**School of Education** 

# Optimising Uptake of Mandated Workplace Training in the Western Australian Public Health Sector.

Susan Louise Alexander

0000-0002-7293-1774

This thesis is presented for the partial completion of the degree of Doctor of Education of Curtin University.

September 2024

#### Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

#### **Human Ethics**

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number HRE2019-0435.

#### Abstract

Many contemporary organisations require workers to undertake Mandated Workplace Training (MWT). Organisations invest millions of dollars per annum to design, deliver and track participation in MWT with the intent of meeting legal or regulatory compliance requirements, and in the belief that MWT will ensure the workforce has the skills and knowledge to perform their roles and contribute to achieving organisational goals. Evidence that these programs support learning or workplace behaviour change is limited.

Health organisations internationally are experiencing increasing pressure due to increased demand for services from aging populations with increased chronic disease incidence, workforce shortages, and aging infrastructure. In this context some health workers question the value of MWT and are reluctant to engage with it. This thesis reports on a study conducted to explore one public health sector workforce's perception of MWT with the aim of identifying strategies to optimise MWT uptake and impact on organisations. The mixedmethods research mapped the current MWT required of the West Australian (WA) metropolitan public health system workforce and investigated the workforce's perceptions about MWT. Specifically, it investigated workforce perceptions of the purpose of MWT, whether it achieves that purpose, how it impacts on work practices, their levels of engagement and the factors that may be associated with levels of engagement, with the aim of identifying strategies to optimise uptake of MWT. Data were collated via a desk-top review of current MWT practices at nine health services, the administration of a Mandated Training Workforce Survey to the workforce volunteers, and interviews with

workers. The research used statistical and qualitative thematic analysis to interrogate the data.

The key findings of the research are that health workers are keen to engage in workplace training when they perceive it to be relevant to their roles and responsibilities, when it is well designed and based on contemporary adult learning principles, when the organisation facilitates access to training and the application of learning in the workplace, and when the training is perceived to have a meaningful impact on work practices. The findings also showed that the workforce predominantly believes the purpose of MWT is to improve safety and quality in the workplace, and that MWT does achieve its intended purpose, but has only a moderate impact on work practices. Further, the workforce believes that current MWT training is often irrelevant, poorly designed, and poorly executed. Some characteristics of individual workers, including their years of work experience, their work role, and their employer, were associated with their reported perceptions.

Using the study findings and extant evidence on effective adult and workplace learning strategies, a MWT Practice Framework to support the delivery of effective, engaging MWT is proposed, and its potential application in WA Health discussed. Recommendations for future research in the field are also described.

The research impacts on MWT in WA Health and other Australian public health organisations, and potentially public and private health organisations internationally. It may also contribute to MWT practices in Australia public sector services, and other organisations requiring MWT of their workforce.

#### Acknowledgements

The author acknowledges the contributions of many in the completion of this study. In the School of Education, Curtin University, thanks to my initial primary supervisor Dr Kathryn Dixon (retired), who has gone above and beyond to support me over an extended period. Thanks also to my second and third primary supervisors, Associate Professor Brad Gobby, and Professor P. John Williams respectively, to Associate Professor Dr Rekha Koul for advice on statistical analysis and Dr Kathryne Forde for advice in navigating the post-graduate research process. I also acknowledge the support of Kathryn Napier of the Curtin Institute for Data Science for statistical advice.

I acknowledge the contribution of multiple colleagues within WA Health including workers in the Research Governance Units at the South, East and North Metropolitan Health Services and King Edward Women's and Children's Services for support in obtaining ethics approval at each participating site, and the workers nominated as mandatory training experts at Royal Perth, Sir Charles Gairdner, Osborne Park, King Edward Memorial, Fiona Stanley and Fremantle Hospitals, and the Bentley and Armadale Health Services. Thanks also to health educators Professor Greg Sweetman and Dr Penny Keogh of the Fiona Stanley Fremantle Hospital Group (FSFHG) for support during the design of the *Mandated Workplace Training Survey* (MWTS), and to FSFHG colleagues for volunteering to pilot the survey. Thanks also to allied health colleagues at each site, and Learning and Manager, FSFHG, Kellie Easter for supporting the participant recruitment drive, and to colleague Dr Dayse Tavora-Viera for statistical advice.

For thesis editing I acknowledge the contribution of graphic designer Anna Palma and professional editor Amanda Tattam.

Finally, thanks to the workers across WA Health who volunteered to be interviewed or who completed the *Mandated Training Workforce Survey*. Their willingness to be involved demonstrates once again that the public health workforce goes "above and beyond" to support and improve the services they provide to the population of WA. I hope this study, and the recommendations arising from it, will have a positive impact for them all.

## Table of Contents

| Declaration   | 2          |
|---|------------|
| Abstract  | 4          |
| Acknowledgements  | 6          |
| List of Figures   | 14         |
| List of Tables  | 16         |
| List of Abbreviations   | 19         |
| List of Appendices  | 21         |
| Chapter One: Background   | 22         |
| 1.1 Introduction  | 22         |
| 1.2 Background  | 24         |
| 1.3 Research issue  | 27         |
| 1.4 Research objectives   | 27         |
| 1.5 Research questions  | 28         |
| 1.6 Research methodology  | 28         |
| 1.7 Significance of the study   | 30         |
| 1.8 Limitations of the study  | 32         |
| 1.9 Ethical considerations  | 32         |
| 1.10 Thesis structure   | 33         |
| 1.11 Chapter conclusion   | 35         |
| Chapter Two: Literature Review  | 36         |
| 2.1 Introduction  | 36         |
| 2.2 Mandatory workplace training  | 37         |
| 2.2.1 Mandated workplace training in the health sector                    | 41         |
| 2.2.2 Current status of health sector mandated training                   | 47         |
| 2.2.3 Assessing the value of mandated workplace training in the he sector | alth<br>51 |
| 2.3 Workplace training  | 53         |
| 2.3.1 Mandated versus voluntary workplace training                        | 66         |
| 2.3.2 Learning transfer   | 67         |
| 2.4 Adult learning  | 72         |
| 2.4.1 Adult learning theories   | 73         |
| 2.4.2 The adult learner   | 78         |
| 2.4.3 Learning in the workplace   | 80         |

| 2.5 Implications for the study83  |
|---|
| Chapter Three: Methodology85  |
| 3.1 Introduction  |
| 3.2 Epistemology  |
| 3.3 Theoretical foundations86   |
| 3.3.1 Adult learning theories86   |
| 3.3.2 Workplace learning87  |
| 3.3.3 Engagement  |
| 3.3.4 Learning transfer88   |
| 3.4 Study design  |
| 3.5 Methods92   |
| 3.5.1 Phase One94   |
| 3.5.2 Phase Two   |
| 3.5.3 Phase Three111  |
| 3.5.4 Phase Four114   |
| 3.6 Study validity115   |
| 3.7 Ethics and governance121  |
| 3.8 Chapter summary 122   |
| Chapter Four: Mandated Workplace Training in WA Health - Current Practice and Preferred Training Topics |
| 4.1 Introduction  |
| 4.2 Mapping mandated workforce training in WA Health  |
| 4.3 Data analysis and findings125   |
| 4.3.1 All mandatory training programs126  |
| 4.3.2. Unique topics addressed through mandated training  |
| 4.3.3 Mandated training delivered at all sites  |
| 4.4 Workplace learning classification134  |
| 4.5 Incidental findings137  |
| 4.5.1. Training lexicon137  |
| 4.5.2. Learning objectives138   |
| 4.5.3 Rationale for mandated training139  |
| 4.5.4 Governance and management of mandated workplace training 140                                      |
| 4.6 Workforce preferences for mandated training topics  |
| 4.6.1 Impact of demographic variables on preferred topics for MWT 145                                   |
| 4.6.2 Summary: Workforce preferences for mandated training topics. 152                                  |

| 4.7 Chapter summary  | 153          |
|--|--------------|
| 4.7.1 Research Question 1: What MWT programs and delivery met are used in the WA PHS sector? | hods<br>153  |
| 4.7.2 Research Question 2: How does the PHS workforce perceive need and purpose of MWT?      | the<br>156   |
| 4.8 Chapter conclusion   | 157          |
| Chapter Five: Workforce Perceptions of the Purpose of Mandated Work<br>Training              | place<br>159 |
| 5.1 Introduction   | 159          |
| 5.2 The dataset and analysis   | 159          |
| 5.3. Workforce perceptions of the purpose of mandated training                               | 160          |
| 5.3.1 Qualitative findings   | 160          |
| 5.3.1.4.6 Conclusion: Impact of demographic variables  | 173          |
| 5.3.2 Quantitative findings  | 174          |
| 5.3.3 Interview data   | 178          |
| 5.3.4 Summary of Findings  | 180          |
| 5.4 Chapter conclusion   | 181          |
| Chapter Six: Workforce Perceptions of the Impact of MWT and Optimisi                         | ng           |
| Impact   | 183          |
| 6.1 Introduction   | 183          |
| 6.2 The dataset and analysis   | 183          |
| 6.2.1 Quantitative survey data analysis  | 183          |
| 6.2.1.4 Summary of Quantitative Analysis   | 190          |
| 6.2.2 Qualitative survey data analysis   | 191          |
| 6.2.3 Interview findings   | 215          |
| 6.3 Summary: MWT value and design for impact   | 222          |
| 6.4 Chapter conclusion   | 224          |
| Chapter Seven: Workforce Engagement and Perceptions of Barriers an<br>Enablers               | d<br>225     |
| 7.1 Introduction   | 225          |
| 7.2. The survey dataset  | 225          |
| 7.3 Quantitative survey data: Engagement   | 225          |
| 7.4. Qualitative survey data: Engagement   | 228          |
| 7.4.1 Effective training design  | 230          |
| 7.4.2. Relevance   | 232          |
| 7.4.3 Allocated time and place for training  | 233          |

| 7.4.4 Purpose and value  | 234           |
|--|---------------|
| 7.4.5 Effective trainers   | 235           |
| 7.4.6 Organisational support   | 236           |
| 7.4.7 New learning   | 237           |
| 7.5 Impact of demographic variables on engagement                                | 237           |
| 7.5.1 Work roles   | 237           |
| 7.5.2 Employers  | 238           |
| 7.5.3 Age  | 241           |
| 7.5.4 Years in health  | 242           |
| 7.5.5 Years in WA Health   | 244           |
| 7.6 Qualitative survey data: Disengagement                                       | 245           |
| 7.6.1 Mandatory workplace training design and delivery                           | 247           |
| 7.6.2 Relevance of mandatory workplace training                                  | 248           |
| 7.6.3. Mandatory training as a compliance requirement                            | 249           |
| 7.6.4 Training repetition  | 249           |
| 7.6.5 Time   | 250           |
| 7.6.6 Additional findings  | 251           |
| 7.7 Impact of demographic variables on disengagement                             | 253           |
| 7.7.1 Work role  | 253           |
| 7.7.2 Employer   | 256           |
| 7.7.3 Age  | 259           |
| 7.7.4 Years in health sector   | 260           |
| 7.7.5 Years in WA Health   | 262           |
| 7.8. Interview findings  | 264           |
| 7.9 Chapter Summary: Engagement and disengagement                                | 267           |
| Chapter Eight: Discussion  | 270           |
| 8.1 Introduction   | 270           |
| 8.2 Question 1: What MWT programs and delivery methods are used WA PHS sector?   | in the<br>271 |
| 8.3 Question 2: How does the PHS workforce perceive the need and purpose of MWT? | 279           |
| 8.4 Question 3: How engaged is the PHS workforce in MWT?                         | 283           |
| 8.5 Question 4: What factors are associated with PHS workforce MW engagement?    | ′T<br>286     |
| 8.5.1 Understanding value  | 288           |
| 8.5.2 Trainers   | 289           |

| 8.5.3 Training format   | 289        |
|---|------------|
| 8.5.4 Resourcing of MWT   | 290        |
| 8.5.5 Organisational support  | 293        |
| 8.6 Question 5: How do personal characteristics moderate levels of MW engagement? | /T<br>297  |
| 8.6.1 Age, years of health sector experience and years in WA Health               | 297        |
| 8.6.2 Employer  | 298        |
| 8.6.3 Work role   | 299        |
| 8.6.4 Summary   | 299        |
| 8.7 Question 6: How do PHS workers perceive the impact of MWT on practice?        | 300        |
| 8.8 Implications for current mandated training practices in WA Health             | 304        |
| 8.9 Chapter conclusion  | 305        |
| Chapter Nine: Conclusion & Recommendation   | 308        |
| 9.1 Introduction  | 308        |
| 9.2 Contribution of the study   | 312        |
| 9.3 Limitations of the study  | 314        |
| 9.3 Implications of the findings  | 317        |
| 9.4 Practice recommendations: A proposed MWT practice framework                   | 320        |
| 9.4.1 Framework Element 1: Organisational support                                 | 320        |
| 9.4.2 Framework Element 2: Resources  | 324        |
| 9.4.3 Element 3: Mandatory workplace training planning                            | 329        |
| 9.4.4 Conclusion MWT practice framework   | 344        |
| 9.5 Recommendations for future research   | 345        |
| 9.6 Chapter conclusion  | 351        |
| References  | 353        |
| Appendix A: Mandated Training Workplace Survey Items                              | 447        |
| Appendix B: Workforce Interview Protocol  | 452        |
| Appendix C: Unique Mandated Training Programs-All Participating Sites .           | 453        |
| Appendix D: Unique Mandated Workplace Training Topics Delivered                   | 456        |
| Appendix E: Suggested New Mandated Training Topics by Workforce Gro               | ups<br>459 |
| Appendix F: Suggested New Mandated Training Topics by Employer                    | 462        |
| Appendix G: Mandated Workplace Training Workforce Survey Response<br>Rates        | 465        |

## List of Figures

| Number | Title  | Page |
|--------|--|------|
| 3.1    | Theoretical Concepts Underpinning the Study          | 89   |
| 3.2    | Study design   | 92   |
| 3.3    | Qualitative Data Coding Process                      | 110  |
| 3.4    | EMHS Workers Years of Service in WA Health           | 119  |
| 3.5    | Survey Respondents Years of Service in WA Health     | 119  |
| 3.6    | EMHS Age distribution                                | 120  |
| 3.7    | Age Distribution of Mandatory Workplace Training     | 120  |
|        | Survey Respondents                                   |      |
| 4.1    | Identification of Core Mandated Training Topics      | 126  |
| 4.2    | Workplace Learning Conceptual Models                 | 135  |
| 4.3    | Preferred Mandated Training Topics                   | 143  |
| 5.1    | Data Sources: Workforce Perceptions of Mandatory     | 160  |
|        | Workplace Training                                   |      |
| 5.2    | Purpose of Mandated Workplace Training               | 162  |
| 6.1    | Response Distribution: Impact of Mandatory Workplace | 187  |
|        | Training on Care                                     |      |
| 6.2    | Participant Perceptions of Mandated Training Design  | 194  |
|        | Improvement  |      |
| 7.1    | Ranked Mean Engagement Score for Each Program        | 226  |
| 7.2    | Levels of Engagement with Mandated Workplace         | 228  |
|        | Training Overall                                     |      |

| 7.3 | Positive Contributing Factors to Mandated Workplace | 229 |
|-----|---|-----|
|     | Training Engagement                                 |     |
| 7.4 | Factors Impacting on Disengagement                  | 246 |
| 9.1 | Proposed Mandated Workplace Training Practice       | 319 |
|     | Framework   |     |

## List of Tables

| Number | Name   | Page |
|--------|--|------|
| 3.1    | Data Collection Method                                 | 94   |
| 3.2    | Survey Participants by Area Health Service             | 99   |
| 3.3    | Demographic Data of Phase Two Survey Respondents       | 101  |
| 3.4    | Research Questions & Related Mandated Training         | 106  |
|        | Workforce Survey Items                                 |      |
| 3.5    | Demographic Details of Interviewees                    | 112  |
| 3.6    | Workforce Distribution Across Health Service Providers | 117  |
| 3.7    | EMHS Workforce & Survey Respondent's Years of          | 118  |
|        | Service and Age Distribution                           |      |
| 4.1    | Participating Hospitals by Area Health Service         | 124  |
| 4.2    | Mandated Training Source Documents                     | 125  |
| 4.3    | Mandated Training Programs at Participating Sites      | 127  |
| 4.4    | Format of Mandated Training Programs                   | 128  |
| 4.5    | Frequency of Training Programs Repetition by Site      | 130  |
| 4.6    | Workforce Learning Classification: WA Heath Mandated   | 136  |
|        | Workplace Training Programs                            |      |
| 4.7    | Proposed Categories of Preferred Mandatory Training    | 144  |
|        | Topics   |      |
| 4.8    | Proposed Mandated Training by Work Role Groups         | 147  |
| 4.9    | Proposed Mandated Training by Employer                 | 148  |
| 4.10   | Proposed Mandated Training by Age                      | 150  |

- 4.11 Proposed Mandated Training by Years of Health 151 Experience
- 4.12 Proposed Mandated Training Topics by Years in WA 162 Health
- 5.1 Purpose of Mandated Workplace Training by Area Health 171 Service
- 5.2 Purpose of Mandated Workplace Training by Program 175
- 5.3 Multiple Purposes of Mandated Workplace Training by 176 Program
- 5.4 Statistical Association: Demographic Variables & 178 Purpose.
- 6.1 Achievement of Purpose by Program 184
- 6.2 Achievement of Purpose by Program 185
- 6.3 Kruskal-Wallis Test of Relationship Between 188 Demographic Variables & Ratings of Overall Impact of Mandated Workplace Training
- 6.4 Personal Impact of Mandated Workplace Training 189 6.5 Demographic Variables and Personal Impact Ratings 190 6.6 Design Improvements by Work Role 207 Design Improvements by Employer 6.7 208 6.8 Design Improvement by Age Groups 211 6.9 Design Improvement by Years in Health Sector 213
- 6.10 Design Improvement by Years in WA Health 2147.1 Levels of Individual Engagement 227
- 7.2 Engagement by Employer 238

| 7.3 | Engagement by Years of Health Experience | 243 |
|-----|--|-----|
| 7.4 | Engagement by Years in WA Health         | 245 |

### List of Abbreviations

- ABS Australian of Bureau Statistics ACHS Australian Council on Healthcare Standards ACSQH Australian Commission on Safety and Quality in Health ADT Association of Talent Development AEDM Accountable and Ethical Decision Making AHS Area Health Service AIHW Australia Institute of Health and Welfare ANTT Aseptic Non-Touch Technique ARC Australian Resuscitation Council CAHS Child and Adolescent Health Service COREQ Consolidated Criteria for Reporting Qualitative Studies CPD **Continuing Professional Development** CPR Cardiopulmonary Resuscitation EMHS East Metropolitan Health Service FSFHG Fiona Stanley Fremantle Hospital Group HAC Hospital Acquired Complication HETI Health Education and Training Institute HR Human Resources ICT Information and Communication Technology Independent Health and Aged Care Pricing Authority IHACPA IHPA Independent Hospital Pricing Authority KEMH King Edward Memorial Hospital
- MOOC Massive Open Online Courses

- MWT Mandatory Workplace Training
- MWTS Mandatory Workplace Training Survey
- NHMRC National Health and Medical Research Council
- NHS National Health Service
- NMHS North Metropolitan Health Service
- OT Occupational Therapy
- PHS Public Health Services
- PPE Personal Protective Equipment
- PT Physiotherapy
- ROI Return on Investment
- RTO Registered Training Organisation
- SAC Severity Assessment Code
- SDL Self-Directed Learning
- SDN Staff development Nurse
- SMHS South Metropolitan Health Service
- SPSS Statistical Package for Social Sciences
- WA Western Australia
- WHO World Health Organisation
- WHS Workplace Health and Safety

## List of Appendices

| Appendix | Title  | Page |
|----------|--|------|
|          |  |      |
| А        | Mandated Training Workplace Survey Item                        | 407  |
| В        | Workforce Interview Protocol                                   | 412  |
| С        | Unique Mandated Training Programs-All                          | 413  |
| D        | Unique Mandated Workplace Training Topics<br>Delivered         | 416  |
| E        | Suggested New Mandated Training Topics by Workforce Groups     | 419  |
| F        | Suggested New Mandated Training Topics by<br>Employer          | 422  |
| G        | Mandated Workplace Training Workforce Survey<br>Response Rates | 425  |

#### **Chapter One: Background**

#### **1.1 Introduction**

Each year, public health systems worldwide invest billions of dollars in delivering mandated workplace training (MWT) programs to their workforce (Vines and Storen, 2023; Warner and Zaranko, 2023). MWT is training that employees are required by their organisation to undertake as a condition of employment, including training which organisations are required by law to provide (Royal College of Nursing, 2018). Australian health services deliver MWT with the reported intent of demonstrating compliance with regulations and legislation, managing workplace risks, and supporting the delivery of safe and high-quality patient care (NHS Digital, 2024; State of New South Wales, 2024; Queensland (Qld) Health, 2021; Business & Strategy WA Health, 2023). Health industry and academic journals report complaints from employees about the volume, quality, and value of these programs (Alcolado et al., 2014; Hills, 2015; MacDonald, 2019), and organisations are often challenged to achieve training compliance targets.

The value of MWT is conceptualised differently by different stakeholders. For health organisations, the demonstration of compliance with legislative and regulatory requirements offers one significant value proposition of MWT (South Metropolitan Health Service (SMHS), 2017; East Metropolitan Health Service (EMHS), 2021). For individuals who invest their time in training the intended outcome of training is learning, and for both organisations and individuals, the intended outcome of training that occurs in the workplace is the application of learning in the workplace context (Illiris, 2011; Billett et al.,

2021). Evidence of MWT having a positive impact on workplace behaviours, practices, the safety and quality of workplaces, and the services or good organisations deliver is sparce (Bahn, 2012; Bartlett et al., 2019; Blair & Soe, 2007; Taylor, 2015). Despite this, MWT is now a major, and some claim, growing feature of the public health system (MacDonald, 2019), that creates a significant cost impost on the sector (Gerada, 2019; SMHS, 2017).

The first stage of achieving learning, and the application of learning in the workplace, is to facilitate staff access to and engagement in training. This study focussed on how to optimise the uptake of MWT in the public health sector. A mixed method research design was used to investigate the views, perceptions, and beliefs of the adult learners (workers), who are required to undertake workplace training. The aim was to use these findings to inform how MWT can be enhanced to positively impact workplace practices and behaviour.

Adult learners require a sense of perceived need and purpose to engage in learning opportunities (Billett et al., 2012; Knowles, 2011). Their views about MWT therefore have the potential to inform the design and delivery of MWT to optimise learning and the application of learning in the workplace setting. This study sought health worker's views on MWT, and in doing so aligned with best practice co-design methods currently in use in many health systems. Co-design processes involve actively engaging the consumers of services or products (e.g. patients and their carers; employee users of health care information systems) in the review, design and evaluation of the product or service (Garmann-Johnsen et al., 2020; Harrison et al., 2022; Mulvale et al., 2019; National Health and Medical Research Council (NHMRC), 2022). In this

study employees were considered the "consumer" of the "product" of MWT programs.

This chapter introduces the research and describes the format and content of this thesis. It discusses the background to the research, the research issues, and the study objectives. It summarises the methodology, discusses the significance and limitations of the research, and the ethical issues considered in the design and implementation of the project. The chapter concludes with a brief description of each chapter of the thesis.

#### 1.2 Background

Australian Commonwealth Government expenditure on health services is budgeted at \$101,000 billion for 2022-23 (Department of Health & Aged Care, 2023) with additional contributions from each state. Western Australia (WA), for example, has budgeted \$11.8 billion for health services and an additional \$1.4 billion for mental health service in 2023-24 (Government of WA, 2023). A significant portion of annual public health expenditure is directly (e.g. cost of trainers) or indirectly (e.g. cost of workers attending training) allocated to fund the delivery of MWT to health employees. The total cost of delivering MWT across the sector is difficult to determine (Independent Hospital Pricing Authority (IHPA), 2017), in part because of the complexity of the Australian health sector funding system. In the mixed funding model, the Commonwealth government is responsible for aged and primary health care, and the Australian states and territory governments are responsible for hospitals and public health services. Privately funded health services also operate parallel to, or in partnership with, publicly funded services (Australian Government,

Department of Health & Aged Care, 2023). One public (i.e. State government funded) area health service in WA estimates it costs over \$7 million per year to deliver a suite of 19 MWT programs to its workforce of 7,500 (SMHS, 2017). Current labour force data estimates that 2.2 million individuals work within the health and social support industry across Australia (Australian Bureau of Statistics (ABS), 2022). Extrapolation of the WA Health SMHS (2017) costing estimate to the reported national ABS employee figures equates to a significant annual expenditure of approximately \$2 billion per year, or just under 2% of total health expenditure, being spent on MWT by the Commonwealth and State governments of Australia. A further calculation in Britain estimates that each year 267 (*Ed: medical*) consultant work years are allocated to MWT, representing a significant opportunity cost to health services as the time spent in training could be used to deliver clinical care (MacDonald, 2019).

There is some evidence that well-designed, effectively delivered MWT can impact on workplace behaviours which in turn impact positively on productivity, employee and patient safety and the quality of services delivered (Robson et al., 2012). There is also, however, significant evidence that many workplace training programs (mandated and optional) in the healthcare sector are not based on sound educational theory (Bryan, 2009; Lewis, 2017), are poorly designed (Moll et al., 2018), and are not critically evaluated to assess either learning or impact on workplace practices and behaviours (Legare et al., 2015). Further, where the critical review of training efficacy has been conducted, the evidence is inconclusive. Evidence from the evaluation of individual, voluntary workforce training programs does suggest learning and

knowledge changes can result from workforce participation in some specific, targeted programs (Cunningham et al., 2022; Maguire et al., 2022; Rissel et al., 2022) however a significant body of evidence, based mainly on meta-data analysis, suggests that a positive impact on work behaviours and practices cannot be consistently demonstrated (Bartlett et al., 2019).

There is evidence that the healthcare workforce is prepared to engage in MWT when they perceive it may impact positively on the quality of healthcare (Benbadis, 2013; Biro, 2011; Coole et al., 2015; Talaulikar et al., 2014). Health sector employees' support for MWT is also demonstrated in recent papers calling for more MWT on a range of clinical and non-clinical topics (Berry, 2020; Jack & Kaliaperumal, 2019; Learning Disability Practice, 2019; Martinez, 2017; Persaud et al., 2021). In contrast, a further body of literature indicates that tension exists between organisational requirements to demonstrate training compliance and healthcare employees' expectations that training contributes to quality healthcare by enhancing employee learning and practice on critical issues. In this body of literature, MWT is variously described by employees as "Just a ticking-the-box exercise" (Jevon et al., 2012, p. 18), "chalk and talk" or "death by PowerPoint" (Hills, 2015, p. 22) and "unpopular and poorly attended" (Mythen & Gidman, 2011, p. 11). One British Medical Journal editorial suggests that health agencies "often seem more exercised by compliance figures than the quality of the teaching and making sessions interesting and valuable" (Alcolado et al., 2014, p. 187). Others refer to the practical challenge of having time to attend the training given their heavy workloads (Black, 2022; MacDonald, 2019). These reports indicate that some workers do not consider MWT as part of their job responsibilities or feel that it

is less important than other work tasks. Employees also argue that some MWT (e.g. on the topic of resilience) inappropriately places unrealistic expectations on the workforce and deflects attention and resources from the more critical issue of systemic failures in the health system (Ripullone & Womersley, 2019). This evidence of employees' lack of conviction about the rationale for and value of MWT, and their practical challenges in engaging with it, are consistent with reported experiences of health educators who describe persistent challenges in engaging employees in MWT. The lack of evidence about the learning outcomes of MWT and its impact on workplace practices, and the evidence that employees fail to engage with MWT may contribute to understanding how to optimise their uptake of MWT.

#### 1.3 Research issue

This research was initiated to investigate how a public healthcare system might optimise the uptake of MWT so it can have a positive impact on the organisation. Specifically, this study explored the perceptions of the Western Australian public health sector (PHS) workforce about MWT.

#### **1.4 Research objectives**

The study had two objectives. There is currently limited data on the content, delivery methods, structure, and processes of MWT in the healthcare literature despite MWT being required in all PHSs. The first objective of this study was therefore to describe the MWT required of health employees in a public sector health service in West Australia, specifically, the training topics and learning

objectives of the training, the duration and format of delivery and the frequency of training required. These findings were used to support the second objective of the study, which was to explore workforce perceptions of MWT with the intent of informing how to optimise the uptake of MWT.

#### **1.5 Research questions**

This study was designed to answer the following questions about MWT practices in the WA PHS:

Q1: What MWT programs and delivery methods are used in the WA PHS sector?

- Q 2: How does the PHS workforce perceive the need and purpose of MWT?
- Q 3: How engaged is the PHS workforce in MWT?
- Q 4: What factors are associated with PHS workforce MWT engagement?
- Q 5: How do personal characteristics impact levels of MWT engagement?
- Q 6: How do PHS workers perceive the impact of MWT on practice?

#### 1.6 Research methodology

A mixed method design was used. Mixed method designs are acknowledged to be challenging in terms of the requirements for time, resources, and multiple skills of the researcher (Creswell & Clark, 2011), however the research questions posed were ideally answered by analysis of both qualitative (e.g. a description of MWT and employees' perceptions of MWT) and quantitative data (e.g. the impact of personal variables on employee perceptions of MWT). Further, the health context in which the study was conducted is recognised to preference, until relatively recently, quantitative research over qualitative research (Ajjawi, 2022). In acknowledgement of the relative value ascribed to quantitative data by potential readers and users of the study findings, it was judged important to include quantitative methods.

The methodology incorporated three separate methods of data collection and multiple analysis techniques to explore the research questions (See Chapter Three for a full description). Study participants included employees from nine hospitals in three metropolitan area health services in Perth (The capital city of the state of Western Australia). The study was constructed in four phases, commencing with a descriptive phase (Phase One) in which organisational data from the nine participating sites were collated and analysed to map the phenomena of MWT in the WA public health sector, including identifying the MWT topics addressed at each site. The findings of this initial phase are reported independently as qualitative descriptive data. The findings also informed the design of Phase Two of the study, in which a *Mandated Training* Workforce Survey (MTWS) was developed and administered to volunteer employees at each participating site to capture employees' (learners') experiences with MWT in the WA public health sector. Qualitative findings from this phase are reported in descriptive text, and quantitative statistical findings are reported in descriptive text and tabular forms. Phase Three involved semistructured interviews with individual employees on their experiences with MWT. Findings from the interviews are reported independently and are combined for analysis in Phase Four in which all data were triangulated for integration into a final summative report of the study findings.

Ontologically, the study was designed in a constructivist paradigm that acknowledges the potential for "multiple realities" as constructed by different people or groups (Waring, 2012). Epistemologically, the study positioned the learner as central to constructing their own knowledge. Constructivist epistemology is learner-focused and considers previous learning as a foundation on which to modify, build, and expand new knowledge (Peters, 2000). There was a philosophical assumption driving this study that adult learners are active agents in their learning (Knowles, 1984; Merriam & Bierema, 2014) and therefore have personal beliefs, behaviours, and attitudes about MWT.

#### 1.7 Significance of the study

The Australian healthcare system is currently facing significant challenges, including worker shortages, the introduction of emerging technologies and new clinical practices, and questions about whether current service models are financially sustainable or fit-for-purpose for the changing demands of an aging population (Boxall, 2011; Butler, 2023; Korshid, 2021). In this context, all aspects of the health system, including workplace training of employees, should be critically examined, and continually improved to ensure that practices are evidence-based, fit-for-purpose, and offer sound return on investment.

The cost of delivering MWT to the public sector workforce is a significant impost on the health budget. The costs of MWT include employee's time to attend training, costs of replacement employees to provide cover for employees attending training, the cost of trainers and training materials (e.g.

life support training requires the use of disposable personal protective equipment such as masks and gloves), and the establishment, maintenance, and operation of training administrative and reporting systems (e.g. Digital learning management systems to track and report compliance) (SMHS, 2017). Employee time spent in training also represents an opportunity-cost as employees engaged in workplace training are not available to complete the other work tasks. In the healthcare sector, where workforce shortages are a current feature of the industry (Australian Healthcare & Hospitals Association, 2017), this represents additional stress on organisations.

This study adds valuable detail to the limited existing research on MWT in the public health sector. It explores potential strategies to improve how MWT is currently delivered so that uptake can be optimised, learning outcomes achieved and positive impacts on the workplace, including compliance requirements and impacts on workplace behaviours, are optimised for a positive organisational impact.

This research can potentially inform MWT practices in multiple organisations. In addition to the WA public health sector, the research findings are relevant to public sector health services delivered by governments in other states of Australia where similar models of MWT are operating. Findings may also inform private health services providers across Australia and potentially internationally. The study has relevance to the broader Australian Commonwealth and state public sectors which in 2023, employed 350,000 and 1.9 million people respectively (ABS, 2023), all of whom are required to

undertake MWT. The findings may be more widely applied in other organisations requiring MWT.

#### 1.8 Limitations of the study

This study was primarily concerned with mandated training in metropolitan, tertiary hospitals within the WA PHS and sought to inform the known practicebased challenges of engaging employees in MWT in that context. The scope of the study does not, therefore, include investigation of other types of training delivered in the workplace, MWT in other industries, health services in rural and remote settings, health services other than tertiary hospitals or health services in the private sector. Information from these domains does, however, inform the research design and is incorporated in later chapters in which the implications of the findings of this study are explored.

#### 1.9 Ethical considerations

Two ethical concerns were identified and managed within this study. One concern was the potential for conflict of interest arising from the researcher investigating practices of their employer and their work colleagues' perceptions of MWT. These risks were mitigated by triangulation of data and de-identification of all data from the workplace survey in Phase Three.

The second ethical concern was the potential perception of risk to hospital employees participating in the study should they comment critically about their employer's work practices in survey responses or interviews. This was managed by including the option for anonymous engagement in the survey and, where participants opted to identify themselves, ensuring all reported

data were de-identified. To ensure participant anonymity all direct quotes reported in this thesis are de-identified.

Ethics approval to conduct the study was undertaken as described in Chapter Three.

#### 1.10 Thesis structure

The thesis is presented in nine chapters as described below.

**Chapter Two** examines the literature that informed the study design and against which study findings were compared. The chapter is organised into sections addressing key concepts relevant to the study, how MWT came to be practiced in the health sector, adult learning theory, workplace learning and factors that impact it. The chapter concludes with a summary of the key theoretical concepts identified in the literature (i.e. adult learning theory, workplace learning, engagement and learning transfer) which guided the study design and informed the discussion and recommendations arising from the study.

**Chapter Three** outlines and justifies the methodology used in the study. It includes sections on the epistemology and the key theory underpinning the study design. Details of the target participants, target data, data collection and analysis methods and reporting are described, as is a discussion of the validity of the study. The chapter describes the four iterative phases of data collection and analysis, comprising 1) the mapping and exploration of current requirements for MWT (Phase One), 2) a *Mandated Training Workforce Survey* administered to volunteer workers from nine metropolitan WA Health sites (Phase Two), 3) semi-structured interviews with volunteer employees

(Phase Three), and the triangulation of all findings in Phase Four. The chapter closes with a discussion of the study validity and the ethical and governance processes considered as part of the study design and implementation.

**Chapter Four** is the first of four chapters describing the research findings. The chapter maps the current MWT requirements in the WA Health public health system, including describing the mandated topics, how they are trained, the duration of the training and how frequently workers undertake the training. The chapter also examines the findings in relation to a conceptual model of workplace training classifications (Jacobs & Park, 2009). The chapter also describes the training topics the WA Health workforce believe should be mandated.

**Chapters Five to Seven** describe the findings of the analysis of qualitative and quantitative data from the *Mandated Training Workforce Survey* (MWTS) and interviews with volunteers. Throughout each chapter, the impact of employee characteristics (specifically age, years of health sector work experience, years in WA Health, work role and place of work) on their perceptions of MWT are described.

**Chapter Five** focuses on findings related to workers' perceptions of the purpose of and need for MWT.

**Chapter Six** describes findings on workforce perceptions of how MWT impacts on practice and the strategies workers propose to improve impact.

**Chapter Seven** describes the factors that impact on engagement and disengagement with MWT, and the factors that effect this.

**Chapter Eight** provides a discussion of the findings and how they relate to previous understanding about MWT identified in the literature. It explores the implications of the findings to the practice of MWT in a public health service.

**Chapter Nine** concludes the thesis with a summary of the recommendations for practice and future research, including the proposal of a new MWT practice model based on the study findings and extant literature.

Seven appendices provide supplementary material to support the text.

#### 1.11 Chapter conclusion

This first chapter introduced the phenomenon of MWT in the PHS and described the practice challenges experienced by health educators tasked with implementing training that meets organisational compliance objectives while also meeting worker's expectations that training delivers meaningful learning that can be transferred to workplace practices. A summary of the study design and methodology included a compelling argument for the value of research in this field. It introduced the complexity of the phenomenon of MWT and the opportunities the study offers to identify strategies that may contribute to improving the effectiveness and value of the training, and which can support the workforce to transfer learning into work practices. The chapter concluded with a summary of the thesis structure and an overview of each chapter, commencing with Chapter Two in which the extant literature related to MWT in the PHS is examined.
# **Chapter Two: Literature Review**

### **2.1 Introduction**

This literature review was concerned with understanding how mandated workplace training came to be a requirement of many industry sectors, what it looks like in contemporary organisations, how it is positioned in relation to other types of workplace training and what the current evidence tells us about how to optimise training uptake, maximise learning and enable both employee and organisational benefit. The contribution of multiple knowledge domains to scholarship on adult workplace training and learning has been identified previously (Alerasoul et al., 2022; Fejes & Nicoll, 2013), therefore a broad search of journals and databases (ERIC (ProQuest), TROVE, Medline, Emerald, CINAHL, Informit, Google Scholar, NCVER and Business Source Ultimate) in the domains of health, health education, education, adult education, training, organisational behaviour and development, business, public sector governance, vocational education and management, organisational psychology was initiated. The initial review yielded an abundance of descriptive and evaluation studies on workplace training in multiple industries of varying relevance to this study. The review was therefore refined to focus on evidence which would inform the specific issues of mandated training in health and related industries, in the public sector and the responses of workforces to that training.

This chapter provides an overview of the literature. It commences with a description of mandated workplace training (MWT) and its history in the healthcare sector, then offers a brief description of contemporary issues in

workplace training. It follows with an overview of adult learning theory and what the evidence has to say about how adults learn in general and in the specific context of the work environment. The chapter concludes with a summary of the key insights, including gaps in current evidence, that were used to both justify and inform this study.

## 2.2 Mandatory workplace training

Mandatory or compulsory workplace training (MWT) is potentially the largest subset of workplace training delivered in contemporary workplaces (ADT, 2021) and represents a "staggering" (Chen & Soltes, 2018, p. 116) investment estimated at tens of millions of dollars per year (ADT, 2021; Chen & Soltes, 2018). Internationally, it is common practice in multiple, contemporary industries (Chen & Soltes, 2018) including finance (Tolleson & Guess, 2013; Wessels, 2006), mining (Parmenter & Trigger, 2018; Rudakov et al., 2021), construction (Albert & Hallowell, 2013; Bahn, 2012; Bahn & Barratt-Pugh, 2012a ; Taylor, 2015), higher education (Quonoey et al., 2022), insurance (Zingg, 2022), health (Zummo & Kearney, 2009), and occupational health and safety (Aziz & Osma, 2018; Mythen & Gidman, 2011).

There are multiple reasons for organisations to mandate training for all or some of their workforce. Firstly, organisations mandate training when there is a legislative, statutory or regulatory requirement to do so. Failure to provide this training puts organisations at risk of breaching regulations and in some jurisdictions facing financial or other regulatory penalties for doing so (Chen and Soltes, 2018). Failure to provide safety training to workers in Australia for example, can result in both the organisation and its responsible officers being

fined or charged with criminal offences that can incur custodial sentences (SafeWork Australia, 2024).

Organisations also mandate training when compliance with that training can be used to demonstrate achievement of a desired standard of organisational practice and demonstrate the quality of the services or goods delivered by the organisation. Many industries and professions have formal standards or guidelines that define the 'gold standard' for practice in that industry. Some of these include the requirements for workforce training on an industry related subject. For example, the International Organization for Standardization (sic) (ISO) uses sector experts to establish agreed standards for practice in multiple industries (ISO, 2024). Some of these specify requirements for staff training, for example, the Food Safely Management standard (ISO 22000) requires staff training in safe food handling (ISO, 2018). Other industry standards may not explicitly specify training as a requirement, but organisations opt to use training to demonstrate their commitment to the standard. For example, the Australian Commission on Safety and Quality in Healthcare (ACSQHS) publish the National Safety and Quality Health Service Standards (NSQHS) against which all Australian hospitals are accredited (ACSQHS, 2024). These standards do not specify a requirement training in specific topics, but organisations use training as evidence of their commitment to specific standards. For example, mandated training for all staff in hand hygiene is routinely required in Australian hospitals and used as a measure of their commitment to the NSQHS Standard three: Preventing and Controlling Healthcare associated infections (South Metropolitan Health Service (SMHS), 2024; Health & Education Training Institute (HETI), 2022).

Indirectly some organisations also use the mandated training required by professional associations as a measure of quality assurance for their workforce. Many professional associations (e.g. Medical Colleges, Chartered Practicing Accountants) require members to complete specified hours of continuing professional development (CPD) training to as a prerequisite for membership. Employers in turn use this membership as a measure of assurance that staff remain current and appropriately credentialed to conduct the work required in their organisations to a professionally assessed standard. While no evidence was found to suggest that organisations routinely deliver training with the specific intent of supporting staff to maintain professional association membership, there is evidence that some staff use MWT to contribute to their CPD portfolios (Wright, 2022).

MWT can also be used by organisations to mitigate risk. There is evidence in the literature that MWT is conceptualised by some organisations as a tool to reduce or manage multiple types of risks including risk to reputation, financial risk, and safety and quality risks (Chen and Soltes, 2018). In this context, MWT is delivered with the intent of skilling workers to practice in ways that mitigate risk, and to demonstrate that organisations have taken actions to address known risks within the organisation.

Finally, some organisations mandate training because they believe it is good for the organisation in some way. This might include delivering targeted training that will skill the workers to deliver high quality services and products efficiently, for example, training in the use of new technology or equipment or training in specific tasks required in the work environment (Illeris, 2011, Shah,

2017). Alternately, training might be proposed to build human capital, generic workforce capacity or support a specific workplace culture. For example, mandated training in workplace diversity, predominantly around race, emerged in late last century with the initial intent of influencing employee attitudes, values, and ways of relating to one another and to transmit organisational values (Ryans and Rosen, 1995). In contemporary settings mandated leadership programs are delivered with the intent of embedding workplace values and building workforce capacity (Carroll & Nicholson, 2014; Ganon & Collinson, 2014; Kjellström et al., 2020).

In summary, there are multiple reasons why organisations might mandate training some or all, of their workforce. As will be discussed below, the literature indicates that the rationale for mandating training, as opposed to making it available to staff to access voluntarily, is not always clearly articulated to the workforce, and indeed within the organisations itself, different stakeholders may have different understanding about why MWT is delivered and what the expected outcome of that training is.

Hird (2012) claims that mandated workplace training (MWT) emerged via the relatively recent disciplines of human resource management and learning and development, however it has been a feature of many industries for many years, often driven by safety and quality concerns (Garganta, 1982).

Given the variation in legislation and regulations across industries, countries and state jurisdictions, and the variation in organisational policies, the content of MWT varies across organisations. Topics frequently cited across all jurisdictions include training to orientate employees to an organisation (ADT,

2021), occupational health and safety related training (e.g. fire safety, emergency management, manual handling) (Bahn, 2012; Jevon et al., 2012; Wright, 2018), specific technical task training related to the organisation's activities (ADT, 2011; Tian et al., 2016), and diversity and cultural safety training (Chang et al., 2019; Perales, 2022).

#### 2.2.1 Mandated workplace training in the health sector

As this study is grounded in the public health system, a review of the history of MWT in that sector is warranted. Multiple factors have influenced the emergence of MWT in the public health care sector over the last three decades, including government policy, profession-based practices, and industry-led factors. As early as the late 19<sup>th</sup> century, some American states required medical practitioners to undergo ongoing training to retain their practice licences (Garganta, 1989). Later, professionals whose practice had been interrupted by the Second World War were required to undertake additional training to "reorientate" them and address the risk of "professional obsolescence" (Garganta, 1989, p. 5), or the loss of professional expertise over time. These concerns led to a self-regulated process of voluntary continuing professional development (CPD) in which training on topics relevant to the skills and competencies required of a profession were offered, often by trainers from within the profession (Illeris, 2011). The adoption of mandated post-graduate training across multiple industries was largely driven by the "self-interest" (Garganta, 1989, p. 13) of professions to maintain control of their professional practices and standards. Profession-managed compulsory CDP requires professionals to undertake specified hours and, often, topics of training to maintain registration and standards of clinical

practice. (e.g. Australian Health Practitioner Regulation Board, 2023; Speech Pathology Australia, 2024; Nursing and Midwifery Board of Australia, 2020). Only health sector employees in professions (e.g. medical, nursing, allied health, accounting, and engineering) undertake mandated CPD. An estimated 55% of the Australian health workforce are neither registered nor qualified professionals and therefore are not compelled to undertake CPD (Beck & Boulton, 2015).

Over time, external agencies such as government licencing bodies and other regulatory agencies sought to impose their own systems of regulation on professional practice, including health professions (Garganta, 1989; O'Reilly, 1982; Tucker, 1984). As demand for mandated post-qualification training increased, processes to deliver this training became systematised across multiple industries. Issues of how and when professionals access CPD is an issue of frequent debate in the literature (Doherty, 2010; MacDonald, 2019), with evidence that some employees view workplace training, including the MWT provided free of charge in paid work hours, as an opportunity to fulfill some of their CPD requirements (Wright, 2022).

Public sector governance literature reveals that MWT first emerged in Australian in the 1970s and 1980s when a neo-liberalist political agenda led to changes to Australian Commonwealth and State government legislation. Neoliberalism preferences free market philosophy, "small government" (Dennis, 2018), and a tightly defined, top-down approach to quality assurance (Mockler & Groundwater-Smith, 2009; Sims & Waniganayake, 2015). The impact of neoliberalism on workplace training is well illustrated in the domain of WHS training (Clark et al., 2011). While the history of legislation to support

the safety of workers in individual industries dates back to the late 18<sup>th</sup> century in the United Kingdom (UK) (Farmer, 2014; Toohey et al., 2005), it was not until the 1970s and 1980s that major reforms in the UK and Australia attempted to consolidate legislation into centralised Acts covering all industries (Emmett, 1997; Committee on Safety & Health At Work, 1972). The UK Health and Safety at Work Act (1974) established two key principles that would impact on training across multiple sectors: 1) that workers and employers were required to work collaboratively to identify and manage workplace risk and hazards (Bluff, 2017), and 2) that employers would self-regulate within a legislative, performance-based regulation framework focused on outcomes rather than processes (Toohey et al., 2005). In Australia in the same period, new government bodies (The National Occupational Health and Safety Commission, The Australian Safety and Compensation Council and Safe Work Australia), and State, Territory and local government laws were established to support industry self-regulation. These bodies specified WHS National Strategies, codes, and standards against which organisations were held accountable (Emmett, 1997; Smith & Leggat, 2005). Many of the Australian WHS standards, acts, and guidelines require employers to train employees on topics such as how to assess workplace risk, identify and manage hazards, maintain a safe work environment and conduct required work tasks safely (Bahn & Barratt- Pugh, 2012a; Bahn & Barratt- Pugh, 2012b). Similarly, in America, "more than 100 Occupational Safety and Health Administration (OSHA) standards require training in health and safety" (Burgel et al., 2014, p. 57). Further, international agencies such as The World Health Organisation (WHO) include three workplace training targets in their 2012-17

WHO Global Master Plan (WHO, 2012) and their WHO Global Plan of Action on Worker's Health (2008-2017) (WHO, 2013). In this context, the demand for MWT on WHS issues increased exponentially.

The Australian public health care sector, and its workforce training practices, were also impacted by legislation such as The Commonwealth Public Governance and Performance and Accountability Act (2013) and related State and Territory Acts, which were intended to improve standards of governance, performance, and accountability within the public sector, and to ensure coherence across sectors. The Acts resulted in a significant increase in monitoring and reporting to account for expenditure, service delivery and service outcomes. Additional Australian government reforms such as the National Health Reform Act (2011) specifically impacted on health service administration, management, and governance with the intent of improving accountability and transparency through the achievement of new national performance standards (National Health Funding Body, 2019). These legislative changes resulted in a rise of MWT to address specific legislative requirements or to be used as de facto measures of compliance and adherence to standards. Britain's Health and Social Reform Act (2012) had a similar intent and impact (Pownall, 2013).

The Australia health industry itself also generated a demand for MWT through initiatives intended to improve the quality of the healthcare system. For example, The Australian Council on Healthcare Standards (ACHS) was initiated by a coalition of health professional Colleges and Societies in the early 1970s with the aim of establishing agreed standards for healthcare across Australia (ACHS, 2017). ACHS established accreditation programs to

independently review healthcare services against an agreed set of standards (ACHS, 2017). In 2023 these included the National Safety and Quality Health Standards (NSQHS) established by the Australian Commission on Safety and Quality in Healthcare (ACSQH) which provide "a nationally consistent statement of the level of care consumers can expect from health service organisations" (ACSQH, 2020). Similarly, the National Health and Medical Research Council (NHMRC), publishes numerous clinical practice guidelines and actively promotes standardised care. Many of these standards include reference to the need for workforce training on specified topics. Collectively, these industry driven practices, in combination with public sector reform and profession led CPD requirements, impact on how healthcare is designed, delivered, administered, managed, and reported in Australia and led to a shift from a sector with significant autonomy to design and deliver healthcare, to one where government and healthcare providers work in, at times uncomfortable, partnership to deliver care to standards regulated by government and peak professional or industry bodies (Gerada, 2022). In this context, workplace training, including MWT is used to demonstrate service commitment to, and compliance with, agreed performance standards. For example, New South Wales Health requires its employees to undergo mandatory governance training to demonstrate their commitment to the NHSQ Standard 1 Governance (New South Wales Government, 2017). The Australian Guidelines for the Prevention and Control of Infections in Healthcare (NHMRC, 2010) recommend a series of essential health worker education which is interpreted by multiple organisations to mean MWT on hand hygiene and aseptic non-touch techniques (HETI, 2022; Queensland

Health, 2018; SMHS, 2017). Hospitals are now required to report hospital acquired complications (HACs) and are financially penalised for each incident (Independent Hospital Pricing Authority, 2020). This results in the delivery of MWT on the topic of the prevention of sepsis, a life-threatening HAC, at many health services (Australian Sepsis Network, 2020; NHMRC, 2019).

The requirement for health organisations to identify and manage risk also impacts on MWT (Seisser & Epstein, 1998). For example, recommendations from a coronial inquest into the death of a restrained patient led to the requirement for mandated restraint and seclusion training for WA Health employees (Government of WA, 2011). In Britain there is a plan to mandate training on disability and autism based on recommendations of an enquiry that found the clinical workforce has a poor understanding of the subject and limited skills (Mc Gowan, 2022), and in Ireland there are calls for more training on the management of maternity patients experiencing mental health disorders after reports of patient suicide while in hospital care (Canady, 2022; Smyth, 2022). WA Health has recently aligned with a WA government strategy to introduce training in cyber safety to address data security risks (Government of WA, 2022).

Finally, government health strategies and statutes impact on MWT. For example, in the UK, a new Health Women's Health Strategy includes specific direction to health organisations to implement mandated training for all medical staff on specific women's health assessment tools (Wise, 2022) and new statutory requirements to report patients with suspected sexual abuse has led to calls for more training for theatre staff in how to identify patients with genital mutilation (Hoddes, 2022).

In summary, MWT has become a feature of contemporary healthcare systems over the last three decades due to government policy and governance changes which require organisations to demonstrate compliance with externally established standards. MWT is used as mechanism to demonstrate compliance with both government strategies, legislation, policies, or guidelines, and industry standards which either require specific training or for which MWT can be used as a de-facto compliance measure.

#### 2.2.2 Current status of health sector mandated training

Evidence from health sector grey literature and health education research suggest there is a degree of consistency in the MWT subjects delivered in health sector organisations, with most programs related to employee safety (OSHA, 2015), and patient safety. Topics frequently cited include infection prevention and management, manual handling, management of aggression; emergency management (basic life support, fire evacuation), and cultural safety and diversity (HETI, 2022; NHS, 2022; Royal College of Nursing, UK 2023; SMHS, 2017).

The health education literature yields two broad categories of evidence related to MWT. The first describes health workers' opinions of MWT, while the second describes and evaluates MWT programmes delivered to targeted cohorts of health workers.

The body of literature describing the health workforce's views on MWT reveals two contradictory perspectives. The first perspective indicates workforce frustration with both the quality and quantity of MWT required, for example, "The mere mention of 'statutory and mandatory training' is guaranteed to raise

negative and often adversarial responses from many doctors working within the NHS" (Alcolado et al., 2014, p. 184). There is a perception that health agencies "often seem more exercised by compliance figures than the quality of the teaching and making sessions interesting and valuable" (Alcolado et al., 2014, p. 187), and that health providers are "constantly under pressure" (John, 2015, p. 42) to demonstrate compliance with multiple regulations. Others refer disparagingly to MWT as a tick-the-box exercise (Gerada, 2019; Jevon et al., 2012), "chalk and talk" or "death by Power Point" (Hills, 2015, p. 22), and "unpopular and poorly attended" (Mythen & Gidman, 2011, p. 11). Recent literature criticises the practice of MWT for deflecting attention from more critical organisational issues, and the opportunity-costs it represents. For example, mandated resilience training is criticised for inappropriately placing unrealistic expectations on employees to manage their own stress when employees perceive that the health system itself creates stressors and fails to support workers (Ripullone & Womersley 2019). Similarly, Hartzband & Groopman (2020) criticise MWT in hospitals for both being compliance-driven rather than evidence-based, and for placing unrealistic demands and workloads on workers which leads to burnout. Commentary in the British Medical Journal (Gerada, 2019; MacDonald, 2019) suggests MWT causes employees to develop an "anti-education" attitude (Gerada, 2019, p. 365) as requirements to undertake excessive volumes of poorly designed training prevents engagement in other activities, often clinical, which the workforce perceive to be more important. Collectively this body of literature argues that MTW is, inappropriately, compliance-driven, offers few learning opportunities

for the workforce, and indeed may prevent them from completing more productive activities.

In direct contrast, a second perspective emerging from the literature indicates that MWT is highly valued and should be expanded. Requests for additional workplace training topics fall into three cohorts. The largest cohort focusses on training on specific clinical tasks or procedures. For example, Verzini et al. (2008) discuss the need for training in carotid stenting. Others propose training in interpretation of cardiotocography for staff in labour wards (Talaulikar et al., 2014), and cardiopulmonary resuscitation training for physiotherapists (Harvey et al., 2019). A recent request calls for spirituality training for medical staff to address the diversity of patients' beliefs that may impact care needs (Fleenor, 2022). Notably, specific task training requests are consistently proposed by a professional group for their own worker cohort.

The literature also includes requests for additional MWT focused on universal aspects of clinical care such as care of the dying (Hunt, 2014; Murphy, 2010), identification and support of at-risk drinkers (Berry, 2014), cultural competence to support birthing asylum seeking mothers (Tobin et al., 2014), strategies to support patients to reduce smoking (McNeill et al., 2012), and working with people with learning disability and autism (Glasper, 2019). These requests focus on training for the clinical workforce delivering care within individual professions, or in multi-professional, specialist teams.

A final cohort of requests for additional MWT focus on non-clinical tasks, for example, training on how to complete "fit to work notes" (Coole et al., 2015), and cyber security training (Gordon et al., 2019). Overall, when new training topics are proposed it is with the explicit or implicit assumption that the training

be mandated for at least some, if not all, worker cohorts. No explicit rationale or evidence was provided in any of the articles identified to justified this, rather there was an implicit assumption that training would be of value based on the perceived importance of the topics and the risks associated with untrained workers.

There is further evidence that the workforce values access to MWT that supports their work practices and contributes to compulsory CPD hours (Duggan et al., 2022; Wright, 2018), and that they often experience barriers to accessing MWT. Barriers cited include a lack of time, lack of workforce to cover the duties of staff in training which is perceived as a safety risk and disincentive to attend training, lack of flexible learning options to accommodate shift workers, and a lack of computer literacy and subsequent lack of confidence or willingness to engage in online training (Brand, 2015; Doherty, 2010; Duffin, 2010; Independent Nurse, 2010; Zummo & Kearney, 2009). Access to MWT was restricted during the COVID-19 pandemic (due to worker shortages, closure of training services, social distancing requirements that prevented inperson training) and was seen as problematic for individuals who wanted to access the training, and for organisations who have been unable to demonstrate compliance because of training backlogs (Duggan et al., 2022).

The second, limited, body of evidence around MWT in the literature comprises a small number of studies describing or evaluating mandated programs. These usually involve MWT programs directed to specific health professional workforce cohorts. For example, training on healthy weight gain and management in pregnancy targeted at midwives (Susan et al., 2018), training on the use of contraceptive implant devices for medical staff (Creinin et al.,

2017), neonatal resuscitation training for medical and nursing staff (Charafeddine et al., 2016), and patient handling training program for nurses and health care assistants (Clemes et al., 2010). The rationale for why an individual program is proposed to be mandated rather than being made available for voluntary access are rarely described and where they are, refer to the perceived importance or risk of the training topic. These examples of individual learning programs targeted to specific staff demonstrate the use of a range of teaching methodologies including simulation, workshops and reflective practice. More often however, evidence from organisations' grey literature suggests that a heavy reliance on e-learning and standardised face-to-face training session to deliver MWT programs. While not explicitly described in the grey literature, it can be surmised that this may be the result of pragmatic decisions such as cost efficiency and convenience, particularly for organisations requiring mandated training of large volumes or staff, or staff dispersed over large geographic areas (Beckett, 2020).

# 2.2.3 Assessing the value of mandated workplace training in the health sector

When training is mandated the measure of its value could be argued to be the achievement of compliance targets and indeed the literature yields little evidence on the impact of MWT in healthcare beyond compliance reporting. The few MWT evaluation reports identified focus on learner outcomes, suggesting that the main concern of trainers and researchers is the impact of MWT on learners and work practices, not compliance. Outcome measures cited include participant perceptions of the usefulness and utility of the program (Camelleri et al., 2022; Herberts & Sykes, 2012; Srivastava, 2008)

and observations of workforce behaviour post-training (Turner, 2009). All studies found moderate levels of learner satisfaction with the mandated programs and improved awareness of the target topic. Some studies also highlight that "real issues" (Herberts and Sykes, 2012, p1) can affect learning implementation such as a lack of time to implement the learned behaviours in practice (Srivastava, 2008; Turner, 2009).

From the perspective of organisations, the intent of MWT is to meet legislative requirements, address risk and demonstrate achievement towards industry standards, therefore the value of MWT is assessed via compliance rates, risk reduction, and achievement of safety and quality standards. Data to demonstrate this is not generally available in the public domain, but some literature evidence about compliance training in general claims that "Many executives are rightly frustrated about paying immense and growing compliance costs without seeing clear benefits" (Chen & Soltes, 2018, p. 116). Only one evaluation study reviewing health sector MWT from the perspective of measuring the achievement of organisational objectives was identified. Gaskell et al. (2016) implemented MWT for rotating medical staff and argued the program was "effective" in that it efficiently covered off a range of mandated training programs on the workers' first day in the organisation, thereby meeting the organisation's need for compliance reporting.

A final issue identified in the literature is the potential for MWT to have unintended, unwanted consequences. For example, staff in medication prescribing roles have called for mandatory training on safe prescription and management of potentially fatal opioids (Snidvongs & Mehta, 2012), but opioid manufacturers argue the MWT is a "burdensome process" (Traynor, 2010, p.

96) and claim clinicians will opt out of opioid prescription to avoid the burden of training, thereby reducing the potential pool of prescribers and in so doing reduce medication access for patients (Kuehn, 2010). Others write of the risk that excessive MWT requirements may lead to workforce burn out (Hartzband & Groopman, 2020), and note the opportunity-costs of time spent on MWT that could be more usefully sent on patient care delivery (MacDonald, 2019).

If the primary motivation of MWT in the health sector is to demonstrate compliance, is there any imperative to evaluate the impact of training? The literature demonstrates that many workers value high-quality workplace training, including mandated training, and are keen to learn, and that organisations also believe it has the capacity to impact meaningfully on their behaviours. MWT therefore provides an opportunity to support employee learning and safe, effective work practices. If the significant resources currently invested in MWT are to be fully realised, it is essential training programs "not only improve employees" understanding of the rules but also...instill (sic) and perpetuate appropriate behaviours" (Chen & Soltes, 2018, p. 124). Later sections review the literature on adult learning theory and workplace learning research, to consider how this goal might be achieved.

### 2.3 Workplace training

MWT is not required by every organisation. When it is, it may be the only training offered to staff however increasingly MWT is delivered in the context of organisations that offer additional training to their workforce (ADT 2021; Billett et al., 2014). A summary of current issues in workplace training is therefore justified.

The term *workplace training* is used to describe both training undertaken by students in a workplace as part of their training for a qualification (Markauskaite and Patton, 2019), and training of employees in the workplace (Illeris, 2011), sometimes termed *employment-based training* (O'Dwyer, 2021). Historically these two domains functioned relatively independently however recently the differentiation has become less relevant as both the vocational training and tertiary education sectors look to address the emerging needs of employers to skill workers to meet the requirements of rapidly changing workplaces (Billett et al., 2012; National Centre of Vocational Education Research (NCVER), 2023; O'Dwyer, 2021).

Workplace training has existed since at least the 17<sup>th</sup> century industrial revolution (Chalofsky, 2014; Nankervis et al., 2017), and is currently practiced in most industry sectors in Western developed countries (American Association of Talent Development (ADT), 2021). Australian data indicates that there is an upward trend in the proportion of employers providing some sort of training to their workforce with recent evidence that 81.2 % employers provide informal training to their workplace training including the need for workplaces to meet regulatory requirements (Shah, 2017), attract and retain workers (Baker, 2014; Thorne & Pellant, 2007) and skill workers to optimise productivity (Illeris, 2011) in a context where working lives are now extended and in which the pace of workplace change is increasing (Billett, 2012; Ryan and Sinning, 2009). In turn, workers reportedly see workplace training as tool to remain competitive, particularly in the international labour market (Martini and Cavenago, 2017).

Workplace training has been described in terms of informal, formal, and nonformal training (Evans & Rainbird, 2002; Marsick & Watkins, 1997, Shah, 2017), Formal, or structured as it is also described (Cully, 2002), training occurs within a prescribed learning framework in which planned, structured, intentional learning experiences (e.g. on-the-job teaching and competency assessment, e-learning programs, attendance at training programs, directed reading) are delivered and evaluated (Eruat, 2000; Marsick & Watkins, 2001; Smith, 1998). This can include training that is accredited by national education or training institutions (Cully, 2002; White, 2012), and that endorsed by profession based governing bodies. Informal training includes learning opportunities that may be contrived or facilitated within a workplace (e.g. providing access to online resources and tools to support self-directed learning, providing staff with a formal supervisor in the workplace from whom they can learn) or training which happens independent of the organisation. These independent experiences include email discussions, unplanned encounters and discussions with colleagues or work experiences (Noe et al., 2010), unplanned discussions with experienced, knowledgeable colleagues (Rowold & Kauffeld, 2009), conversations with peers (Carr et al., 2016); and work experience on a new project or work area (Cunningham & Hillier, 2013). The term *nonformal* is used to describe learning that occurs in underdeveloped and emerging economies where formal organisational structures do not exist, but where learning is more organised than informal (Malcolm et al., 2003). Workplace training can also be described in terms of on-the-job (Training while undertaking work related tasks) or off-the-job (Training occurring separate to daily work activities) (Jacobs and Park, 2009). The range of terms used to

describe workplace training reflects an ever-evolving understanding of the nature of work, workplace learning and training approaches (Cameron and Harrison, 2012).

The literature evidences a range of workplace training topics currently delivered across multiple industries includes industry and role-specific training, and generic training aimed at developing human capacity (ADT, 2021). Generic learning topics delivered across multiple industries include workplace health and safety reporting, management and prevention (Zemmel et al., 2022), digital organisations (Davies et al, 2022), leadership development (Jacobsen et al., 2022; Jungmann et al., 2020; Martin et al., 2021), diversity and inclusion training (Devine & Ash, 2022; Onyeador et al., 2021) and health and wellness strategies for the workforce (Hollis et al., 2022). A recent report by the ADT (ADT, 2021; Washburn, 2022) indicates that the top workforce training topics delivered in 2021, were, from the highest to lowest frequency: mandatory/compliance training, manager/supervisor training, profession/industry-specific training, interpersonal skills training, training on process, procedures, and business practices, information technology and systems training, new employee orientation, executive development, customer service training, product knowledge training and sales training. This list illustrates that the dual purpose of workforce training described by earlier researchers (Noe & Ellingson, 2017), persists. That is, training is delivered with the intent to skill the workforce to function effectively, and to support the efficient delivery of quality goods and services. The ADT data also illustrates that mandated training is the most frequently delivered of all programs.

The decision about what training should be delivered in the workplace has traditionally sat with organisations (Altman, 2008), however, challenges to the power and influence held by employers do exist. Governments and their related regulatory bodies may require public and private organisations to deliver training on specific topics (e.g. safety training) to their staff (SafeWork Australia, 2024). Some professional associations hold significant power to require their members to engage in training and have influenced employers to support staff to engage in training to both upskill staff (Australian Medical Association, 2015) and to attract and retain staff to the profession (Australian) Nursing & Midwifery Federation, 2022). Trade unions also work to secure workers' entitlements to training and campaign to be involved in decisionmaking on what training topics are delivered (Bryson, 2020) and a growing body of evidence about the value of co-designing training programs with the workforce (learners) to ensure learning needs are met, potentially increases opportunities for workers to actively influence the programs offered to them (Billett et al., 2024; Davies et al., 2022).

Evidence indicates the way workplace training is managed and governed varies considerably across organisations. Training may be managed within an organisation through training, human resource or organisational development departments, or contracted to external education and training providers (ADT, 2021). The emergence of micro-credentialing whereby training organisations offer elements of their accredited training programs to individuals not completing the whole program, is another means by which workplace training can be outsourced (Demarchelier & Car, 2022; Shay, 2023). In these outsourcing scenarios courses are generally delivered by qualified teachers.

In contrast, many sectors rely on trainers who have no formal education or training qualifications and are, instead, technical experts with an interest in, or delegated responsibility for, training (Cranton & King, 2003; Ong et al., 2022). The Australian vocational education sector requires trainers to hold at minimum, a training certificate qualification to deliver programs that may include workplace training, however there was no evidence in the literature of agreed standards or qualifications for other trainers delivering workplace training, nor any evidence of best practice standards for workforce to trainer ratios. A ratio of an average 1:385 trainers to employees has been reported in the United States training sector surveys (ADT, 2021).

Much of the detail (e.g. the rationale for the program design, the application of learning theory, discussion of intended learning outcomes, the teaching methodologies) related to the content of workplace training programs delivered across sectors, including health, sits within the grey literature of organisations. In published research however there is significant evidence about the methods used to deliver workplace training within descriptive studies, studies of the efficacy or impact of individual workplace training programs, and meta-analyses of training on specific topics. This evidence shows that a board range of teaching methods are used for the delivery of workplace training. Literature from the past two decades describes workplace training, direct instruction, lectures, workshops and seminars, e-learning, simulation-based training and blended or mixed methodologies (Delahaye, 2004; Illeris, 2011; Rothwell & Kazanas, 2003).

During the COVID-19 pandemic many existing workplace training programs were suspended or converted to online learning. The literature provides examples of training programs that were converted from face-to-face to elearning programs (Naciri et al., 2021; Papapanou et al., 2022) and programs that were converted to webinars or interactive online delivery (Seymour-Walsh, 2020; Sander et al., 2020).

Over the last couple of decades an increasing number of published studies refer to the concept of workplace learning initiatives rather than training per see. This is, as described later in this literature review, in recognition that learning can occur through multiple experiences, not just formal training. For example, a recent meta-analysis of studies of learning opportunities designed to support healthcare staff to deliver compassionate care to their patients considered curricula, workshops, rounds (A healthcare practice in which senior and junior staff jointly review patients), education programs, professional development, lectures, seminars, and workplace rotations as part of the review (Sinclair et at, 2021). Similarly, a review of an eight-year Australian initiative designed to improve staff compliance with best practice hygiene referenced direct instruction, regular point of care audits and feedback and poster alerts as part of a repertoire of learning strategies designed to change behaviour (Grayson et al., 2018). Other learning methods cited in the literature, and particularly in health care, include socially based learning methodologies which recognise that as social beings, human learning can be influence through social experience and connection. Methods such as Action Learning sets (Boak, 2022; Dunphy, 2022), Communities of Practice (Li, 2009; Ranmuthugala, 2011) and Learning Circles (Rohrbasser et al., 2018; Taylor-

Ford & Abell, 2015) support learning through engagement with others. Through reflection and sharing of ideas learning can emerge as, and sometimes more, effectively as direct instruction and formal training.

A key learning from the literature is that a broad range of methodologies are used in the delivery of workplace training and that decisions regarding which methodology to use are inconsistently documented. Pragmatic considerations such as organisation budgets, resources, the numbers of staff to be trained and the topics to be covered all impact on the teaching methodologies used by organisations (Illeris, 2011). Australian evidence indicates that employers seek workplace training that is agile, responsive, affordable, and limits workforce time away from the workplace (O'Dwyer, 2021). As such, the literature demonstrates that workplace training design is not always concerned purely with the quality of learning experience and outcomes, and that other factors such why the training is being provided, and cost are also considerations.

The ADT estimates that in the United States, billions of dollars are spent on organisational training each year. It costs approximately \$US 1300 per employee to deliver an average of almost one week per annum (35 hours) of training per employee (ADT, 2021). Similar levels of expenditure are reported in the UK, Australia, and China (Carliner & Bakir, 2010; Harper et al., 2016; Noe, 2002; Tian et al., 2016). The total cost of healthcare industry employee training in Australia and internationally is unknown. There is no centralised data on health workforce training, including costs, in Australia (Independent Hospital Pricing Authority (IPHA), 2018). There are approximately 600,000 registered and employed health workers in Australia (Australian Institute of

Health and Welfare (AIHW), 2018), and evidence indicates that most employees are required to undertake at least several hours of mandated training per year (Health Education and Training Institute (HETI), 2022; Queensland Health, 2022; Child & Adolescent Health Services (CAHS), 2018). This represents a significant investment in the design, delivery, management, and reporting on workplace training.

Given the multi-industry investment in workplace training by both public and private organisations, there is increasing interest in understanding its value or return on investment (ROI). Historically, the viability and appropriateness of measuring the value of workplace training was contested with concerns focused on the time, effort and resources required to evaluate training (Phillips, 2011). It was proposed that organisational resources are better applied elsewhere when managers "recognise the need for training and intuitively feel there is value in training" (Phillips, 2011, p 2), particularly during times of organisational change, growth, and competition. Bahn & Barret-Pugh (2012a), in the context of workplace safety training in the construction sector, refer to this phenomenon as *cultural acceptance* and propose it enables organisations to fund training in the absence of definitive evidence that it impacts on organisational safety. A further challenge to the critical evaluation of ROI is that value can be defined in different ways by different stakeholders, for example, training participants, trainers, management or researchers (Phillips, 2011). A recent Australian systematic review of the reported impact of continuing professional development for health professionals identified that outcomes may include increased knowledge; changes to practice, skills, confidence and attitudes; career development; networking; user outcomes;

intentions to change; organisational change; personal change and scholarly accomplishments (Allen et al., 2019), thus demonstrating that outcome measurement is complex.

Despite the contention that workplace training evaluation may not be required or justified, multiple tools and frameworks to evaluate the impact of workplace training have been proposed (See Passmore and Velez (2014) for a comprehensive review). Despite the age of the model, Kirkpatrick's (1996) model of training evaluation is still one of the most frequently cited evaluation methodologies (Alsalamah & Callinan, 2022; Bernardino & Curado, 2020; Campbell et al., 2019; Johnston et al., 2018; Sutton & Stevenson, 2005). Allen et al. (2019) showed in a systematic review of training in the healthcare sector that Kirkpatrick it was cited in 23% of the 191 papers on health professional development outcomes. Developed in the 1950s the Kirkpatrick model initially described four measurement levels of training impact:

1) Reaction: How participants feel about the training - "basically a measure of customer satisfaction" (Kirkpatrick, 1996, p. 55).

2) Learning: A measure of the knowledge acquired, skills improved, and attitudes developed.

3) Behaviour: The extent to which behaviours change because of the training.

4) Results: A measure of the "final results" of the training (Kirkpatrick, 1996, p.56) such as quality improvements or impact on staff turnover.

Criticism of the model include that it does not address the cost-benefit analysis required by organisations that fund training (Phillips, 2011), fails to account for organisational context (Allen, 2019; Bates, 2004; Holton, 2000) or

unanticipated training outcomes (Allen, 2019; Sutton and Stevenson, 2005), rates behaviour change lower than trainees' enjoyment of the training (Giangreco et al., 2010; Holton, 2000) and fails to recognise that training may have met learning outcomes, but organisational barriers prevent changes to behaviour in the workplace (Holton, 1996). Kirpatrick's model has been adapted to address the perceived limitations by:

1) the inclusion of additional factors that may impact on, or be impacted by, training (e.g. participant motivation, personality traits, locus of control and the work environment) (Holton, 2005),

2) the addition of measures of the impact and consequences in and for society (Kaufman & Keller,1994), and

3) the addition of measures of impact on business variables and the financial implications of the training (Phillips, 2011).

While Kirkpatrick's methodology is frequently cited in research and practice literature, organisations struggle to implement Level 3 or 4 evaluations, that is, measures of impact on trainee behaviours or organisational outcomes (Campbell et al., 2019; Johnston et al., 2018). In different contexts, the frequency of training evaluation has been reported to be as high as 93 % (Bassi & Van Buren, 1998) and 100% of training programs (Srimannaayana, 2010), and as low as 50% programs (Vitolins et al., 2012). There is consistent evidence however that evaluations are mostly limited to measures of participant reactions or impacts that are relatively easy to measure (Allen et al., 2019; Blanchard et al., 2000; Lamont & Brunero, 2018; Yadapadithaya 2001). Blanchard et al. (2000) report approximately 75% of Canadian

organisations evaluate reaction and learning but less than half examine learning transfer or business impact, findings consistent with ADT American findings over the last decade (ADT, 2021). Others argue that the lack of detail about program content makes the comparison of programs outcomes difficult (Vitolins et al., 2012), and that there is a dearth of longitudinal studies that explore the sustainability of changes to practice (Campbell et al., 2019). Further, the reliability and validity of evaluation tools used in studies are rarely reported or described (Campbell et al., 2019; Gozu et al., 2017; Opperman et al., 2016a; Opperman et al., 2016b; Opperman et al., 2018) and, where they are, indicate that the evaluation tools are often poorly constructed or use inadequate sample sizes (Krugman & Warren, 2011). Allen et al., (2019) argue that currently approaches to evaluation are too narrow and fail to capture unplanned or unanticipated learning.

One workplace training domain that has been critically examined for many decades is workplace health and safety (WHS). Findings from meta-analyses of WHS training program literature indicate that many programs fail to define learning objectives against which outcome can be assessed, do not include robust program evaluation, and rarely use the best practice randomised control trials to review impact (Cohen et al., 1998; Haslam et al., 2005; Ricci et al., 2016; Robson et al., 2010). Meta-analyses also offer inconclusive evidence of impact even when well-designed training evaluation studies are examined. Robson et al. (2012) reviewed 6396 studies published between 1996 and 2007 for evidence of WHS training impact on participants' knowledge, attitudes and beliefs, behaviours, and health (e.g. avoidable symptoms, disease, or injuries) and concluded there was limited evidence to

demonstrate an effect of training on knowledge, attitudes, beliefs, or health and some limited evidence that training could impact on behaviours. Later Ricci et al. (2016) reviewed over 3,000 research publications published between 2007-2014 and found strong evidence that training can impact attitudes and beliefs, but less evidence that it can impact the knowledge, behaviour, and health of participants. Similarly, a body of work in the Australian construction industry explored the impact of new mandated training in safety. Evidence concluded that despite initial resentment about the requirements for training, over time managers and staff reported that it did impact on safety awareness, attitudes to safety and some behaviours. Improvements in lost time injuries or a drop in WHS incidents were reported by some managers but others wanted more robust evidence of training impact (Bahn & Barratt-Pugh, 2012a; Bahn & Barratt-Pugh, 2012b).

In the health sector, multiple reviews of training on the WHS issue of workplace aggression conducted in the UK, Australia, America, and Scandinavia indicate poor reporting of training objectives, content and delivery, and that programs are often not, or are poorly, evaluated (Beech & Leather, 2006; Geoffrion et al., 2020; Heckemann et al., 2015; Kynoch et al., 2009; Lamont & Brunero, 2018; Price et al., 2005; Tölli et al., 2017). One challenge in measuring the value of WHS training is that it is often delivered as one element of a larger safety program. One robust, longitudinal study in Australia found a national initiative to improve healthcare workers' hand hygiene practices did reduce the incidence of healthcare associated bacterial infections (Grayson et al., 2018). The program incorporates multiple elements including a mandated online training program for all clinical workers. The impact of training on the program

outcome is assessed as significant, however how this was extrapolated from the impact of other elements of the program is not fully described.

This absence of definitive evidence of the benefits of workplace training on WHS issues may in fact be, as argued by Allen et al. (2019) an artefact of the failure to look broadly at the potential impact of training. Further, despite this absence of conclusive evidence of training impact, there is a sense in the literature that workplace training, particularly in the WHS domain, has merit (Beech & Leather, 2006; Cohen et al., 1998; Lamont & Brunero, 2018) or that, "It is *assumed*" (sic) (Price et al., 2015, p. 447) that training will improve workers' abilities and improve safety in practice, however "while results are highly encouraging, they fall short of definitive evidence" that training reduces workplace fatalities and injuries (Taylor, 2015, p. 66). The significance of this lack of substantiated value of workplace training is that organisations, including those public funded, are investing significantly in practices that may or may not be of benefit to them (Chen & Soltes, 2018).

#### 2.3.1 Mandated versus voluntary workplace training

The final issue explored via the literature is whether mandating training enhances learning and learning transfer in the workplace. There is surprisingly limited data on the subject despite MWT being a significant, and costly, feature of many industries.

As noted previously, there is evidence that mandated training may have an impact on workforce awareness of, and attitudes towards, workplace safety (Bahn & Barrett- Pugh, 2012a; Ricci et al., 2016; Robson, 2021), however it is not known whether the same outcome might have been achieved if programs

were voluntary (Bahn & Barratt-Pugh, 2012b). There is inconclusive evidence that mandating training signals to the workforce the value the organisation places in training and increases engagement or learning transfer. Greater learning transfer has been reported in some mandated programs when compared with voluntary access to learning (Baldwin & Magjuka, 1991; Tian et al., 2016) while others have found the opposite. Curado et al. (2015) explored training in the insurance sector in Portugal and found there to be greater motivation to transfer learning in workers who made an autonomous decision to be involved in training versus those who were mandated to attend. Similar results were identified by Gegenfurtner et al. (2016) who explored the relationship between mandated and voluntary training, learners' goal orientations and learning transfer. Their findings indicate that the transfer of training "seems more likely" (Gegenfurtner et al., 2016, p. 297) when learners autonomously decide to attend a program but that in circumstances where mandated attendance is required, offering trainees choices in different program types, or when to attend, may improve their feelings of autonomy and self-determination which leads to more effective learning transfer. They also report that learning transfer improves if learners are involved in the design and development of learning programs. In summary, the evidence that mandating training contributes to learning and learning transfer remains inconclusive.

#### 2.3.2 Learning transfer

Re final key issues arising from the literature is the concept of learning transfer, or the degree to which knowledge, skills and competencies acquired during training are applied in practice in the workplace (Sankey & Machin, 2014; Sørenson, 2017), and involves a three-stage process of 1) education, 2) personal development, and 3) the application of learning to job specific processes (Leberman et al., 2006).

Models of learning transfer include simple models of *lateral transfer* (skills of the same level of complexity are applied in similar situations) and vertical transfer (the development of greater, more complex skills and applications) (Gagne, 1965) or near and far transfer (Blume et al., 2010). Transfer is also conceptualised in a temporal dimension: generalisation (the application of skills and knowledge to new settings, people, and situations) and maintenance (the persistence of changes over time) (Blume et al., 2010). More complex models of learning transfer propose up to six *levels* and *types* of transfer ranging from non-specific transfer (learning is superimposed on old learning), through application transfer, context transfer, near and far transfer to creative transfer (something new is created because of interactions between old and new knowledge) (Haskell, 2001).

Transfer involves three interrelated elements: 1) the work environment (e.g. the organisation's learning culture, workplace practice opportunities), 2) the learner (e.g. motivation, attitude, personality), and 3) the training or instructional intervention provided (Baldwin et al., 2009; Holton et al., 2000). For example, one study compared two training programs on the same topic delivered to social care workers and found that individual learners' perceptions of training utility, workplace participation, relatedness, and a sense of shared social identity with presenters, were found to impact on transfer. They also found more transfer was observed after the program delivered by an in-house expert focussing on content immediately relevant to the workplace, when

compared to the program delivered by external experts focused on national standards (Bjerregaard et al. 2016).

The social, cultural, economic, and political influences within organisations can either support or restrict transfer (Leberman et al., 2006). Argyris identified that over-bureaucratic workplaces encourage passivity, an overdependence on others and discourage independent learning and thinking in the workplace (Parker, 2017). Similarly, a rule based, command and control culture (the police force) prevented transfer of knowledge acquired via a training program that encouraged learners to actively question information, challenge thinking, and engage in critical reflection (Swartz, 2019). Organisations can also create a "climate for transfer" (Noe & Winkler, 2009, p. 177) or a "continuous learning" culture ... one in which organisational members share perceptions and expectations that learning is an important part of everyday work life" (Tracey et al., 1995, p. 241), to either support or inhibit the use of new skills in the workplace. Factors contributing to a transfer climate include opportunities to perform trained tasks, supervisors and peers who jointly set learning goals with the learner and actively support them to use newly acquired skills, provision of regular cues within jobs tasks to prompt workers to use new skills, and intrinsic and extrinsic rewards to workers use new skills (Baldwin & Ford, 2009, Noe & Winkler, 2009; Tannenbaum & Yukl, 1992). Organisational messaging to workers on the importance of training may include pre-training information about the value of training, making training mandatory, holding workers accountable for their learning (Baldwin & Magjuka, 1991; Rouiller & Goldstein, 1993), the use of as if training such as simulated workplace

scenarios, reflection (Ford et al., 1992; Vermeulen, 2002), and the use of experiential and action learning processes (Leberman et al., 2006).

A further concept that highlights the social element of transfer (Chen et al., 2002; Farh et al., 2004; Tian et al., 2016) is that of "organisational citizenship behaviour" (OCB) which is used to describe the phenomenon of the workforce being more likely to engage in behaviours (including transfer) when they perceive the behaviour to be the social or psychological norm of the workplace. Tian et al.'s (2016) hypothesis that workers in less economically developed countries feel a higher degree of reciprocity to their employer than those in economically developed countries, and that workers in collectivist Confucian cultures (e.g. mainland China) which defer to the "superior" (Chen et al., 2022, p. 341), are more likely to enact behaviours they perceive to be pleasing to their supervisor. Tian's conclusions have been challenged (Farh et al., 2004; Hui et al., 2004) but do highlight the potential complexity of factors impacting learning transfer.

Characteristics and behaviours of individual learners also impact on transfer. The concept of engagement refers to the degree to which people participate in, and with, activities (Whitton & Mosely, 2014). It is variously described in terms of academic, cognitive, intellectual, institutional, emotional, behavioural, social, and psychological engagement (Parsons & Taylor, 2011). Chiu (2021) suggests engagement is "multi-dimensional" (p.2) consisting of five individual interrelated, intrinsically motivated entities: learner, behavioural, cognitive, emotional, and agentic, each one potentially impacting on a learner's investment and persistence in learning and their levels of attention, effort, participation, passion, curiosity, and satisfaction in learning tasks.

Engagement is impacted by an individual's levels of self-determination (the innate needs for autonomy, relatedness, and competence) (Chiu, 2021), learners' orientation to learning (Webber, 2004; Schwartz, 2019) which determines how proactively learners seek learning (Raemdonck et al., 2014; Wessells, 2007), and learners' perceptions of learning needs (Sankey & Machin, 2014). Billett et al. (2014) in the context of workplace learning refer to engagement in terms of the individual learners' energy, fatigue and emotional state and levels of interest. High levels of behavioural engagement are claimed to impact positively on learning (Kuh et al., 2011; Parsons & Taylor, 2011), however the definition of learning outcome is poorly defined in many of these studies (Albert& Kussmaul, 2008; Jo et al., 2015; You 2016; Wagner et al., 2008). High levels of engagement are also said to lead to "deep learning" (Bryson & Hand, 2007; Kelly, 2003; Marton et al., 1997), or a deep understanding and knowledge of the learning topic. Conditions for deep learning include a social-cultural environment that 1) encourages a sense of solidarity between learners and teachers, 2) is welcoming, 3) is perceived by learners to be a place where they will be accepted, respected and their voices heard, 4) has a shared sense of power between the learner and facilitator, and 5) has opportunities to "influence what they have been told to learn" (Illeris, 2011, p. 47). Reflection and being encouraged to develop an awareness of the impact of knowledge on the environment or context, are also cited as conditions for deep learning. (Illeris, 2011; Mann, 2001).

Meta-analyses of transfer studies consistently demonstrate that the key impacts of transfer are learner's cognitive ability, conscientiousness, and motivation, and a supportive work environment (Blume et al., 2010; Hughes et
al., 2020; Grossman & Salas, 2011) with peer support arguably having the most impact.

In summary, learners are most likely to transfer learning if they have the cognitive skills to do so, if they see value and relevance of the learning to their work environment, if they believe the organisation values their learning and, if the learning aligns with the social and psychological norms of the organisation. Organisations can optimise learning transfer by signalling to workers the value they place in transfer, by providing the resources required to transfer learning into workplace practice (e.g. equipment, time), and by providing training that is highly relevant, well designed and targeted to specific behavioural requirements in the workplace. Mandating training may also signal the value an organisation places on training.

#### 2.4 Adult learning

If organisations are to capitalise on the significant investment in the design, delivery and reporting of MWT, one significant outcome would ideally be that the training participants learn something from the training and that they apply the skills and knowledge in the workplace, to the benefit of the organisation. An understanding of how adults learn in general, and in the workplace in particular, is therefore required to guide the design and delivery of programs that optimise uptake and impact of MWT.

There is an extensive body of knowledge on how and why adults learn embedded in the philosophy, adult learning, education, and psychology domains (Brookfield, 1995; Fenwick & Tennant, 2002; Merriam & Bierma, 2014; Tennant, 2019). A comprehensive critique of adult learning theories and

practices is beyond the scope of this review, however a summary of the key issues that relate to MWT is warranted.

#### 2.4.1 Adult learning theories

Adult learning theory is far from an exact science. The term "orientations" has been used (Merriam & Bierema, 2014, p. 25) to acknowledge that the concepts underpinning contemporary adult training and education practices are an amalgam of evolving philosophies, frameworks, incomplete sciences, and practice models. These orientations refer to different conceptualisations of learning as: a change in behaviour (Behaviourism), the development of the person (Humanism), a cognitive process (Cognitivism), an outcome of social and contextual experiences (Social-Cognitivism) or constructed by individuals creating meaning from experience (Constructivism) (Merriam & Bierema, 2014). In practice the orientations are not mutually exclusive such that learning initiatives may include interventions that include multiple orientations within the one learning program.

A foundation stone of contemporary understanding of how adults learn is the concept of andragogy which emerged from a humanist orientation that maintains the potential for learning is inherent in all people, and possible when individuals choose to engage with their body, mind, and spirit. In the early 1800s, the German philosopher Kapp wrote extensively on learning as a process of "inner forming" (Leong, 2017, p 631), that enables full engagement in the world. Kapp was "the first known user" of the term *andragogy* (Leong, 2017, p. 629). The concept was introduced to America in the 1960s by Malcolm Knowles as a "new label" (Knowles, 1984, p. 6) to attach to the growing body

of work that recognised adult learning as different to pedagogy or learning in children. In his seminal text, *The Adult Learner: A neglected species* (1973), Knowles described six key "assumptions" (Knowles, 1990, p. 57) that emphasis that adults come to learning internally motivated, independent, self-directed, with prior experience, a readiness to learn when a learning need is identified, and with a problem-focused orientation (Henschke, 2011; Knowles, 1990; Merriam & Bierema, 2014). Knowles proposed that effective adult learning programs should:

1) support adult learners to understand the value of investing time and effort in learning,

2) accommodate prior life experiences, prior learning, biases, values, and beliefs and a concept of self-determination, and

3) recognise that adults bring a *life–centred* orientation to learning relevant to their individual life situation, and that,

4) learner motivations to learn are generally internal, that is, concerned with self-perception, self-esteem, or quality of life (Knowles, 2005; Knowles, 2011).

While other theories and practice approaches have evolved, Knowles theory is still widely cited and supports, for example in life-long learning societies (Churungkaittikul & Henschke, 2017), online teaching of adaptive physical education (Sato et al., 2017), e-portfolio evaluation (Sharifi et al., 2017), undergraduate management courses (Dachner & Polin, 2016) and teaching leadership skills (Mc Cauley et al., 2017), and has been claimed to "a proven

theory and strong method for teaching adults" (Henschke, 2011, p35). Criticisms include that Knowle's research focused on American, educated, middle class, white males it has limited applicability to "foreign born learners"(Lee, 2003, p. 11), woman, and learners from other backgrounds (Baumgartner, 2003; Sandlin, 2005).

Another resilient approach to adult learning arose from the cognitivist orientation which frames learning as a mental, information processing task. Gange (Gange, 1985) developed a theory of instructional design (ID), "a system of procedures for developing education and training curricula in a consistent and reliable fashion" (Branch & Kopcha, 2015, p 77). ID can be applied at a macro level (e.g.: curricula or systems aimed at long term learning outcomes), a meso level (e.g.: learning over a semester/ program) or micro level (e.g.: a lesson) (Schoot & Seel, 2015). Gagne's (1985) Analysis, Design, Development, Implementation and Evaluation (ADDIE) model outlines five core elements of effective ID. His initial model, as described by Schoot and Seel (2015) focussed on procedures commencing with a learning needs assessment, identification of instruction goals, progressing through to evaluation. Later iterations focus on the automation of components of the process, for example, the use of computerised systems to manage learning content and assessment methodologies and the creation of learning environments. Multiple contemporary training and education programs, particularly online learning (Castro & Tumibay, 2021) are based explicitly or without acknowledgement, on ID principles. While it provides a highly practical framework for educators, there is "a disturbingly small volume of literature

describing any testing of instructional design models". (Branch & Kopcha, 2014, p 85).

Social and social-cognitive orientated adult learning theories acknowledge that adults bring to learning their own unique characteristics and experiences and that they are social beings who learn in and from their social environment. An early writer in this space, Cross proposed that learning is impacted by individual learner variables such as age, life stage and developmental stage, and situational variables (full part or part time learning, voluntary or dated) (Cross, 1981). Her Characteristics of Adult Learners (CAL) Model described criteria to optimise learning including capitalising on learner's prior experiences, accommodating variations or learner age and personal development, and offering choices to adult learners to accommodate preferences about how, when, and where, programs were delivered. Another model that accommodates this complexity within a social orientation is McCluskey's Theory of Margin (1963) which proposes that adult learners come to a learning environment with a mix of abilities, prior experiences and external factors that can impact on their capacity to learn. Arising from the psychology domain this theory sought to explain the relationship between the demands on an adult learner (Load), and the resources that can be called upon to manage the load (*Power*). Load consists of both internal and external expectations such as the external expectations of family responsibilities, financial and career requirements, or internal expectations of self- imposed goals, selfconcept or expectations. Power is also internal (e.g.: mental abilities, physical strengths) or external (e.g.: financial support, social capacity and supports).

McClusky proposed an equation to evaluate the optimum load and ideal "margin" to optimise adult learning potential.

More recently adult learning theories and practices with a constructivist orientation have gained precedence. These practices propose that learning is the outcome of adults seeking meaning through experience often mediated through cultural symbols and language (Vygotsky, 1978). Peter Jarvis in his work Adult Learning in the Social Context (1987) proposed a model of adult learning that focusses on the fact that adults come to a situation with a preexisting psychology and set of experiences and that through the experience and reflection on those experiences learning arises. He refers to 'the transformation of experience into knowledge, skills, and attitudes' (Jarvis, 1987, p. 32). Jarvis's own life experiences resulted in the evolution of his own ideas over time such that he now refers to learning as an ongoing, life-long task and that effects the whole of human experience incorporating both body, mind and potentially the soul of an individual (Jarvis, 2021). Other constructivists such as social theorist Habermas propose that a critical element of this transformation is the act of communication. Habermas' theory of communicative action proposes that speech supports the confirmation of understanding (Calleja, 2014). This notion informs the adult learning approach of reflective practice by which learning is encouraged through the reflection, either personally or with others, in (during) or on (after) an experience (practice) (Rolfe and Freshwater, 2020).

The use of reflection is extended in further in the Community of Practice model advocated by social anthropologists Wenger and Lave (Wenger, 1998; Wenger, 2000; Wenger-Trayner & Wenger-Trayner, 2015). The model

proposes that learning will arise through the voluntary engagement of a group of people in regular dialogue on a shared topic of interest. The concept of the expert teacher is replaced by a social process by which the curious, expert and novice practitioners share and reflect on understanding.

As this brief exploration demonstrates, in the second decade of the twenty first century there is no one universally accepted epistemology or theory of adult learning. Current approaches reflect different historical linages (British, European and American); contributions from different disciplines or epistemologies (philosophy, sociology, psychology, education) and differing concerns about theory and / or the practical application of knowledge about adult learning to education contexts such as adult education providers, the workplace or in social contexts such as public health programs. The relevance of this finding to this study is that organisations have multiple tools at their disposal to support learning in the workplace.

### 2.4.2 The adult learner

A recent study discussing the value of neuroscience and neuropsychology research notes that all life experiences impact on brain function and the establishment of neural pathways which impact how adults gather, reflect, create, and test information - the fundamental functions of learning (Jang et al., 2022). Learning is impacted by learner variables such as age, life stage, and developmental stage (Cross, 1981). Leveraging learners' prior experiences, accommodating variations associated with learner age and different levels of personal development, and offering choices to adult learners to accommodate preferences about how, when, and where, programs are delivered are all considered necessary to optimise learning (Knowles, 2011).

The cultural background of adult learners can also impact on learning (Merriam & Bierema, 2014). Culture is a pattern of shared, basic assumptions that teach people in a culture how to perceive, think and feel in relation to problems of external adaption and internal integration and is "often unarticulated" (Schein, 2004, p. 241). Culture exists within all human groups such as national, religious, geographic, gender, and professional groups, meaning that individual adults bring their own, multiple, cultural understandings to the learning context. In the Australian, New Zealand, and Canadian literature there is a significant body of evidence about Aboriginal ways of knowledge and knowing (Archibald, 2001; Delbridge et al., 2022; Prochner, 2010; Yunkaporta, 2009; Yunkaporta & McGinty, 2009) that can inform learning program design for both Aboriginal and non-Aboriginal adult learners (Papps & Ramsden, 1996). Similarly, different health professions have their own cultural norms that impact individual's beliefs, attitudes, and approaches to learning (Paradi & Sutkin, 2017; Smedley et al., 2003; Sukhera et al., 2020).

The impact of age on learning was explored in some of the first systemic studies of adult learning such as Thorndike et al. (1928). More recent investigations have exploring older learner's capacity to manage digital systems and online learning (Ma et al., 2022) or their cognitive ability to recall information (Jang et al., 2022) suggest. age may impact learning. Barrash (1994) found route learning declines with age, and Rogers et al. (2000) found variations in the learning strategies used by learners of different ages. The impact of age on learning can be confounded by other related variables such as years of experience and prior learning.

There is sufficient evidence to indicate that culture (organisational, professional, personal), peer learning experiences and individual learner characteristics should be considered in the design of MWT.

#### 2.4.3 Learning in the workplace

Workplace learning is "the acquisition of knowledge or skills by formal or informal means that occurs in the workplace" (Cacciattolo, 2015, p. 243). Theories of workplace learning are evolving as the nature of work evolves (Manuti et al., 2015), but currently accepted central concepts include recognition that learning can occur *in, at* (Sambrook, 2005) and *for* work (Billett& Choy, 2013), and that it can be both intentional and planned or unintentional and unplanned (Hodkinson and Hodkinson, 2004).

There are three key factors to consider in this space. Firstly, workplaces are complex social systems in which dynamics of power and authority are played out. In the sphere of workplace learning this manifests in who decides what learning will be enabled, how, when and who may access it (Sebrant, 2008). Secondly, organisations also learn, and workers can contribute to this process through engagement in learning activities that benefit both the organisation and the worker. Finally, organisations need to consider pragmatic factors such costs, impact on productivity, access to staff for example, when supporting workforce learning (O'Dwyer, 2021; Billett et al., 2014).

Evidence suggests that the workforce places more value in, and learn more from, informal learning than formal learning programs (Billett et al., 2012; Boad & Garrick, 1999; Le Clus, 2011; Livingston, 1999). Factors that support informal learning include the personal characteristics of the individual learner,

their social relationships and structures and processes designed by the organisation. These include, 1) an individual learner's personal commitment to learning and development (Schürmann & Beausaert, 2016); 2) positive learning relationships (e.g. good mentors, peer relationships, giving and seeking feedback from peers and supervisors, reading and talking and collaborating with others) (Cunningham & Hillier, 2013; Kyndt et al., 2016; Schürmann & Beausaert, 2016); 3) learning opportunities arising from enlarged or redesigned work (e.g. stretch assignments); 4) cross-sector training (e.g. temporary assignments to different work areas, acting roles) with opportunities for reflection and coaching (Janssens et al., 2017); 5) programs involving learning through doing (Cunningham & Hillier, 2013) and, 6) programs that focus on specific project outcomes (Cunningham & Hillier, 2013). Access to self-directed information is also valued by informal learners (Janssens et al., 2017), for example, access to mobile phones to use as a learning resource at work (Fahlman, 2013).

Jacobs and Park recognise that workplace learning involves "highly complex individual processes and organisational practices" (Jacobs & Park, 2009, p. 136). They propose a conceptual model that classifies workplace learning into eight categories based on three critical, binary elements: whether a systems approach to learning is applied (structured or unstructured), the location of the learning (on-the-job or off-the-job) and the extent to which a facilitator or trainer is actively engaged in the process (passive or active). Each category of learning is independent and of no greater or lesser value than another category. The framework is regularly cited as a useful tool to support research

on workplace learning (Leicher & Mulder, 2018; Schwatz, 2019; Sellu and Ching, 2019).

With respect to the concept of organisational learning, the concept of single and double loop learning describes two ways in which organisations and workers can learn from errors or problems. Single loop learning is the process of identifying an error, remediating the error, and progressing with the same practices (e.g.: in a supply chain interruption an alternate supply source is located). Double loop learning supports workers to conduct more extensive enquiry about the error and can result in innovative responses to the problem which, over time leads to more sustainable and robust organisations. Argyris and Schön (1978) explain that people's behaviour within organisations can either inhibit or support double loop learning. Limited, single loop learning occurs when an individual's behaviour is based on values of personal control in which they define a situation as it relates to themselves, when they want to win or suppress their own and other's feelings or when they want to deemphasis the emotional aspects of a situation. Double loop learning will occur when individuals value reliable information, competence, regular monitoring of effectiveness of decision making and focussing on technical and interpersonal activities (Schön 1987, Argyris & Schön 1978). In the contemporary setting organisations use other tools to support double loop learning. Action Learning Sets, for example, involve a practice-based process of ongoing group action planning, implementation and outcome reflection intended to enhance knowledge or solve a workplace problem (Baines, 2020; Hetherton et al., 2021; Vaughan & Joliffe, 2021; Webster et al., 2022). Change management theories and practices also support worker and organisational

learning by systematically engaging workers in the change process, inviting their contribution as stakeholders in the design of change, testing the implications of change and making ongoing adjustments as required (Hiatt & Creasey, 2012).

### 2.5 Implications for the study

This study is concerned to understand how to optimise the uptake and impact of MWT in the context of the public health sector. The literature review highlights the complexity of the context in which MWT is delivered. It demonstrates that organisations invest significant resources in workplace training overall and that MWT is the most frequently required of training across all industries. It demonstrates the tensions between organisations who need to invest in MWT to comply with regulations, and the wish of organisations and their workers to see that training deliver meaningful learning and transfer of the learning into workplace practices.

The literature also revealed that MWT is poorly described but does appear to rely heavily on a standardised "one size fits all" approach to training despite the evidence that adults learn best when the learning opportunity takes into consideration their personal characteristics, knowledge, skills and learning needs. The literature revealed that while there is no universally agreed best practice for delivery of adult learning support, a multitude of learning strategies are available to organisations to support learning.

The review identified the challenges of assessing the value and impact of adult learning programs and that there is no equivocal evidence about the impact of these programs on individual learners, workplace practices and behaviours,

nor the organisation. With this limited evidence, the return on investment of MWT cannot be measured other than through limited lens of the achievement of compliance targets.

Finally, the literature review supports the intent of this study in that it identifies that there are gaps in the evidence describing the details of the MWT required of workers in the public health sector, including the rationale for mandating some programs that are not required by law rather than making them voluntarily available to access, which workers are required to complete which training, topics covered, the volume, program design, how and by whom it is delivered. Further, robust evidence of the impact on these programs on individual learners, the organisation and work practices is sparce. Finally, there is very limited evidence on how to optimise the uptake of MWT. As such, the literature supports the need for further research into MWT and provides guidance about the key factors that should be considered in addressing these gaps. Specifically, the evidence in the literature about effective workplace learning principles, adult learning theory, learning engagement and learning transfer suggest they are relevant to understanding how best to deliver effective, impactful MWT. Chapter Three describes how these concepts have been incorporated into the design and methodology of this research.

# **Chapter Three: Methodology**

## **3.1 Introduction**

This chapter describes the study methodology and starts with a description of the epistemology and the theoretical foundation of the study designed to investigate MWT in the public health sector (PHS) in Western Australia (WA). It then proceeds to describe the study design and the rationale for the four phased, mixed method design used to answer the six research questions. It then describes the each of the four phases of the study, including the target participants, participant recruitment, target data, data collection, data analysis and date reporting in each phase. The chapter concludes with a discussion on the study validity, and the ethical and governance considerations of the study.

## 3.2 Epistemology

The "worldview" (Creswell & Plano-Clark, 2011, p. 35) that guides this study combines elements of constructivism and pragmatism. Epistemologically, the study positions the learner (i.e. the worker undertaking MWT) as central to the construction of their own knowledge. As such, the study methodology incorporates the collection of data representing the voice of employees. At the same time, the study was initiated to address a real-life problem, that is, the challenge of maximising employee participation in MWT to both attain training compliance targets and achieve learning outcomes that result in learning transfer and positive behaviour change in the workplace. This intent aligns with a pragmatic worldview in which "the focus (*of the study*) is on the consequences of the research, on the primary importance of the question

asked rather than the method." (Creswell & Plano-Clark, 2011, p. 37). This combined constructivist/ pragmatist approach aligns with a mixed method study design.

## **3.3 Theoretical foundations**

This research was initiated to interrogate how participation in MWT might be optimised. A literature review (See Chapter Two) revealed limited published information describing the details of MWT delivered within public health services (e.g. training methods, duration of programs, frequency of training) therefore this study commenced with descriptive research designed to provide a comprehensive description of MWT requirements in one public health service (WA Health). Brink & Wood (2012) confirm the exploratory research method is appropriate when a phenomenon is known to exist, is amenable to description, where there is limited literature on the subject and where there is a sound rationale for the study.

The literature review also identifies four key concepts (workplace learning practices, andragogy, engagement, and learning transfer) that impact on adult learning in the workplace. These concepts are described below and impacted on how the study was designed and conducted.

### 3.3.1 Adult learning theories

Adult learning theories that have evolved from the concept of andragogy propose that when adults identify a learning need, they are likely to be internally motivated, relatively independent, and self-directed learners with a readiness to learn. Adults build on their prior experiences to seek learning to

address their learning goals that are often problem focused (Henschke, 2011; Knowles, 1990; Merriam & Bierema, 2014). As such, they are active agents in their own learning, and their personal characteristics (e.g. age, culture, professional roles) may impact on their learning experiences. Understanding the workforce's relationships with, and perceptions, attitudes, and beliefs about MWT can provide insights into how MWT can be more effectively and efficiently designed and delivered. These variables are all testable (i.e. observable and measurable), therefore they are appropriate topics for research investigation (Creswell, 2014; Portney & Watkins, 1993).

#### 3.3.2 Workplace learning

Workplace learning can be classified as informal or formal (Evans & Rainbird, 2022; Marsick & Watkins, 1997), on-the-job or off-the-job, and involve passive and active learning (Kyndt et al., 2012). This study used a workplace learning classification tool to investigate and describe the types of workplace learning opportunities currently being delivered via MWT in the organisation under study. The tool classifies workplace learning opportunities based on three critical elements: 1) the degree to which a system's (or organisationally coordinated) approach to learning is applied (structured or unstructured), 2) the location of the learning (on-the-job or off-the-job), and 3) the extent to which a facilitator or trainer is actively engaged in the process (passive/active) (Jacobs & Parks, 2009).

### 3.3.3 Engagement

Levels of learner engagement may impact on learning outcomes. Engagement can be impacted by trainers and organisations can manipulate learning

opportunities and organisational contexts to improve learning outcomes (Billett , 2012; Chui, 2011; Illeris, 2011; Parsons & Taylor, 2011; Sankey & Machin, 2014). Understanding what impacts on the PHS workforce's engagement with MWT may assist organisations to include enablers of engagement in their MWT practices and minimise barriers to engagement. The study design therefore incorporated an exploration of workforce engagement with MWT, defining engagement in accordance with social-emotion-psychological theorists who consider engagement to be a learner-centred judgement of their commitment to, and emotional or psychological involvement with, a learning task (Schwartz, 2019; Whitton & Mosley, 2014).

#### 3.3.4 Learning transfer

Learning transfer is the degree to which knowledge, skills and competencies acquired during training are applied in the workplace (Sørensen, 2017). Transfer is a goal of all workplace training and is a function of three elements: 1) the work environment or organisational factors, 2) the learner, and 3) the nature of the training or instructional intervention provided (Holten et al., 2000). Evidence from the literature review about how MWT contributes to workplace behaviour change is inconclusive, therefore a study of the workforce perceptions of learning transfer and how it might be enhanced will add to the existing body of knowledge.

The four concepts of adult learning theory, workplace learning, engagement and learning transfer have been incorporated into the research design, as outlined in Figure 3.1.

# Figure 3.1

# Theoretical Concepts Underpinning the Study



# 3.4 Study design

Mixed method study design is frequently applied in both organisational and education research (Bazeley, 2016; Creswell, 2014) where the research question is best answered through the exploitation of both qualitative and quantitative data. This study applies a mixed research method defined as "...research in which the investigator collects and analyzes (*sic*) data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of enquiry" (Tashakkori & Creswell, 2007, p.4).

The issue of data integration is considered a critical element in the analysis and reporting of the findings of mixed method research (Bazeley, 2018; Bryman, 2006; Mertens, 2021). Bazeley (2018) describes the concept of "purposeful interdependence in which a "conversation" takes place between data elements (Bazeley, 2018, p.4). In this study the "conversation" is designed into each stage of the project: data collection, data analysis and data reporting.

The study design (See Figure 3.2) can be defined as convergent in that it sought to "bring together the results of the quantitative and qualitative data analysis so they can be compared and combined" (Creswell & Plano-Clark, 2011, p. 65). In convergent studies datasets are separate until the point of analysis when they are compared and used to validate findings in each dataset. Where this study diverged from this pure definition is that the integration of the data occurred throughout the study, meaning that Phase One data informs Phase Two design, and Phase Two data informs Phase Three, in a series of iterative steps. In Phase Four the data from all phases is integrated. The study design also aligns with Creswell & Plano-Clark's (2011) description of an explanatory sequential design in which quantitative data are collected in Phase One of a study and inform the design of a subsequent qualitative phase. This combination of elements from two core mixed method designs is not incompatible as there is potential for research paradigms and designs to "interbreed" (Lincoln & Guba, 2003, p. 245). Further, the combination of convergent and exploratory sequential design elements strengthens the validity of data and analysis of all datasets by including a critical data review and comparison at each stage of the study.

There are potential risks in the use of mixed method studies. Creswell & Plano-Clark (2011) describe historical debates related to whether the foundation philosophies of qualitative and quantitative research are essentially incompatible and therefore cannot be combined. Others note the risk that mixed method studies may lack focus and attempt to answer too many questions in the one study or attempt to extract meaning through combining data that would be better analysed independently (Dawadi et al., 2021; Wilkinson & Staley, 2019). The practical implications of conducting a mixed method study are also discussed in the literature. For example, the need for the researcher to have both qualitative and quantitative research skills, the need for additional time and resources to apply both methods, and the potential need to educate others on the value of a mixed method study versus more familiar independent qualitative or quantitative approaches (Creswell & Plano-Clark, 2011; Creswell, 2014; Dawadi et al., 2021). The latter issue applies to research conducted in the health domain where qualitative studies are increasingly in evidence, particularly in relation to the experiences of health professionals and patients, but where many researchers maintain "...whether knowingly or unknowingly...an allegiance to a post-positivism paradigm single objective, external, tangible, measurable reality" (Ajjawi, 2022, p. 70). This allegiance is likely the result of philosophies assumed and adopted by health professionals during their clinical training programs, and the ongoing focus on quantitative research in clinical and biomedical sciences (Young & Ryan, 2020). The design of this study, as described above, is consistent with the methods most frequently cited in mixed method studies. That is, it uses

cross-sectional, semi-structured interviews, and a questionnaire to elicit qualitative data, and questionnaire to elicit quantitative data (Bryman, 2006).

# Figure 3.2

## Study Design



# 3.5 Methods

This study sought to address six research questions:

Q1: What MWT programs and delivery methods are used in the WA PHS sector?

Q 2: How does the PHS workforce perceive the need and purpose of MWT?

Q 3: How engaged is the PHS workforce in MWT?

- Q 4: What factors are associated with PHS workforce MWT engagement?
- Q 5: How do personal characteristics impact levels of MWT engagement?

Q 6: How do PHS workers perceive the impact of MWT on practice?

The study was designed as a four phase, cross-sectional, combined convergent/explanatory sequential, mixed method investigation with four phases as described in Figure 3.2. The study was conducted over a three-year period within the PHS in WA. The WA PHS is organised into three metropolitan Area Health Services (AHS), a Children and Adolescent Health Service, a WA Country Health Service, a Health Support Service and a pathology service (WA Health Government of western Australia, Department of Health, 2024). This study recruited participants from three metropolitan AHSs that provide comparable services and functions of (i.e.: each included a tertiary hospital, secondary hospitals and delivered community-based health care to the adult population of a defined region) and employ the majority of WA Health workforce (Over 30,000 people). Focussing on three like AHSs allowed comparison across the services and ensured that the findings would have immediately relevance to a large cohort of workers. Private health services delivering care under contract to the PHS were excluded from the study. Study participants were recruited from nine hospitals in the three metropolitan AHS. All participants were volunteers, and no incentives were offered for participation.

This section describes each phase of the study in detail. It includes details of the target participants, participant recruitment, target data, data collection

protocols, a summary of the data collected, and the data analysis in each phase. Table 3.1 provides a summary of three phases of the study, the data collection methods and the target and actual participants numbers for each phase.

### Table 3.1

#### Data Collection Methods

| Study Phase | Data Collection Method       | Participant Group                                 | Sample Size (Target) Actual |
|-------------|------------------------------|---|-----------------------------|
| One         | Document collection & review | Site MWT contact nominated by participating sites | N = (9) 15                  |
| Two         | Online Survey                | WA Health employees at participating sites        | N = (725) 365               |
| Three       | Semi- structured interview   | Volunteer WA Health employees                     | N = (3) 3                   |

### 3.5.1 Phase One

Phase one of the study was designed to address research question one: What MWT programs and delivery methods are used in the WA Health PHS sector?

#### Participants and recruitment

This phase involved recruiting a cohort of WA Health employees designated by their workplace as MWT subject matter experts. As part of the WA Health Research Governance process, each site invited to participate in the study was asked to nominate a MWT subject matter expert from within their organisation. This person became the primary contact and data provider for that site. The target number of participants for this phase was nine (one per participating hospital) however as the cohort was nominated by the participating worksite, no limit was placed on the target number of recruits. Each site nominated a person who managed or worked in the work unit responsible for MWT. Nominated site experts were contacted via email and invited to participate. Responses were received from five site experts initially nominated by sites, and from a delegate at four sites. A further four participants were recruited subsequently, resulting in a Phase 1 cohort of 13 individuals.

#### Target data

This phase required the collection of information in any format about the MWT training required at each of the participating sites. Data were expected to include hardcopy, digital and electronic versions of site protocols, policies and guidelines, and potentially verbal and advice from the nominated site experts.

### Data collection protocol

Each nominated site expert was contacted by email to request access to data on the MWT practices at their site. Data requested of each site included: details on the training topics mandated; the workforce cohorts required to undertake each training program; the names, learning objects and content of each MWT program; the frequency of training required; the duration of training and the format of each training program.

The collection protocol required hardcopy data to be stored securely and transcribed into an electronic database. All data were summarised in a purpose designed Excel data base identifying each of the data fields requested of. Where key data were not identified in the initial data provided by each site, the relevant site contact person was approached via email to seek clarification or further information. Responses to requests varied with some services providing comprehensive responses to queries and others providing no additional information after repeated requests via email and phone calls. Any

additional information received was included in the Excel database. The accuracy of all data transferred to the database was verified by an independent research officer.

#### Data Collected

The information provided by all sites is detailed in Chapter Four and included: 1) digital copies of internal policies, reports, and staff guides, 2) links to internal WA Health intranet sites (Accessible to the researcher as they were employed by WA Health at the time of the study), 3) descriptive emails from the site contact people, and 4) verbal discussions with site contacts which were transcribed and included in the Excel database.

#### Data analysis

Data from each site were reviewed and compared to 1) to understand the current requirements for MWT at each participating site, 2) to identify the programs consistently delivered across every participating site, and 3) to classify the programs according to one workforce training framework (described in Section 4.3).

To fully describe the MWT requirements, source data were interrogated to identify: 1) the training topics mandated, 2) the workforce cohorts required to undertake each training program, 3) the names, learning objects and content of each MWT program, 4) the frequency of training required, 5) the duration of training and 6) the format of each training program.

To identify the MWT programs delivered at every participating site a three-step iterative process was applied. The source data were examined to identify three

datasets: 1) the name of every "mandatory" or "mandated" training program delivered across all sites, 2) a list of training topics addressed by the programs, and 3) training topics delivered at every participating sites.

Further analysis of the data involved the application of Jacobs and Park's (2009) conceptual framework to classify the type of workplace learning being offered at all participating sites. Other, more expansive, conceptual models of workplace learning have been proposed (e.g.: Billett, 2008; Fuller & Unwin, 2003; Griffin, 2011) to describe the multiple factors that impact on workplace learning. Such frameworks refer to, for example, learning environments, psycho-social cultures, personal attributes of learners and structural contexts (e.g.: Workplace learning for organisational productivity, for career progression or as part of a program of study). For this study, Jacobs and Park's (2009) tool was considered sufficient to provide a measure of the types and the level of diversity of MWT delivery methods used in the PHS context.

Jacobs and Parks' (2009) framework describes eight categories of workplace learning based on the interaction of three key variables:1) whether the learning occurs on or off-the-job, 2) whether the organisation is actively involved in its planning and delivery, and 3) whether trainers or facilitators are actively involved in the learning tasks. The classification system is described in more detail in Chapter Four. The classification framework was applied to ten mandated training programs comprising the eight mandated programs required of all workers at all participating sites and a further two programs delivered at all sites to most worker cohorts.

#### **Report of Findings**

The findings of Phase One data analysis are reported independently in Chapter Four as a descriptive summary. The data was also used to inform the design of a *Mandatory Training Workforce Survey* (MWTS), the data collection tool used in Phase Two.

### 3.5.2 Phase Two

The five remaining research questions (How does the PHS workforce perceive the need and purpose of MWT? How engaged is the PHS workforce in MWT? What factors are associated with PHS workforce MWT engagement? How do personal characteristics impact levels of MWT engagement? How do PHS workers perceive the impact of MWT on practice?) were addressed in Phases Two to Four of the study which sought to explore the PHS workforce perceptions of MWT. Phase Two is described in the following section.

#### Participants and recruitment

This study recruited participants for Phase Two from nine individual PHS hospital sites within the three metropolitan AHS. Target participants were workers in any role including but not limited to managerial and executive, information technology, clerical and administrative, professional and technical support roles (e.g. engineering and catering), health professional, clinical support workers, educators, and researchers.

A target number of 725 participants was calculated using Fowler's sampling error formulae (Fowler, 2009) and a pragmatic aim to achieve proportional representation of respondents from across the nine participating sites. Using Fowler's sampling method (1988, cited in Cresswell, 2014, p. 607), a total sample size of 500 was required to ensure a 95% confidence interval for differentiating participant responses 96% of the time (A 4 % error rate). An additional 250 participants were added to the target number to ensure that the sample size from each participating site would have sufficient statistical power for investigation.

#### Table 3.2

| Participating site                | Target Respondent Numbers | Recruited Target Numbers |
|-----------------------------------|---------------------------|--------------------------|
| North Metropolitan Health Service | 270                       | 85                       |
| East Metropolitan Health Service  | 230                       | 128                      |
| South Metropolitan Health Service | 225                       | 150                      |
| Unknown                           |                           | 2                        |
| TOTAL                             | N=725                     | N=365                    |

## Phase Two Participants by Area Health Service

The initial recruitment plan was to invite potential participants via direct invitation using the WA Health global email system. This was not supported by any of the participating sites. Sites proposed an alternate strategy to distribute a generic invitation incorporating a description of the study and a link to an online data collection tool to potential participants via a weekly, electronic Staff Bulletin distributed to all employees at each site. Opportunities to further promote recruitment were limited due to site constraints, however, one AHS included an invitation to participate in the research, and a link to the data collection tool, on the opening page of the organisation's learning management system.

Table 3.2 summarises the target and recruited numbers for each area health service. A total of 365 people were recruited to Phase Two, approximately 50% of the planned target. The possible reasons for this are discussed further in Chapter Eight but potentially included limited staff capacity to engage in anything other than core duties during the COVID-19 pandemic and immediate aftermath, and the recruitment methods. Demographic data on survey participants was derived from six, multiple choice survey items. This dataset is summarised in Table 3.3.

### Target data

Phase Two of the study aimed to collect both qualitative and quantitative data on the PHS workforces' perceptions of MWT and the demographic variables of each of the participants. Specifically, it sought to understand staff engagement with MWT, their understanding of the purpose of MWT and its achievement of purpose, and their views of the impact of MWT on work practices. Demographic data on study participants (age, work role, employee, years of experience in the health sector and in WA Health) were also collected in this phase to allow for the exploration of the factors that might influence engagement.

## Table 3.3

| Demographic | : Data | of Phase | Two | Participa | ants |
|-------------|--------|----------|-----|-----------|------|
|-------------|--------|----------|-----|-----------|------|

|                             | Response Options   | Number of<br>Respondents                    | Percentage  | Total responses |
|-----------------------------|--|---|---|-----------------|
| Age Group                   | <21<br>21 -30<br>31- 40<br>41-50<br>51-60<br>>60   | 4<br>32<br>88<br>98<br>98<br>44             | 1.1%<br>8.7%<br>24.1%<br>26.9%<br>26.9%<br>12%                    | 364             |
| Employer                    | SMHS<br>NMHS (Includes KEMH)<br>EMHS   | 150<br>85<br>128                            | 41.3%<br>23.3%<br>32.2%   | 363             |
| Work Roles                  | N&M<br>AH & HS<br>Medical<br>Other clinical<br>Admin & Clerical<br>M&E<br>B,F & IT<br>Other non-clinical | 103<br>112<br>47<br>4<br>73<br>7<br>2<br>17 | 28.1%<br>10.8 %<br>12.8 %<br>1 %<br>19.9%<br>1.9%<br>.55%<br>4.6% | 365             |
| Years in Health<br>Industry | < 5<br>5 – 10<br>11-20<br>21-30<br>>30   | 46<br>64<br>107<br>70<br>70                 | 12.8%<br>17.9%<br>29.9%<br>19.6%<br>19.6%                         | 357             |
| Years in WA<br>Health       | < 5<br>5 – 10<br>11-20<br>21-30<br>>30   | 60<br>88<br>118<br>57<br>41                 | 16.4%<br>24.1%<br>32.4%<br>15.6%<br>11.1%                         | 364             |

Key: N&M=Nursing & Midwifery; AH&AHS=Allied Health & Health Scientists; M&E=Management & Executive; B, F &IT=Business, Finance & Information technology.

#### Data collection protocol

In Phase Two qualitative and quantitative data were elicited from volunteer participants recruited from the WA Health PHS via a purpose designed, online survey: the Mandated Training Workforce Survey (MTWS). Surveys are recognised as a useful tool to measure individuals' attitudes, beliefs, and opinions on a topic (Cresswell, 2014) and are regularly used in education research (Bargagliotto et al., 2021), including research investigating workforce education and development activities (Billett et al, 2012; Brimblecombe et al., 2019, p.9; Darling-Hammond et al., 2009; Teigland et al., 2013). Surveys are also a tool familiar to, and well received by, the health workforce (Mc Coll et al., 2001). Online surveys address the challenge of capturing target participants who are widely distributed geographically and have limited time to engage in research (Cresswell, 2014). A further rationale for the use of an online survey was the convenience of data capture for large volumes of data. Further, the ethical risk of exposing survey respondents to negative reactions from employers should the employee comment negatively about workplace practices, can be managed by allowing anonymous responses to the survey (Cresswell, 2014).

The initial literature review identified no existing survey tool that addressed the specific issues of concern in this study. Surveys addressing similar issues were identified. On was a 34-item electronic survey investigating medical trainees' perceptions of the need for training in safety and quality (Teigland et al., 2013). This study designed was informed by a literature review, three focus groups of the target participants (medical students) and subject matter experts (safety and quality and medical seniors). The survey reportedly elicited

relevant, valid data and used open ended questions to elicit text-based responses. The survey was not piloted prior to distribution however the only limitation of the tool methodology noted by the survey designers was the potential for non-response bias. Another survey used by the (American) Council of Linkages between Academia and Public Health was used regularly to survey the public health workforces' training and development needs (Leider, 2015; Sellers et al., 2015). The survey was distributed electronically and includes items requiring forced alternative or multiple-choice responses, 10-point rating responses and one open-ended text response. The survey elicited data about participants' age, time in profession, and time in government public health roles. (Sellers et al., 2015). After the completion of the study addition surveys were identified in the vocational education domain (e.g. Billett et al., 2022). Some of the demographic data collected in these surveys (duration of service, roles) aligned with the questions used in this study.

In the absence of a suitable, existing survey tool, a new survey was created, piloted, refined, and distributed for this study of MWT. The survey design was informed by the two surveys described above, and was developed in consultation with two experienced, PhD qualified, practicing health educator colleagues of the lead researcher of this study. A draft list of 36 items was created to elicit data to address five of the research questions (Questions Two to Six). Items were designed to elicit views on MWT in general, views on the 10 MWT programs delivered at all sites, and participants' demographic data that previous literature suggested has the potential to impact on adult learner's experience (i.e. age, years of work experience, professional roles and years

working within an organisation) (Knowles, 2011; Mezirow, 1991). Open-ended questions requiring a text response, and sentence completion items were included to capture descriptive, qualitative data about participants' perceptions of 1) the purpose of MWT, 2) the enablers and disablers of engagement, 3) how MWT design can be improved, and 4) their overall views on MWT (Ajjawii, 2022). Quantitative questions requiring ranked responses were included to collect data to explore relationships between the variables of 1) levels of engagement with MWT, 2) the perceived impact of MWT on practice and 3) the workforce variables of work roles, years of health sector experience, years in WA Health, the area health service they work in, and age (Fabbris, 2013). Multiple choice questions were used to collect grouped demographic data, and to measure the respondent's views on the purpose of MWT and its achievement of purpose. Data on the same issue was collected via multiple questions to increase validity of the data (e.g. Purpose and achievement of purpose was collected via multiple choice questions and descriptive text).

The initial list of 36 survey items was tested with a cohort of six WA Health workers recruited via a generic invitation to staff working in a multidisciplinary service at the researcher's (WA Health) worksite. The invitation reached a mixed workforce of over 700 staff and invited volunteers to be part of the study. There was no compulsion or incentive to participate. The initial review of items aimed to eliminate item redundancy, refine item content and confirm response types. Based on pilot participant feedback about the items and a review of the data elicited, a 25-item draft survey was developed in Qualtrics, an online survey tool. This revised survey tool was piloted with 15 health workers from one WA Health worksite, using the recruiting methods described above. Pilot

participants included health professionals, administrative and clerical workers, and educator employees of varying ages and years of experience in the health system. Verbal feedback (informal interview) was received from the 15 pilot participants regarding: 1) the usability of the survey tool, 2) the internal logic (or flow) of items, 3) their comprehension of the survey introduction text and the rationale for survey items, 4) comprehension of each survey item, 5) tolerance for survey duration, 6) ease of use of the responses required and 7) preferences for question type and mix. In addition, the data elicited from the 15 pilot survey responses were reviewed for fitness for purpose. A level of survey item reliability was demonstrated in that consistent responses were obtained when completed by multiple users and when repeated by the same user over time.

Survey respondent feedback and the survey output were reviewed by the researcher and the two experts initially consulted. As a result, two duplicated survey items were deleted, and the sequence of items was modified. Face validity of the second draft survey was addressed through a second round of piloting with five WA Health workers from the original review group, and a review of the tool and responses elicited in the pilot trial, by four WA Health educators with PhDs in health education. No additional changes were made to the survey after the second review, and a final survey of 22 items (20 items related to the study data collection and two items related to the recruitment of volunteers for the case study interviews in Phase Three of the study) was finalised for distribution. The relationship between the final 23 survey items and the study research questions is outlined in Table 3.4, and the survey is included in Appendix A.

Survey distribution was planned to commence in early 2020 but was delayed due to advice from site based MTW experts that potential recruits were fully occupied in responding to the COVID 19 pandemic. Site experts also advised that MWT practices were impacted by the pandemic response therefore an additional survey item (Item 19) was added to the survey with the intent of exploring the impact of the pandemic on workers' perceptions of MWT. (This data is reported independent of this study). The survey was launched, and participants recruited in May 2020. The recruitment period was initially planned to be one month but due to low recruitment numbers, the survey remained open, and was actively promoted, for 12 weeks.

#### Table 3.4

#### Research Questions & Related Mandated Training Workforce Survey Items

| Research Questions   | Related Survey Item   |
|--|---|
| Q 2: How does the<br>PHS workforce<br>perceive the need and<br>purpose of MWT? | <ul> <li>7 Tell us in your own words what you think is the purpose of mandated workplace training in WA Health.</li> <li>8 What do you think is the purpose of each of the following mandated training courses? (10 responses)</li> <li>9 Overall do you think mandated workplace training achieves its purpose?</li> <li>18 List the subjects you believe should require mandated training in your workplace.</li> </ul>   |
| Q 3: How engaged is<br>the PHS workforce in<br>MWT?                            | <ul> <li>15 How engaged do you feel when you access these specific mandated workplace training programs?</li> <li>16 As a general comment, how engaged do you feel in mandated workplace training overall?</li> <li>17 Please complete the following sentences in your own words: I feel disengaged from mandated workplace training when</li> </ul>  |
| Q 4:What factors are<br>associated with PHS<br>workforce MWT<br>engagement?    | 14 Please complete the following sentence in your own words: I feel engaged with mandated workplace<br>training when  |
| Q 5: How do personal<br>characteristics impact<br>levels of MWT<br>engagement? | 1 How do you identify? (Gender options)<br>2 What age group are you in?<br>3 What WA Areas Health Service do you primarily work in?<br>4 What professional group do you work in?<br>5 How many years have you worked in the health industry?<br>6 How many years in total have you worked in WA Health?   |
| Q 6: How do PHS<br>workers perceive the<br>impact of MWT on<br>practice?       | <ul> <li>10 How much do you think mandated workplace training impacts on the quality of the work you do in your organisation?</li> <li>11 How useful is mandated workplace training to you personally?</li> <li>12 Overall, how do you rate the impact of mandated workplace training on the delivery of safe. Quality care across WA Health?</li> <li>13 Tell us how mandated workplace training can be designed to have a positive impact on your behaviour and that of your colleagues?</li> </ul> |
| Q2, Q3, Q4, Q5 & Q6  | 20 Complete this sentence in your own words: "Mandated workplace training in WA Health is"<br>21 Please add any other comments, reflections, or thought you have on the subject that would inform this study.   |
| Additional question  | 19 Tell us how the recent Covid 19 pandemic has impacted on your thoughts, beliefs and ideas about mandated workplace training.   |

#### Data collected

365 participants responded to the survey, generating multiple qualitative and quantitative datasets of respondent demographics and responses to the survey items on perceptions of MWT purpose, achievement, engagement and impact. Response rates varied for each item from a minimum of 87 responses for survey Item 21 (An invitation to add any other comments about MWT) and maximum 365 for a survey Item 6 (*How many years have you worked in WA Health?*). Response rates for individual survey items are provided in Appendix G.

#### Qualitative data

The MWTS included eight items that elicited qualitative data. These items explored the specific research questions of workers' perceptions of the purpose of MWT (Item 7 and 8), the training topics they felt should be mandated (Item 18), their beliefs about how MWT could be better designed for impact (Item13), and the barriers and enablers of engagement (Items14 and17). Two additional open-ended questions (Items 20 and 21) also elicited qualitative data related to workers' attitudes to MWT. Response rates to the individual qualitative items ranged from 94 responses (26% total respondents) for Item 21 (A free text request for further comments about MWT) to 229 responses (63% total respondents) for Item 20 (A sentence completion task: *MWT is...*).

#### Quantitative data

The survey elicited two independent quantitative datasets. The first dataset detailed respondents' demographic data (i.e. age, work role, employer, time working in health and in WA Health). The second quantitative data set was
derived from seven survey items that explored the purpose and achievement of purpose, of MWT (Items 8 and 9), the impact of MWT (Items 10, 11 and 12), and survey respondents' level of engagement and disengagement with MWT (Items 15 and 16). The response rate for individual survey items ranged from 64% to 83% of the total survey respondents, with a resulting dataset of between 237 and 303 responses for each item. Three of the survey items (Items 10, 11 and 15) required ten independent responses to each question in relation to the ten different MWT programs identified as being delivered consistently across most services and sites.

## Data Analysis

To manage the risk of cross-contamination of qualitative and quantitative data noted by other researchers (Dawadi, 2021; Leal et al., 2018), data elicited via the survey was separated and analysed independently.

Qualitative data (text-based responses to eight open-ended or sentence completion items) was analysed using three commonly used qualitative analysis techniques with the intention of "finding patterns of meaning" (Braun & Clark, 2006). One process used a review of key word frequency in which word searches were conducted to identify key issues arising in the data. The method has been used in qualitative research including in the identification of health knowledge gaps (Vasconcellos-Silva et al., 2013). The second analysis process usilised a coding process recommended by Creswell (2014). This process is summarised in Figure 3.3 and involves reviewing collated responses to each survey item in six iterative steps designed to identify key themes in the data. Creswell's steps are consistent with other frequently utilised qualitative data processes (e.g. Braun & Clark, 2006) and involve:

1) data familiarisation,

2) identification of key words from a sample of the dataset,

coding of text segments (i.e. Words or phrases) using in vivo codes (i.e.
 Codes named for words used by the respondents),

4) review of the code list and removal of redundant codes (e.g. Initial codes "lack of time" and "no allocated time" were combined under one code titled" time"),

5) review of dataset against the new code structure and,

6) reduction of the review code list to major themes and creating a description of the theme.

Data from each survey item was analysed as a single dataset of all responses, and as sub-sets of data within the demographic variables of respondent age, years of experience in the health sector, years of experience in health, workforce group and employer. Analysis was conducted manually (i.e. manual notations of key words and themes on hard copy data spread sheets) and summarised in Excel spread sheets.

The third qualitative data analysis process involved the review of the vocabulary used in the responses, and the grammatical construction of written text responses to identify underlying attitudes of the respondents. This method is frequently used to measure customer satisfaction with products and services (Ren & Quan, 2012) and involves measurement of word frequency using digital tools such as Word Clouds and word counts.

Quantitative data arising from the multiple choice and ranked MWTS items were analysed using non-parametric tests to explore relationships between demographic variables, and the statistical significance of the relationships. Some planned analyses were not conducted as the statistical power required to conduct some tests was not achieved due to lower than planned participant numbers.

Figure 3.3

Qualitative Data Coding Process (Based on Creswell, 2014, p. 243)



## **Report of findings**

Phase Two findings are reported in three chapters in the form of descriptive text and supporting data tables. Chapter Five describes the findings about the workforce's perceptions of the purpose of MWT, Chapter Six describes their perceptions of the impact of MWT and Chapter Seven discusses barriers and enablers of MWT engagement. Each chapter separately describes the findings from qualitative and quantitative data analysis and compares the findings from each data set.

#### 3.5.3 Phase Three

Additional data on employee experiences with, and opinions of, MWT were captured via semi-structured interviews with three volunteer workers. Interviews were conducted by the researcher, a health professional with over 40 years' experience in clinical and research interviewing.

#### Participants and recruitment

Target participants for Phase Three of the study were volunteer workers representing the diversity of the WA PHS workforce. Diversity was defined in terms of the demographic characteristics described in Phase Two i.e.: age group, work role group, employee (AHS), years of experience in the health sector and years of experience in WA Health). The initial intent was to use a sampling approach whereby interviews would be conducted and analysed until clear themes had emerged from the data. When no new themes emerged (saturation), data collection would cease.

Participants were recruited for interview via the MWTS Item 22 which invited participants to volunteer to be interviewed as part of Phase Three of the study. A total of 33 individual survey participants (Approximately 9 % of the total 365 participants) volunteered to be contacted. The list of volunteers was randomised (using Excel data base RAND function), and email invitations sent to an initial group of three volunteers. One volunteer accepted the invitation and, after 10 days a further three randomised volunteers were contacted. A total of 12 volunteers were contacted in sequential groups of three over the three-month period allocated to Phase Three. Three volunteers were secured

within the available recruitment period, and interviews conducted. Details of the interviewees and the interview context outlined in Table 3.5.

The limited number of interviewees recruited in the time available meant that data saturation was not achieved. This study limitation is discussed further in on Chapter Eight however the data from the three interviewees was valid in that it represented workers from different professional, age, employer and work experience groups. The data also provided insights into workers perceptions of MWT.

## Table 3.5

#### Demographic Details of Interviewees

| Identifier | AHS  | Profession                          | Gender | Age    | Years in Health | Years in WA Health | Interview Details         |
|------------|------|-------------------------------------|--------|--------|-----------------|--------------------|---------------------------|
| JH         | NMHS | Nursing & Midwifery                 | Male   | 51-60  | >30             | 11-20 years        | Zoom meeting              |
| LS         | SMHS | Educator                            | Female | 31- 40 | 11-20 years     | <5years            | Face-to-face in workplace |
| ZB         | EMHS | Mixed Admin/<br>Clerical & Educator | Female | >60    | 5-10 years      | 5- 10 years        | Face-to-face in workplace |

## Target data

The target data in Phase Three was thick, rich, qualitative, descriptive evidence about the workforces' perceptions of MWT. The data were intended to provide independent of the MWTS dataset with the potential to reveal unique perceptions about MWT, and support validation of the MWTS findings.

## Data collation protocol and data collection

Once consent to interview was obtained, a time and location for the interview was negotiated. An interview protocol was designed by the researcher, based on Creswell's (2014) recommended interview design methodology. The

protocol consisted of six questions regarding participants' demographic data, and 10 open-ended questions about MWT that allowed workers to express their perceptions of MWT. The protocol is included in Appendix B. Interviews were conducted by the primary researcher, a health professional with over 40 years of experience in clinical and research interviewing.

Participants were offered the option of a face-to-face, phone or online interview at a time and location of their choosing. Two opted for face-to-face meetings in their workplace, one in work hours and one outside of work hours. The third interview was conducted in work time using Zoom, the online meeting platform. Interviews were conducted with the researcher and took from 25 to 90 minutes. Interview questions were based on the protocol, with opportunities for expansion and follow-up questions across the interview. Interviews were audio recorded, transcribed in full by the researcher and validated through review by an independent research assistant. The written transcript formed the dataset analysed.

#### Analysis

Interview data were analysed using the same method of data coding and thematic analysis applied to Phase Two text based qualitative survey data (See Figure 3.3).

Audio recordings of all interviews were transcribed verbatim into text by the researcher using the process recommended by Creswell (2014), which includes noting pauses, interruptions, and verbal utterances other than words. Data were reviewed "by hand" (Creswell, 2014, p. 238), meaning that a hard

copy of the data were reviewed multiple times, colour coded according to key meanings, and then grouped into key themes as interpreted by the researcher.

The full interview transcript, requests for clarification (e.g. requests for interpretation where the audiotape was difficult to understand or where the meaning of a statement was not clear), and a document summarising the key themes identified in the analysis were emailed to the interviewee within four weeks of interview, with a request for validation of content and the data interpretation, and a request to respond with any clarification questions. This process of "respondent validation" is a commonly used method in qualitative research to reduce errors in data interpretation (Braun & Clark, 2006; Kitto et al., 2008). Transcripts were amended where the interviewee provided additional data, and a final dataset of three validated transcripts were available for further analysis.

The reviewed transcripts were reviewed, and the key themes interpreted a second time. The themes from each interview transcript were cross referenced with others interviews to identify whether themes were consistent.

## Reporting

The findings of the interview analysis are reported in Chapters Five to Seven as a descriptive commentary and is compared with the data arising from the MWTS.

#### 3.5.4 Phase Four

Phase Four of the research involved integration of the findings of the three proceeding phases to address the six research questions. Findings from each

the qualitative and quantitative data analysis conducted at each phase of the study were compared and integrated. Findings were compared with the extant literature evidence and are discussed in Chapter Eight.

In designing and conducting the qualitative analysis and reporting the findings, consideration was given to the advice of health educator Ajjawi (2022) who discusses the challenges qualitative health education researchers face in validly interpreting and reporting the "participant voice" (Ajjawi, 2022, p. 70). Ajjawi notes that while the voice of a participant is collected via direct quotes, or in the case of this survey, written statements, "there is no external truth or meaning instantly recognised in a quote" (Ajjawi, 2022, p. 71), therefore it is the role of the researcher to interpret and create a narrative about the data provided. Ajjawi further notes that in this process the voice of the researcher cannot be neutralised therefore their role becomes one of "co-constructors of knowledge" with the participants (Ajjawi, 2022, p. 73). The analysis and reporting of the qualitative data from the survey (See Chapters Four to Seven) represent the researcher's attempts to engage with all the available data to construct a coherent narrative about workers' views of MWT, through consideration of both individual survey items, and their relationship to responses from other survey items and data collected and analysed in other phases of the study.

## 3.6 Study validity

The research design and methods of data analysis integrated multiple strategies to support study validation. Findings from each phase were

triangulated through cross referencing within and across phases, and across qualitative and quantitative data.

The issue of potential bias arising from data being analysed by only one analyst (the researcher) was addressed by using an assistant to verify accurate data transfer in Phase One of the study, and through consultation with a biostatistician to support the interpretation of qualitative data. As discussed, the study is an interpretation of findings in which meaning is made by constructing knowledge through engagement with the data and study participants (Ajjawa, 2022). While no claim is made that the interpretation of the data is the only meaning that might arise should others review the data, great care has been taken to ensure the robustness of the interpretation, including triangulation of data between survey responses and interview data.

#### Participant validity

Demographic data on each of the participants was captured in the MWTS. The Phase Two participant sample was compared with available workforce data to establish validity. Each Area Health Service (AHS) within WA Health reports on their workforce profiles publicly available annual reports. Data from the East Metropolitan Health Service (EMHS), North Metropolitan Health Service (NMHS), and South Metropolitan Health Service (SMHS) Annual Reports 2019 (EMHS, 2020; NMHS, 2020; SMHS, 2020) were compared with the demographic data of survey participants.

#### Table 3.6

| Health Service Provider           | Total Full Time<br>Equivalent (FTE) staff | Annual ReportsTotal<br>Percentage Workforce | Survey Participant<br>Numbers | Percentage Participants<br>Within Survey Cohort |
|-----------------------------------|---|---|-------------------------------|---|
| East Metropolitan Health Service  | 6499                                      | 28.9%                                       | 85                            | 23.4%   |
| South Metropolitan Health Service | 7028                                      | 31.27%                                      | 150                           | 41.3%   |
| North Metropolitan Health Service | 8943                                      | 39.79%                                      | 128                           | 35.2%   |
| Total FTE                         | 22471                                     |   | 363                           |   |

## Workforce Distribution Across Health Service Providers

Table 3.6 illustrates that the overall distribution of the participant sample across AHSs did not consistently align with the actual workforce distribution across WA Health. NMHS participation in the survey sample did approximate the proportion of WA Health workers working in NMHS, however there was an approximately 10% variation between distribution of SMHS and EMHS workforces. No reason for this variation was identified.

Data regarding the age range and years of service of WA Health employees were available in only one AHS (EMHS) (See Table 3.7). The data on years of service (See Figures 3.4 and 3.5) were compared with the survey participant cohort and found the survey sample was more evenly distributed across years of service than the EMHS workforce. The age distribution between the EMHS workforce and survey respondent populations are more closely aligned (See Figures 3.6 and 3.7). No further comment can be made about how representative the survey participant sample is given the absence of comparative data about the whole of the WA Health workforce.

Data regarding the age range and years of service of WA Health employees were available in only one AHS (EMHS) (See Table 3.7). The data on years of service (See Figures 3.4 and 3.5) were compared with the survey participant cohort and found the survey sample was more evenly distributed across years of service than the EMHS workforce. The age distribution between the EMHS workforce and survey respondent populations are more closely aligned (See Figures 3.6 and 3.7). No further comment can be made about how representative the survey participant sample is given the absence of comparative data about the whole of the WA Health workforce.

## Table 3.7

EMHS Workforce & Survey Respondent's Years of Service and Age Distribution

| East Metropolitan Health Sen | vice Workforce   | Survey Participants  |                       |
|------------------------------|------------------|----------------------|-----------------------|
| Age Categories (Years)       | % EMHS Workforce | Age Category (Years) | % Survey Participants |
| <19                          | 0.18 %           | <21                  | 1.1%                  |
| 20 – 29                      | 15.67%           | 21 -30               | 8.7%                  |
| 30 – 39                      | 25.6%            | 31-40                | 24.1%                 |
| 40 – 49                      | 22.2%            | 41-50                | 26.9%                 |
| 50 - 59                      | 21.67%           | 51-60                | 26.9%                 |
| 60 – 69                      | 13.38%           | >60                  | 12%                   |
| >70                          | 1.29%            |                      |                       |
| Years in Health              | % EMHS Workforce | Years in Health      | % Survey Participants |
| <10                          | 76.8 %           | < 5                  | 12.8%                 |
| 10-19                        | 15.9 %           | 5 – 10               | 17.9%                 |
| 20-29                        | 4.5 %            | 11-20                | 29.9%                 |
| 30-39                        | 2.2 %            | 21-30                | 19.6%                 |
| 40-49                        | .38 %            | >30                  | 19.6%                 |
| 50+                          | .01 %            |                      |                       |
|                              |                  |                      |                       |

# Figure 3.4



## EMHS Workers Years of Service in WA Health

# Figure 3.5

Two Respondents Years of Service in WA Health



# Figure 3.6





EMHS WORKFORCE (N= 8549) AGE DISTRIBUTION



Age Distribution of Mandatory Workplace Training Survey Respondents



SURVEY REPONDENTS: AGE RANGE (N= 334)

## 3.7 Ethics and governance

All proposed research studies in WA Health must comply with the WA Health Research Governance Policy (Government WA Department of Health, 2021) which requires ethics approval and governance approval from individual participating health sites. Each of the nine potential participant sites were approached via the WA Health Research Governance process to request participation in the study and all agreed to participate.

The study complied with the NHMRC National Statement on the Ethical Conduct of Health Research (2007, updated 2018). It was approved by both the Curtin University Human Research Ethics Committee (Approval: HRE 2019-0435) and the WA Health Human Research Ethics Committee (Approval: RGS 0000003068).

As discussed in Section 3.5.2 the ethical risk of exposing survey respondents to negative reactions from employers should they comment negatively about workplace practices was be managed by ensuring anonymous responses to the survey. The risk of staff being coerced into participation in the study was also managed. The convenience sample of workers who supported the development of the MWTS was recruited via an emailed request for volunteers with no incentive offered to participate. Participation into the Phase Two MWTS was managed through the process agreed during the WA Health research governance process which limited the researcher's access to staff. Potential participants could only be invited to participate in the study via an invitation in a global staff newsletter. The invitation offered no inducements to

participate. There was no risk of negative consequences for not participating as all response were deidentified.

There were no inducements or rewards offered to participants to engage in the study and all participants were volunteers.

## 3.8 Chapter summary

This chapter described the methodology used in this study into the MWT required of the WA PHS workforce and the workforces' perception of MWT. The chapter described the rationale for the four phase, cross-sectional, mixed method research design and detailed the participants, participant recruitment process, the target data, data collection methods, and the analysis and reporting of data in the four study phases. The chapter discussed the study validity and closed with a description of the ethics and governance approval process undertaken to support data collection and described

The following chapter is the first of five chapters in which the study findings are reported. Chapter Four details findings which address the research question seeking to understand the MWT required of WA Health workers and identifies the health workforces' preferences for MWT topics.

# Chapter Four: Mandated Workplace Training in WA Health - Current Practice and Preferred Training Topics.

## 4.1 Introduction

This chapter is the first of four chapters describing the findings of this study. It focuses on findings about the current MWT practices in WA Health and WA Health employee's topic preferences for MWT.

The chapter begins by describing the dataset of information collated from nine participating sites about their current MWT practices. It includes details of the data elicited from each participating health service and the findings of the analysis. These include a description of all the programs delivered, the unique topics delivered, and the programs that are consistently delivered at each site. The chapter also maps and classifies the programs according to Jacobs & Park's (2009) Conceptual Framework of Workplace Learning. Thereafter, the chapter describes findings from analysis of data elicited from MWTS Item 18 which required respondents to describe the training topics they want to be mandetd. The chapter concludes with a summary of how the findings inform research questions one and two, and how these inform the design of the later phases of the study.

## 4.2 Mapping mandated workforce training in WA Health

To map MWT requirements across the metropolitan public health services within WA Health, data were collated about the MWT practices in nine participating metropolitan hospitals, three within each of the three metropolitan area health services (AHS) in Perth, Western Australia. Data were provided by

site-based experts in the form of hardcopy documents, links to electronic documents, and verbal and written correspondence between the researcher and the nominated site experts or their delegate. Details of each participating site are summarised in Table 4.1, and the primary source documents provided by each site are listed in Table 4.2. All documents were accessed between September 2019 and January 2020.

## Table 4.1

| Participating Area Health Service   | Participating Hospital Sites  | Hospital type *  | Approximate Bed Numbers    |
|---|---|--|----------------------------|
| East Metropolitan<br>Health Service (EMHS)  | Royal Perth Hospital<br>Bentley Hospital<br>Armadale Hospital                           | Tertiary &quaternary<br>Subacute & mental health<br>General secondary hospital   | 450<br>200<br>290          |
| South Metropolitan<br>Health Service (SMHS)   | Fiona Stanley Hospital<br>Fremantle Hospital<br>Rockingham General Hospital             | Tertiary & quaternary<br>Sub-acute & mental health<br>General secondary hospital | 790<br>300<br>230          |
| North Metropolitan<br>Health Service (NMHS)<br>– incorporating Women<br>& Newborn Health<br>Services (WNHS) | Sir Charles Gardiner Hospital<br>Osborne Park Hospital<br>Kind Edward Memorial Hospital | Tertiary & quaternary<br>Subacute<br>Women & newborns hospital                   | 600<br>190<br>Not reported |

## Participating Hospitals by Area Health Service

\*Key: Quaternary=highly specialised, state-wide services; Tertiary=specialist services for acute illness and injury; Secondary=general hospital services.

The primary source documents provided by each site were reviewed and further correspondence with site nominated MWT experts was undertaken to seek clarification where data were missing or ambiguous. The collated primary data set, consisting of all primary source data and clarifying verbal or written advice from site experts, was then analysed as described in the following sections.

# Table 4.2

# Mandated Training Source Documents

| Area Health Service                                   | Source Documents   | Version Date   |
|---|--|--|
| SMHS  | SMHS Safety Skills Training Framework<br>SMSH Safety Skills Training Policy<br>SMSH Mandatory Training Review Project  | Sept 2017<br>2017<br>2017  |
| EMHS  | EMHS Mandatory Training Policy (EMHS:51)   | July 2006  |
| NMHS  | Osborne Park Hospital Mandatory Training Departmental Guide 2020-2022<br>Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Nursing-all non-clinical staff<br>Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Nursing-all clinical staff<br>Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Medical  | 2020/2021<br>Undated<br>Undated<br>Undated   |
| Incorporating Women's<br>& Newborn Services<br>(KEMH) | Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Allied Health & Pharmacy<br>Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Clinical support staff<br>Sir Charles Gardiner Osborne Park Health Care Group Mandatory Training<br>Checklist: Patient support staff<br>KEMH Professional Development Review - Midwifery, Registered Nurse,<br>Enrolled Nurse<br>Mandatory Education & Training Checklist: Allied Health<br>Mandatory Education & Training Checklist: Medical<br>Mandatory Education & Training Checklist: Patient Support Services<br>Mandatory Education & Training Checklist: Corporate & Clerical<br>Mandatory Education & Training Checklist: Technicians<br>Attendance Category: Magnetic Resonance Imaging (MRI) Training<br>Attendance Category: Workplace Aggression and Management (WAVE)<br>Training<br>Attendance Category: Resuscitation training | Undated<br>Undated<br>24/06/2019<br>Oct 2018<br>Oct 2018<br>Oct 2018<br>Oct 2018<br>Oct 2018<br>Oct 2018<br>May 2018<br>May 2018<br>May 2018 |
|   | Attendance Category, Manual Task Training  | Oct 2018   |

# 4.3 Data analysis and findings

The primary data set was interrogated through the iterative steps described

below and in Figure 4.1. The intent of the analysis was threefold:

1) to understand the current requirements for MWT across all the participating sites (i.e. topics, the mode of training delivery, duration, and frequency of delivery),

2) to identify the programs consistently delivered across every participating site, and 3) to classify the programs delivered according to Jacobs & Park's (2009) workforce training framework (Described in Section 4.3.), to understand the types of MWT learning opportunities being delivered.

## Figure 4.1

## Identification of Core Mandated Training Topics



## 4.3.1 All mandatory training programs

The primary dataset identified 168 individually named MWT programs delivered across the participating sites. The number of individual programs identified at each participating area health service is included in Table 4.3. Hereafter, training program titles are capitalised when referring to a specific training product, and uncapitalised when discussing a training program on a specific topic.

# Table 4.3

| Area Health Service | Site  | Number of individual programs identified in site data |
|---------------------|---|---|
| EMHS                | Royal Perth and Bentley Hospitals Group & Armadale Hospital | 19  |
| SMHS                | Fiona Stanley, Fremantle & Rockingham Hospitals             | 24  |
| NMHS                | Sir Charles Gardiner Hospital                               | 25  |
| NMHS                | Osborne Park Hospital<br>King Edward Memorial Hospital      | 29<br>71  |
|                     | Total identified programs                                   | 168   |

## Mandated Training Programs at Participating Sites

# 4.3.1.1 Scope of mandated training topics

Of the 168 individually named MWT programs delivered across the nine participating sites, multiple programs are required at more than one site. These include:

- three programs mandated by WA Health for delivery to all workers i.e.: Aboriginal Cultural Learning, Accountable & Ethical Decision Making and Record Keeping Awareness,
- clinical skills training relevant for all clinical workers e.g. hand hygiene, life support practices,
- clinical skills training specific to sub-groups of the clinical workforce e.g.
  blood transfusion, maternity care,
- workplace safety skills relevant to clinical and non-clinical skills e.g. manual handling, emergency procedures, Speak up For Safety (a graded assertiveness training program,

health sector awareness training relevant to multiple workforce groups
 e.g. My Health Record – awareness of the Commonwealth
 Government's single, digital health record.

These programs were further interrogated to explore the training format used, the duration, and frequency of training required and are described below.

## 4.3.1.2 Training Format

Available data on the format, or delivery method, of MWT programs is summarised in Table 4.4 and includes a category "not specified" to reflect that the policies for some sites specify that the program may be delivered in multiple formats. Almost 60% of the MWT programs are delivered via e-learning with just over 50% of programs being delivered entirely via e-learning and a further 8 % incorporating some e-learning. Face-to-face training is used predominantly to deliver physical skills training (e.g. manual handling, hospital life support strategies). Three knowledge-based training topics (Occupational safety, My Health Record and site orientation) are also consistently delivered face-to-face.

## Table 4.4

#### Format of Mandated Training Programs

|                              | Site   |  |  |   |  | Course Num     | ber/ % |
|------------------------------|--|--|--|---|--|----------------|--------|
| Training Delivery<br>Methods | Royal Perth & Bentley<br>Hospitals Group &<br>Armadale Hospital<br>N=19 Programs | Fiona Stanley,<br>Fremantle &<br>Rockingham Hospitals<br>N=24 programs | Sir Charles<br>Gardiner Hospital<br>N=25 program | Osborne Park<br>Hospital<br>N=29 programs | King Edward<br>Memorial<br>Hospital<br>N=70 programs | Total<br>N=168 | %      |
| E-learning                   | 23%  | 29.1%  | 52%  | 72.4%                                     | 55%  | 85             | 50.6%  |
| Face to face                 | 21%  | 37.5%  | 40%  | 24%                                       | 32.4%  | 53             | 31.5%  |
| Blended *                    | 21%  | 8.3%   | 4%   | 3.4%                                      | 7%   | 13             | 7.8%   |
| Not specified                | 28%  | 25%  | 4%   | 0   | 5.6%   | 17             | 10.1%  |

\*Blended=a mix of e-learning and face -to-face delivery.

#### 4.3.1.3 Training frequency

Data from each of the sites indicates that MWT is required by all workers on commencement at the site, and at periods of between one and three years thereafter. Recognition of prior learning (RPL) is accepted by each site for some programs only. Where RPL is not offered, the justification provided by site experts is that there is an organisation specific practice or equipment that requires training (e.g. all sites require new workers to undertake site and work area evacuation training to familiarise themselves with egress routes and the location of safety equipment specific to each location).

No documented rationale for the requirement for repeated training (variously described as update or refresher training) was identified. Comments from site experts were variously supportive and disparaging of the requirement. One site expert stated, "If we were serious about updating skills training, we'd be doing it every three months" and cited research evidence that skills training is most effective when repeated frequently. Others cited the value of repeated training as a "reminder" or "refresher" designed to keep the training topic at the forefront of workers' minds. Three site experts justified repetition of occupational health and safety training for managers on the basis that legislation, guidelines and organisation policy and procedures change frequently therefore training needs to be continually updated. The programs requiring repetition, and the frequency of repetition, are described in Table 4.5. Notably, four training topics (hand hygiene, emergency procedures incorporating code orange evacuation and hospital life support programs) were nominated by all sites for repetition, but the frequency of repetition varied across sites according to different worker groups. Of the remaining 12 training

programs requiring repetition, there was no consistency regarding either the frequency of repetition, or the categories of workers required to undertake repeated training across the sites.

## Table 4.5

# Frequency of Training Programs Repetition by Site

|   | Participating Site  |   |                                     |   |  |  |
|---|---|---|-------------------------------------|---|--|--|
| Training Program  | Royal Perth & Bentley<br>Hospitals Group &<br>Armadale Hospital | Fiona Stanley,<br>Fremantle &<br>Rockingham Hospitals | Sir Charles<br>Gardiner<br>Hospital | Osborne Park<br>Hospital                        | King Edward<br>Memorial Hospital         | Total program<br>repeats<br>(N of 9 sites) |
| Aggression Prevention &<br>Management Programs <sup>1</sup> | Annual  | Annual  | Annual or<br>biannual 3             | Bi or triannual <sup>3</sup>                    | Annual or<br>tri annual <sup>3</sup>     | 9/9  |
| Emergency Procedures  | Annual  | Annual  | Annual                              | Annual or triannual <sup>3</sup>                | Annual                                   | 9/9  |
| Code Orange<br>(Evacuation)                                 | Annual  | Annual  | Annual                              | Annual  | Annual                                   | 9/9  |
| Hand Hygiene  |   | Annual  | Annual                              | Once off, annual, bi, or triannual <sup>3</sup> | Annual                                   | 6/9  |
| Hospital Life Support <sup>2</sup>                          | Annual  | Annual  | Annual                              | Biannual  | Annual                                   | 9/9  |
| Advanced Life Support                                       | Every 4 years   |   |                                     |   |  | 1/9  |
| Recognising &<br>Responding to<br>Deterioration             |   |   |                                     | Annual  |  | 1/9  |
| Manual Handling Theory & Practical                          | Annual for specified staff only                                 |   | Annual or<br>biannual 3             | Annual, bi.<br>or triannual <sup>3</sup>        | Annual, bi,<br>or triannual <sup>3</sup> | 6/9  |
| Invasive Devices  |   |   |                                     |   | Annual                                   | 1/9  |
| Infection Prevention & Management                           | Annual  |   | Annual                              |   |  | 1/9  |
| Cleaning, Disinfecting & Sterilizing                        |   |   |                                     |   | Annual                                   | 1/9  |
| Aseptic Theory  | Triannual   |   | Triannual                           | Triannual                                       | Triannual                                | 6/9  |
| Code Blue   |   |   |                                     |   | 5 years                                  | 1/9  |
| Occupational Health & Safety                                | Triannual   |   | Triannual                           | Triannual                                       | Bi or triannual <sup>3</sup>             | 6/9  |
| Prevention of Workplace<br>Bullying                         | Biannual  |   |                                     |   |  | 3/9  |
| Specialist Obstetric &<br>Neonate Programs                  |   |   |                                     |   | Annual, triannual, or<br>5 yearly        | 1/9  |
| Total Repeated Programs<br>Per Site                         | 10  | 5   | 9                                   | 9   | 17                                       |  |

**Notes** – Where table is blank – either the program is not delivered at the site or is required annually only. <sup>1</sup> Includes WAVE(KEMH), CARM (SCGH/OPH), API 1-3 (SMHH). <sup>2</sup> Incorporates all life support programs <sup>3</sup> Depending on the work group.

#### 4.3.2. Unique topics addressed through mandated training.

To identify the unique learning topics covered by MWT across the organisation, the initial list of 168 MWT programs was filtered to eliminate duplicates (i.e. the same programs delivered at multiple sites). A dataset of 112 unique programs was identified (See Appendix C). This dataset was further filtered by identifying like titles and reviewing the content of each learning program to identify similarities between programs. As data about the specific content of some programs was limited, learning topics were identified as comparable where at least one of the following criteria was met:

*Criteria* 1: Where different elements of the same topic are covered, for example, safe patient handling and manual handling were considered to cover the same topic of manual handling.

*Criteria 2:* Where the source data identified training and competency assessment as two separate elements, for example, Aseptic Non-Touch Technique (ANTT) Theory, ANTT Practice Training and ANTT Competency assessment were considered to cover one learning topic.

*Criteria 3*: Where different versions or components of the same topic were covered. For example, nine individual learning programs were included under the aggression prevention and management training category.

This analysis generated a list of 54 unique mandated topics delivered within participating sites (Appendix D). The topics with the most individual programs covering the same subjects are life support-related programs (17 individually named programs identified across all sites), infection prevention and management (13 related programs), aggression management programs (ten

related programs), and emergency procedures and manual handling (eight programs respectively).

Four site experts advised that one rationale for the delivery of multiple programs on the same topic was the need for training to relate to the specialised services delivered at each site (e.g. there are multiple versions of neonatal life support training delivered at KEMH, the state's specialist service for newborn babies). In addition, sites individualise their program names to reflect site nomenclature (e.g. the aggression prevention and management program at SCGH and Osborne Park is titled *Charlies and Osborne Park Aggression Risk Management* (CARM) program).

The 54 unique mandated training topics included:

- Patient related safety topics e.g. allergen management, foetal assessment, epidurals and spinal analgesia, infection prevention and management
- General safety topics e.g. cleaning techniques, evacuation drills
- Worker related safety topics e.g. manual handling, safe handling of blood products, radiation safety and prevention of workplace bullying
- Other health service topics e.g. open disclosure (How to communicate adverse events to patients), Mental Health Act 2004, activity-based funding, and management.

## 4.3.3 Mandated training delivered at all sites

The 54 unique topics were reviewed to determine which training topics were delivered at every site, resulting in a list of 11 topics mandated for training at every participating site. Of these 11 topics, eight are consistently mandated for

the whole workforce. The remaining three topics (aseptic technique, mandatory reporting of child sexual abuse, and work health and safety for line managers are required only by workers in specified roles at each site.

The eight consistently delivered programs are:

1.Record Keeping Awareness,

2. Accountable & Ethical Decision Making,

3. Aboriginal Cultural Awareness,

4. Life support,

5 Hand hygiene,

6. Manual handling

7.Aggression prevention and management, and

8. Emergency procedures.

Notably, eight of the nine participating sites required training on two additional topics: prevention of workplace bullying and infection prevention and management.

A total of 51 individually names training programs were delivered across the nine sites to address the eight core learning topics. All sites deliver three e-learning programs that are created and governed by WA Health (i.e. *Aboriginal cultural learning, Accountable & Ethical Decision Making* and *Record Keeping Awareness*) while all other topics are covered by training programs specific to each site. Four topics were consistently delivered as an e-learning program, two were consistently delivered face-to-face, and a further two were delivered

via blended face-to-face and e-learning (e.g. aggression prevention and management training programs at all sites combine an e-learning program to train on the basic theoretical principles with additional face-to-face training for breakaway skills). See Table 4.6 for a summary of delivery methods for the eight core programs.

## 4.4 Workplace learning classification.

To better understand the nature of the learning opportunities offered as MWT, the eight programs mandated at every site for all workers were classified using Jacobs and Park's (2009) Workplace Learning Conceptual Model. The model classifies workplace learning opportunities based on the relationship between three critical variables: the location of the learning, the degree of planning involved in the learning activity, and the role of the trainer or program facilitator. The model proposes eight possible training classifications, described as "cells" and designated A to H (See Figure 4.2).

Site data sources were interrogated for evidence to support the classification of each program, and the findings are presented in Table 4.6.

## Figure 4.2

## Workplace Learning Conceptual Model

## (Figure adapted from Jacobs and Park, 2009, p.144)

| Workplace Learning Elements  |     |            |   |              |  |
|--|-----|------------|---|--------------|--|
| Location of trainin  | g ( | On-the-job | C | Off-the-job  |  |
| Degree of plannir  | g s | Structured | U | Instructured |  |
| Degree of learner<br>engagement  | I   | Passive    | A | ctive        |  |
| Workplace Learning Classifications      Cell A    Off-the-job/ Unstructured/ Passive      Cell B    Off-the-job/ Unstructured/ Active      Cell C    Off-the-job/ Structured/ Passive      Cell D    Off-the-job/ Structured/ Passive      Cell E    On-the-job/ Unstructured/ Passive      Cell F    On-the-job/ Unstructured/ Passive      Cell G    On-the-job/ Unstructured/ Passive      Cell G    On-the-job/ Structured/ Passive      Cell G    On-the-job/ Structured/ Passive |     |            |   |              |  |

The classification outcome shows that only two of eight potential categories of workplace learning opportunities are used to deliver the eight consistently delivered WA Health MWT programs. Five programs met Jacobs and Park's definition of training delivered off-the-job, structured and active (Cell D), that is learning "...occurs away from the work setting, as a result of using a systems approach, and with limited involvement of a trainer/ facilitator" (Jacobs & Park, 2009, p. 144). Two programs are delivered on-the-job, are structured and active (Cell H), meaning that "Learning occurs in the work setting, as a result of a trainer/ facilitatic facilitatic facilitatic for the facilitatic facilitatic facilitatic for the facilitatic facilitatic facilitatic for the facilitatic fa

facilitator" (Jacobs & Park, 2009, p. 144). One program (Emergency procedures) is structured, delivered off-the-job, and blends both e-learning (passive) and "hands on" (active) practical elements, (i.e. delivered with and without the active involvement of a trainer). This program was classified as mixed (Cell D & Cell H).

## Table 4.6

Workforce Learning Classification: WA Heath Mandated Workplace Training Programs (Based on Jacobs and Park's (2009) Classification of Workplace Learning Programs)

| Торіс  | Delivery Method           | Jacobs & Park Classification Cell | Classification Description             |
|--|---------------------------|-----------------------------------|--|
| Aboriginal Cultural Learning                 | E-learning                | D                                 | Off the job, structured & active       |
| Record Keeping Awareness                     | E-learning                | D                                 | Off the job, structured & active       |
| Accountable & Ethical<br>Decision Making     | E-learning                | D                                 | Off the job, structured & active       |
| Aggression Prevention & Management           | E-learning & Face to face | D/H                               | On or off the job, structured & active |
| Emergency Procedures<br>Including Evacuation | E-learning & face to face | D/H                               | On or off the job, structured & active |
| Hand Hygiene                                 | E-learning                | D                                 | Off the job, structured & active       |
| Life Support                                 | Face to face              | н                                 | On the job, structured & active        |
| Manual Handling                              | Face to face              | Н                                 | On the job, structured & active        |

The analysis identified no evidence of the other six potential workplace learning approaches described by Jacobs and Parks (2009), and other workforce learning researchers (Illeris, 2011), being utilised to support learning on the eight core mandated topics. Alternate learning opportunities that are not utilised in WA Health MWT include ad hoc and formal mentoring, casual and formal coaching, action learning, self-directed learning, learning by doing, job shadowing, and communities of practice.

## 4.5 Incidental findings

Source data from each site revealed additional findings that contribute to an understanding of the phenomenon of MWT in general, and the specific MWT practices in WA Health, including how they are managed and communicated to the workforce. These findings are described below.

## 4.5.1. Training lexicon

There was no consistent lexicon used to describe mandated training across the nine sites. The term used to describe training that workers must complete as a condition of employment is variously described as *mandated, required, compulsory* or *recommended.* Terms are used inconsistently across the sites, for example, KEMH describes 71 individual mandated programs, some of which are described as compulsory or required at other sites.

Furthermore, different sites used different terms to define the same activities. SMHS, for example, used the term *Safety Skills* training to define their MWT suite while other AHSs refer to it as *Mandatory Education & Training* (KEMH) and *Mandatory Training* (EMHS, Osborne Park and Sir Charles Gardiner Hospital). Training programs designed to address the same topic were also given different names at different sites. Within the data set of 112 individually named programs, there were multiple titles used for similar topics. For example, 17 different titles described various life support training programs (e.g. adult resuscitation, basic life support, defibrillation training), 13 programs

addressed infection prevention related topics (e.g. hand hygiene, infection prevention, aseptic non-touch technique), and ten titles covered aggression prevention and management related subjects. The only consistently titled programs were the three e-learning programs developed by WA Health which were used across all sites (*Accountable & Ethical Decision Making; Aboriginal Cultural Learning* and *Record Keeping Awareness* training), and licenced learning products such as *Aseptic Non-Touch Technique* (ANTT) used across multiple sites. Site experts advised that the variation of training titles reflects differences in the learning content and objectives and reflects site attempts to individualise programs to better promote the training and improve their appeal for workers. This lack of consistency in program names may lead to worker confusion regarding the learning objectives of programs delivered at each site and may have implications for workers seeking recognition of prior learning (RPL) at different sites.

## 4.5.2. Learning objectives

The dataset provided limited details about the learning objectives of MWT programs. The SMHS Safety Skills Training Framework (SMHS, 2017) includes learning outcomes for 18 of the 19 mandated programs in the framework (Aseptic non-touch technique is not described), however other sites did not provide this level of detail. This prevents the comparison of programs for the purpose of this study, but more importantly impacts on the potential for WA Health employees who move across sites to seek recognition of prior learning (RPL). The WA Health workforce includes a high proportion of workers who transfer across sites as part of graduate training programs (WA

Health, 2022) or to participate in internal organisational transfers supported by both industrial awards (WA Industrial Relations Commission, 2021) and internal labour management practices (WA Health, 2022, p. 13). There is potential for efficiency and training cost minimisation if workers do not have to repeat training when they move between sites. If training program content is not detailed, nor learning outcomes specified, workforce and site managers have insufficient evidence to support a process of RPL assessment.

#### 4.5.3 Rationale for mandated training

The rationale for mandating a training topic is not consistently documented. Only two sites document the rationale for mandating training programs for workers and each present a different rationale for individual programs. The EMHS Mandatory Training Policy (2016) lists policies and legislative requirements that MWT is intended to address but does not specify which policy or legalisation relates to which MWT program. The SMHS Safety Skills Training Framework (2017) specifies a rationale for each mandated training program. Both EMHS and SMHS justify the mandating of training programs on the basis that they are required to meet a health service provider policy, a WA Health policy or directive, State Government Legislation (e.g. Occupational Safety & Health Act (1996), Health Services Act (2016), State Records Act (2000), the WA Public Sector Standards or national industry standards (e.g. National Safety and Quality Health Care Standards).

Where the rationale for mandating a training topic was provided, it is different at different sites. For example, one site requires ANTT training on the basis that it meets the WA Health Public Health Policy Framework (WA Health,

2022), while another justifies the same training on the basis that it meets the National Health and Medical Research Council (NHMRC) Guidelines for the Prevention and Control of Infections in Healthcare (NHMRC, 2020). Both the NHMRC Guidelines and the WA Health Public Health Policy describe comparable rationales for requiring this training (i.e., the prevention of patient infections), however the absence of a consistent rationale or statement of purpose for MWT across the public health system creates a risk that workers are unclear about the purpose of MWT, unclear about the whether the training at different sites has the same purpose, or unclear about what compliance requirement is to be achieved through engagement in MWT.

#### 4.5.4 Governance and management of mandated workplace training

The data shows that the responsibility for, and the governance and management of, MWT varies significantly across each site. Services responsible for the management and administration of MWT at different sites include administrative staff working within site human resources departments, managers of area-wide training units, health professionals responsible for MWT within their profession, and health educators with responsibility for delivering MWT to a part of a hospital.

Similarly, the governance of MWT on each site is inconsistent, with responsibility for decisions on what should be mandated at each site variously allocated to a human resource department, training units, or governance groups in the AHS. While it is beyond the scope of this study to explain these differences, site experts indicated that this status had arisen through historical precedence and differing workforce structures across sites and area health

services. The finding that there is no consistency in the governance and management of mandatory workplace training across participating sites may have implications for what mandatory training is delivered, how it is delivered across sites, and how the workforce at each site perceives MWT.

## 4.6 Workforce preferences for mandated training topics

This section examines the responses to MWTS Item 18 which required respondents to indicate the training subjects they believe should be mandated within their workplace. A total of 203 individuals responded to this survey item. The dataset included responses from all work role groups, AHSs, age groups, and workers with different years of work experience in health and WA Health. The responses yielded a dataset of over 600 independent data items.

Six respondents indicated that they do not feel any training should be mandated, with only one providing further commentary (i.e. *"Should be led by the person"*). Ten respondents provided a criterion for mandating a training topic. These included:

- When worker competence is required.
- When the individual feels the needs for training/self-selected (N=3).
- Where cost benefit can be demonstrated.
- To meet legal requirements.
- To meet requirements for accreditation.
- To comply with WA Health policies.
- Where evidence exists that training impacts on practice (N=2).

15 % (N=31) of the respondents indicated they wanted all currently mandated topics to remain mandated. 56 % respondents (N=117) wanted at least one of the currently mandated topics to be included in a suite of MWT. The topics most consistently cited for inclusion were hospital or basic life support training (N=40 respondents), emergency procedures training (N=29) and hand hygiene training (N=28). Less frequently cited were manual handling training (N=18), aggression prevention training (N=13) and Aboriginal cultural issues (N=8).

119 respondents recommended a total of 67 different training topics to be added to existing MWT offered at WA Health sites. The topic range is broad and reflects the range of roles and activities undertaken by the workforce. The general themes of topics are illustrated in Figure 4.3.

# Figure 4.3

# Preferred Mandated Training Topics

| Current MWT Topics                       | Interpersonal Skills   |  |  |
|--|--|--|--|
| Life Support                             | Patient/Carer Focused<br>e.g. Empathy &<br>compassion, paitent/person            | General<br>e.g. emotional intelligence,<br>assertiveness, conflict     | Colleagues & Team<br>e.g. creating positive work culture,<br>assertiveness |
| Hand Hygiene                             |  |  |  |
| Manual Handling                          | Staff Safety   |  |  |
| Infection Prevention & Management        | General<br>e.g. resilience, managing<br>phone aggression                         | Clinical<br>e.g. laser safety, radiolog<br>safety, blood safety, late; | JY   |
| Prevention of Bullying                   | priorio d'ggi occioni  |  |  |
| Emergency Procedures                     | Clinical Practice & Patient  | Safety   |  |
| Aggression Prevention                    | General Clinical Skills<br>e.g. trauma informed care, c                          | Diagnostic or Spultural e.g. COVID - 19                                | ymptom Based<br>), psychosis, acute  |
| Accountability & Ethical Decision Making | safety, ethical decision maki<br>prevention, family & domest                     | ng, falls medical deterior<br>ic violence                              | ation, dementia, delirium  |
| Aboriginal Cultural Awareness            | Patient Groups<br>e.g. youth, abstetric people v<br>mental diagnosis, gender div | Medication<br>with e.g. Clozapine,<br>versity, opiod managmen          | Clincical Services<br>e.g. language services,<br>t clinical coding         |
|  | CADL   |  |  |
|  |  |  |  |
|  | Organisational Systems   | Systems  |  |
|  | e.g. digital systems, video  | e.g. language s  | ervices, understanding   |

The 65 suggested additional MWT topics sit within four, broad topic categories except for two outlier topics: 1) training on legal issues and 2) training about the roles of other professions. The four broad topics categories are:

- personal and interpersonal relationship skills e.g. conflict resolution, resilience,
- specific clinical management topics e.g. asthma management, blood management, managing delirium,
- organisational system knowledge e.g. finding policies, human resource processes,
- safety issues e.g. safe movement of furniture and wall divider, safety in a workshop.
Table 4.7 provides a summary of the most frequently cited topics within each of the four categories.

#### Table 4.7

Proposed Categories of Preferred Mandatory Training Topics

| Topic Category           | Topics  | Total number of references |
|--------------------------|---|----------------------------|
| Personal & interpersonal | Communication skills<br>Conflict resolution<br>Emotional intelligence<br>Assertiveness<br>Resilience; Self Care; Building Positive Workplace Cultures,<br>Customer service                        | 12<br>10<br>4<br>3<br>2    |
| Safety                   | Occupational Health & Safety Issues for staff (various topics)  | 7                          |
| Clinical management      | Family Domestic Violence (Including child protection)<br>Delirium<br>COVID & Pandemic Management<br>Dealing with drug & alcohol misuse<br>Falls management, diabetes management; blood management | 4<br>3<br>3<br>3<br>3      |
| Organisational systems   | Managing poor performance<br>Risk assessment  | 2<br>2                     |

The topics proposed indicate key areas of concern for this cohort of the WA Health workforce. The most frequently cited requests relate to interpersonal interactions, with multiple suggestions for mandated training on related subjects (e.g. respectful and purposeful communications (with colleagues, patients, and their carers), difficult conversations (patient-related), assertiveness skills and negotiation skills.

Further suggestions include training on how to work with patients, their carers, and co-workers with mental health problems. Specific topics suggestions include on Mental Health First Aid training (A propriety training package), managing mental health crisis, managing risks of self-harm and suicidal

ideation, and managing patients with mental health problems face-to-face and over the phone.

Other training subjects proposed less frequently, were: building a safety and quality culture, managing performance (e.g. managers should receive training in how to support a poor performer or hold workers to account for poor performance), working with people from diverse groups (including diverse cultures, genders, sexualities, religions, and language groups), and promotion of the support services available (e.g. translation and interpreter services), managing family and domestic violence issues (for patients and coworkers), managing the effects of alcohol and other drugs (on patients and coworkers), and managing patients with cognitive impairment (e.g. dementia, delirium).

New clinical training topics identified by at least two respondents included recognising and responding to clinical deterioration, managing blood, care planning and coordination, identifying and managing patient falls risks, and person-centred care.

Collectively these suggestions provide an indication of the types of learning needs currently experienced by WA Health employees.

## 4.6.1 Impact of demographic variables on preferred topics for MWT

Data were reviewed within and across respondent cohorts with the intent of exploring whether demographic factors influenced the workforces' preferences for mandated training programs. Notable differences are reported below.

#### 4.6.1.1 Work role

Respondents in all workforce groups indicated that existing mandated training should be maintained but different workforce groups had different topic preferences. Respondents in clinical work roles consistently prioritise hospital life support and emergency procedures training (medical and nursing staff) or life support and infection prevention and management training (allied health staff). In contrast, respondents in non-clinical areas prioritised hand hygiene, aggression prevention and management, and manual handling training.

The work role categories of the 119 respondents who proposed new (novel) topics for mandated training is detailed in Table 4.8. and the full list of proposed topics by group available in Appendix E. There were also minor variations in topic selection across groups. Medical and non-clinical respondents were most likely to request training in non-clinical topics (e.g. communication, culture, professional behaviours, self-care). Clerical and administrative respondents were interested to learn about some clinical interventions such as basic first aid, observations for very sick patients and clinical safety issues such as family and domestic violence. Both clinical and non-clinical respondents shared an interest in building workplace culture, improving interpersonal communication and working effectively with people from diverse groups.

## Table 4.8

| Workforce group (N= total responses)       | Total new programs requested | Clinical Topics | Other topics |
|--|------------------------------|-----------------|--------------|
| Medical<br>N=10                            | 13                           | 5               | 8            |
| Nursing & Midwifery<br>N=35                | 35                           | 21              | 14           |
| Allied Health/Other Clinical Staff<br>N=36 | 26                           | 15              | 11           |
| Non-Clinical Staff<br>N=38                 | 50                           | 12              | 38           |

## Proposed Mandated Training Topics by Work Role Groups

## 4.6.1.2 Employees

Minor variations in responses across Area Health Services (AHS) were noted. The percentage of respondents satisfied with the current MWT suite, or aspects of it, is provided in Table 4.9.

In the AHS 1 cohort of respondents (N=87), the most popular training topics were life support, hand hygiene, emergency procedures and manual handling. Aggression prevention, Aboriginal cultural competence, and infection prevention and management were the next most (and equally) popular. AHS 1 respondents also suggested an additional mandated training topic (update on changes to policies and procedures).

The AHS 2 cohort (N=48) had the highest proportion of respondents support of the existing suite of training programs with 99% respondents supporting at least one of the currently mandated topics. Of the topics preferred, hand

hygiene was the most frequently cited, followed by life support, emergency intervention (including recognising and responding to the deteriorating patient) and infection prevention and management.

The AHS 3 cohort (N=59) was comparable to AHS 1 in that 17% respondents supported with the existing MWT suite. 60 % of respondents supported at least one of the current MWT topics and only one respondent indicated that MWT should not be required.

Between 31% and 38% of respondents in each AHS dataset provided suggestions for additional, new MWT topics. A full list of the suggestions for each AHS is summarised in Appendix F.

## Table 4.9

| Themes  | AHS 1 N=98  | AHS 2 N=48   | AHS 3 N=59   |
|---|---|--|--|
| Support Existing Suite MWT                          | 16%   | 20%  | 17%  |
| Support Some of the<br>Existing Suite               | 66%   | 79%  | 60%  |
| Number of New Programs<br>Proposed                  | 34  | 24   | 32   |
| Existing Training in Order of<br>Preference (Top 4) | Life support<br>Hand Hygiene<br>Emergency procedures<br>Manual handling | Hand hygiene<br>Life support<br>Emergency management<br>Infection prevention &<br>management | Life Support<br>Hand hygiene<br>Emergency procedures<br>Manual handling/ Infection<br>prevention/ Bullying |
| No MWT Required                                     | 4%<br>Life support if the staff<br>member is already trained            | 1%   | >1%  |
| Other Comments                                      | Only mandate if evidence to support efficacy (1)                        | Nil  | Only mandate if evidence of training need; mandate only when role relevant (2)                             |

#### Proposed Mandated Training Topics by Employer

#### 4.6.1.3 Age

The older the respondent, the more likely they were to 1) support the existing MWT topics required in their workplace, 2) be supportive of *some* of the existing programs, and 3) value clinically focused training.

As summarised in Table 4.10, there is a linear trend associated with age that shows an age-related increase in focus on clinical training topics such as COVID-19 and pandemic training, management of patients with specific conditions (e.g. diabetes, dementia, cognitive impairment; in mental health crisis) or status (e.g. obesity, obstetric emergency, delirium), and strategies to reduce or manage clinical risk (e.g. falls prevention, speaking up for patient safety, family and domestic violence).

General, non-clinical topic suggestions for training were less frequently requested by older respondents but were consistent across all age groups in terms of the subjects requested. These focused on interpersonal skills (e.g. communication with colleagues; managing conflict, managing bullying), management of face-to-face aggression (requested by clinical and clerical respondents), and phone-based aggression (requested by front-line, administrative); including identifying people (patients and colleagues) in mental health crisis or under the influence of drugs or alcohol.

## Table 4.10

| Age Groups  |   |  |  |   |  |
|---|---|--|--|---|--|
| Themes  | 21–30 years<br>N=14   | 31-40 years<br>N=48  | 41-50 year<br>N=52   | 51-60 year<br>N=60  | Over 60 years<br>N=30  |
| Support existing suite MWT  | 14%   | 12%  | 19%  | 16%   | 24%  |
| Support some of the existing suite                                | 50%   | 68%  | 69%  | 68%   | 82%  |
| Preferred existing<br>training (Top three in<br>preference order) | Hand hygiene/<br>Aggression/Infection<br>prevention<br>Emergency<br>Life support/ | Life Support<br>Hand hygiene<br>Infection Prevention   | Hand hygiene<br>Emergency<br>Life Support  | Life Support<br>Hand hygiene<br>Aggression/Infection<br>Prevention &<br>Emergency | Life Support<br>Hand Hygiene<br>Emergency                          |
| No MWT required   | 0%  | 2%   | 3%   | 3%  | 0%   |
| Suggestions for new subjects                                      | Clinical: 6 - Mental<br>Health (2)<br>General: 4                                  | Clinical: 14- Mental Health<br>first aide (3) & PPE (2)<br>General: 34 (Interpersonal<br>relationship and conflict the<br>most consistently cited) | Clinical: 5 Pandemic &<br>Infectious disease<br>General: 30<br>Major themes=<br>communication skills | Clinical:18 - Mental<br>health (2) &COVID (3)<br>General: 17                      | Clinical:17<br>Managing dementia<br>and delirium (2)<br>General: 6 |

## Proposed Mandated Training by Age

## 4.6.1.4 Time working in health

Comparison of data grouped by the time the respondents had worked in the health sector indicated no specific trends. Satisfaction with the existing suites of MWT ranged from 7% to 26% across the cohorts with no linear relationship evident with the cohorts' years of experience in health. The highest level of support for the existing MWT suites was within the 21-30 years of experience cohort (see Table 4.11). The preferred topics from within the existing suites were broadly consistent across each group and there were no consistent themes regarding the type of additional training required within any of the cohorts. The only recommendation unique to a cohort was from one respondent in the over 30 years in health cohort who would like to see the introduction of mandated training about the roles of different health professions.

## Table 4.11

| Years of experience in hea                             | Years of experience in health sector   |                      |  |   |  |
|--|--|----------------------|--|---|--|
| Themes   | < Five years<br>N=19   | Five-10 year<br>N=29 | 11-20 years<br>N=59                                  | 21-30 years<br>N=42                                     | >30 years<br>N=51  |
| Support Existing<br>Suite MWT                          | 21%  | 10%                  | 7%   | 26%   | 13%  |
| Support Some of the Existing Suite                     | 84%  | 68%                  | 62%  | 73%   | 76%  |
| Existing Training in<br>Order of Preference<br>(Top 3) | xisting Training in Hand hygiene Life Support<br>rder of Preference Emergency Emergency<br>op 3) Procedures & Hand Hyg<br>Life support Aggression<br>Infection Pre<br>Cultural Awa |                      | Life Support<br>Hand Hygiene<br>Infection Prevention | Hand hygiene<br>Life Support<br>Emergency<br>Procedures | Life Support<br>Emergency Procedures<br>Infection prevention |
| No MWT Required  | 0%   | 0%                   | 1.6%   | 5%  | 2% - only with evidence                                      |
| Comments Unique to Cohort                              |  |                      |  |   | Understanding role of colleagues                             |

## Proposed Mandated Training Topics by Years of Health Experience.

## 4.6.1.5 Time working in WA Health

Comparable with years of experience in the health sector, data indicated no linear relationship in respondents support for the existing MWT suite with support for the whole suite ranging from 6% (Respondents with five to 10 years' experience in WA Health) to 28% (Respondents with less than five years' experience), and support for some aspects of the suite ranging between 40 and 67%.

Respondents with fewer years working in the WA system were most likely to suggest novel, non-clinical subjects for new mandated training (e.g. customer service and assertiveness training). Respondents with the most experience in WA Health were unlikely to suggest novel topics to be mandated. Where they did suggest new topics, the more experienced workforce suggested topics related directly to clinical care, for example, managing patients with delirium, mental state examination or clinical blood transfusions. Key findings are summarised in Table 4.12.

#### Table 4.12

#### Proposed Mandated Training Topics by Years in WA Health

| Years of Experience in WA Health                       |   |   |   |   |   |  |  |
|--|---|---|---|---|---|--|--|
| Theme  | e < Five years<br>N=25                                  |   | 11-20 years<br>N=54   | 21-30 years<br>N=31                                     | >30 years<br>N=22   |  |  |
| Support Existing<br>Suite MWT                          | 28%   | 6%  | 22%   | 16%   | 18%   |  |  |
| Support Some of the<br>Existing Suite                  | 40%   | 64%   | 57%   | 55%   | 54%   |  |  |
| Existing Training in<br>Order of Preference<br>(Top 3) | Emergency<br>Procedures<br>Life Support<br>Hand Hygiene | Life Support<br>Emergency<br>Procedures<br>Hand Hygiene | Life Support<br>Infection Prevention<br>& Management<br>Emergency<br>Procedures | Life Support<br>Emergency<br>Procedures<br>Hand Hygiene | Life Support<br>Emergency<br>Procedures<br>Infection Prevention<br>& Management |  |  |
| No MWT required  | 4%  | 2%  | 3.7%  | 3.2%  | 0%  |  |  |

## 4.6.2 Summary: Workforce preferences for mandated training topics

This research found that WA Health respondents across all organisations value MWT. Over 98% of respondents supported some training being mandated, with 71% of respondents supporting at least one of the mandated training topics currently required at their site. The mandatory training most frequently supported was life support training, emergency procedures training and hand hygiene training. Less frequently supported are manual handling training, aggression prevention training and training in cultural issues.

Multiple respondents referred to the need for mandated training on topics not currently included in existing site requirements. 63 additional, unique clinical and non-clinical training topics were proposed. The most frequently cited suggestions for new mandated training relate to personal and interpersonal relationships, self-care, and strategies to manage clinical challenges in specific clinical contexts. The rationales provided for mandating training included: when workers competence is required, if a worker self-selects for training, when required by law, WA Health Policy, or health service accreditation, and where there is evidence that training is cost-effective and will have a positively impact work practices.

The findings also indicate that the demographic variables of time in health sector, time in WA Health, workforce groups and employer do impact workers preferences for mandated training, including their preferences for the MWT currently required, and the topics they suggest for additional MWT.

## 4.7 Chapter summary

This chapter reported the analyse of qualitative data about current WA Health MWT practices at each participating site, and the workforce preferences for MWT topics. The findings are briefly summarised below with reference to two of the research questions.

# 4.7.1 Research Question 1: What MWT programs and delivery methods are used in the WA PHS sector?

The study found that all respondents in the WA Health metropolitan workforce are required to undertake multiple hours of MWT on commencement at WA

Health sites and at regular intervals thereafter. A total of 112 individual programs are designated as mandated across the three participating AHSs with 54 individual learning topics covered. The learning topics addressed in MWT programs relate predominantly to clinical and staff safety issues (e.g. Manual handling, infection prevention and management, Life Support), training on process, procedures, and business practices (e.g. Record Keeping Awareness Training). The findings identified ten core topics that are delivered at every site, with all the workforce at all sites required to undertake training on eight of these topics. The training programs addressing the ten core topics include three e-learning programs created by WA Health (Accountable & Ethical Decision Making, Aboriginal Cultural Awareness, Record Keeping Awareness) and multiple individual programs designed and delivered independently at each site.

The duration of training was not identified for all programs but the evidence available indicated duration varies according to site specific program design and trainee speed of training completion.

Every site requires workers to repeat four training topics (Aggression prevention and management, life support, emergency procedures and evacuation), and most require repetition of additional programs. The frequency of repetition varies across sites and workforce groups. For some sites and some workforce groups, the total numbers of training hours required on commencement is estimated to be as high as 15 hours per staff member, and up to 10 hours of repeated training over a triennium. Furthermore, workers who work across multiple WA sites concurrently or sequentially do not consistently receive recognition of prior learning if they have trained at other

WA Health sites. As a result, they are required to repeat training on the same or similar topics at each site. Collectively, these MWT training requirements represent a significant allocation of workers' time across the WA Health workforce of approximately 35,000 workers.

The eight core MWT programs required at all participating sites use three workplace learning opportunities: e-learning, face-to-face training for skills-based topics (i.e.: Life support, manual handling, and management of aggression) or a combination of the two. No other workplace learning options are provided (e.g. coaching, mentoring, workplace on-the-job training).

The study finds that the rationale for mandating training is not consistently articulated across sites either in terms of being explicitly described to the workforce, or in terms of being consistent across each site. Where rationales for mandating training are provided, they relate to meeting policy and legislative requirements, supporting accreditation standards, or the broad concept of supporting safety and service quality. The study further identified that the definition of mandated training is not consistent across sites, and that the nomenclature used to name and describe MWT programs varied. Similarly, learning objectives for individual programs are not consistently provided. Furthermore, the findings show that AHSs or individual hospital sites autonomously determine the MWT required of their workforce including the learning topics, training format, duration and frequency of training, and the roles that are required to undertake each training program. The governance and operational management of MWT also varies considerably across participating sites, reflecting historical and workforce variations across sites. WA Health MWT practices are therefore less centrally coordinated or

standardised than other states where state-wide bodies coordinate the delivery of a standardised MWT suite for all organisations within the state (HETI, 2023; Queensland Health, 2023; Victoria Health, 2023). Collectively these findings provide new evidence of the range of topics addressed and the quantity of MWT required across the WA Health system, and evidence that significant resources are utilised across the system to design, deliver, administer, and report on MWT at each site. Furthermore, it demonstrated that individual workers utilise significant paid work hours to complete MWT on commencement at every site in WA Health and at regular interviews thereafter.

# 4.7.2 Research Question 2: How does the PHS workforce perceive the need and purpose of MWT?

Analysis of data from survey Item 18 found that the WA Health workforce *is* interested in accessing training on topics that they perceived are relevant to their work role. They are largely accepting of the MWT topics they are currently required to learn and have suggestions for additional topics. The suggestions for new MWT topics were diverse and covered: 1) personal skill development (e.g. resilience, assertiveness), 2) specific clinical knowledge and skills (e.g. Family and domestic violence identification and management), 3) workers occupational health and safety issues, and 4) general work tasks (e.g. Risk assessment, performance management processes). Respondents described five different reasons for mandating learning, as opposed to making training available to them. These reasons included addressing the current requirement for compliance training, such as that required by law, policy, and accreditation. In addition, respondents cited that MWT could be justified where there are

demonstrated learning needs or competency requirements and when there is demonstrated evidence that the training will impact on workplace practices.

## 4.8 Chapter conclusion

This chapter mapped the MWT currently required of the WA Health workforce at the nine participating sites and identified 112 individual programs covering 54 learning topics mandated for delivery. Ten core learning topics were mandated for delivery at all sites with completion of eight of these programs required by all workers at all sites. This represents a minimum of seven hours of training workers for all workers on commencement at the organisation in addition to a minimum of three hours update training per worker per year. Some workforce cohorts are required to undertake up to 15 hours of training on commencement and to update this annually, biannually, or triennially. The chapter described that the learning objectives of the programs designed at each site are not always transparent, and that there is no consistency in the stated rationale for MWT at each site, the naming conventions, duration of training, requirements for training repetition, delivery approaches, governance, management, and administration of MWT. In addition, the study found that recognition of prior learning (RPL) is not consistently supported at each site with the result that some workers are required to undertake repeated training on the same topic if they work at more than one site.

The chapter also described the classification of current WA Health MWT programs using Jacobs and Park's (2009) workplace learning conceptual framework. Classification found that WA Health relies exclusively on two of eight possible workplace learning strategies: e-learning and face-to-face

training. The chapter also described that workers are generally accepting of the learning topics current mandated and have suggestions for additional topics that they feel would be of value.

The findings described in this chapter were used to inform the design and data collection process for Phase Two of this study in which workforce perceptions of MWT were explored. The survey focused on the ten MWT topics consistently required at each site to explore the workforce's perceptions MWT. The next chapters will describe the findings arising from the survey.

## Chapter Five: Workforce Perceptions of the Purpose of Mandated Workplace Training

## 5.1 Introduction

This chapter opens with summary of the qualitative and quantitative datasets related to staff perceptions of the purpose of MWT, elicited via the *Mandated Workplace Training Workforce Survey* (MWTS) and interviews with volunteer workers. It briefly recaps how the data were analysed and the focusses on the findings of WA Health workforce perceptions of the purpose of MWT.

## 5.2 The dataset and analysis

Findings on workforce perceptions of the purpose of MWT were based on qualitative and quantitative data elicited via survey items in the *MWTS* described in Chapter Three. A total of 365 respondents completed at last some of the survey items and all available data were included for analysis. The data from the three survey items related to the purpose of MWT (Survey Items 7, 8 and 9) were triangulated with qualitative data from semi-structured interviews with three volunteer survey participants (See Figure 5.1).

As discussed in Chapter Three qualitative and quantitative data from the survey data sets were analysed separately. Qualitative data from both the surveys responses and the interviews were examined using thematic analysis, and the latter with simple statistical analysis and non-parametric tests.

## Figure 5.1

Data Sources: Workforce Perceptions of Mandatory Workplace Training



## 5.3. Workforce perceptions of the purpose of mandated training

As described in Chapter Three, the data detailed above were analysed and triangulated to understand workforce perceptions of the purpose of MWT.

## 5.3.1 Qualitative findings

This section describes the findings of the analysis of qualitative data followed by analysis of quantitative data related to workforce perceptions of the purpose of MWT. The qualitative findings are based on responses to 1) MWTS Item 7 which asks about perceived purpose of MWT and 2) MWTS Items 20 and 21 that elicit general comments about MWT, some of which referred to purpose.

## 5.3.1.1 Responses to Item 7

Initial screening of the 191 free text responses to survey Item 7 (*Tell us in your* own words what you think is the purpose of MWT) resulted in exclusion of

seven responses on the basis that they were unrelated to the question. The remaining 184 responses were coded and analysed using the three methods described in Chapter Three (i.e. word frequency, thematic analysis, and language review). The findings of the analysis are reported below sections which represent each of the key themes identified in the data. The first section describes the findings of the analysis of all respondent data and is followed by findings within subsets of respondents grouped by work role, employee, age, years in the health sector and years in WA Health.

Collectively, the 191 responses indicated a perception that MWT impacts three interrelated fields: the organisation, the patient, and the workforce. The fields are described as being independent of, or in combination with, other each other (See Figure 5.2).

#### 5.3.1.1.1 Organisational purpose

Respondents' references to MWT's purpose being related to the organisation noted the need for organisations to meet legislative, policy or procedural obligations imposed by external entities and/or to meet internal objectives such as key performance indicators (KPIs). Comments were framed as either a negative view of MWT, for example, *"A tick box exercise for executive to say that training requirements have been met."*, or offered a declarative statement of perceived fact, for example, *"To ensure compliance with certain policies and procedures."*; *"A legal obligation to support the governments (sic) responsibility of maintaining employee awareness."* and *"To meet the KPIs of the organisation.* 

## Figure 5.2

## Purpose of Mandated Workplace Training

Eioldo of Impost

|                                 | Fields of Impact  |                                 |   |
|---------------------------------|---|---------------------------------|---|
|                                 | Organisation  | Patients/Visitors               | Workforce   |
| Most                            | Safety  | Safety                          | Safety  |
| FREQUENCY OF REFERENCE TO THEME | Safety Organisation<br>Compliance with:<br>• Accreditation &<br>National Standards<br>• Regulation/ legal<br>• KPIs<br>Efficiency & effectiveness | Paitent Care<br>Service Quailty | Staff – OSH, Legal<br>& Professional Liability<br>Skills & Knowledge<br>Minimum, baseline training<br>Knowing rules & expectations<br>Competence<br>Professionalism |
| Least                           | Risk Mitigation   | Risk Mitigation                 | Risk Mitigation   |

#### 5.3.1.1.2 Patient related purpose

Worker's references to MWT's purpose being related to patients focused on the quality and consistency of patient care. For example: "*To ensure patient safety*."; "*To maintain professional, practical skill necessary for safe patient care.*" and "*To ensure a high standard of patient care is provided in a consistent manner throughout all WA Health Departments.*"

## 5.3.1.1.3 Workforce related purpose

Comments referring to MWT as impacting on workforce or personal objectives included a high proportion of references to the development and maintenance of skills or knowledge. For example: *"To maintain our skills", "To maintain competency.", To keep our skills updated", "To be sure that workers are trained in key areas", and "The purpose of mandatory training is to ensure the sure that workers are suppose of mandatory training is to ensure the sure that workers are trained in key areas", and "The purpose of mandatory training is to ensure the sure that workers are suppose of mandatory training is to ensure the sure that workers are trained in key areas", and "The purpose of mandatory training is to ensure the sure that workers are suppose of mandatory training is to ensure the sure that workers are suppose of mandatory training is to ensure the sure that workers are suppose of mandatory training is to ensure the suppose of the sure that workers are suppose of the sure that workers are suppose of the sure that workers are suppose of the suppose of the sure that workers are suppose of the sure that workers are suppose of the sure that workers are suppose of the suppose of the sure that workers are suppose of the suppos* 

essential knowledge and skills in the health workforce". This group of responses indicated that the maintenance of workers' skills and knowledge was perceived to be a purpose of MWT independent of other purposes. Other comments linked the maintenance of skills to the achievement of workplace objectives. Objectives included 1) the completion of job tasks, for example, "To ensure workers are competent in areas required for practice and to ensure they have the skills to undertake roles in their job description",2) safely completing work tasks, for example, "A method used to ensure workers have the necessary training to meet the safety and quality requirements of their role and to mitigate risk", and 3) reducing risks, for example, "To ensure workers are sufficiently educated on issues that impact on their accountability and health and safety as well as safety and wellbeing of patients."

#### 5.3.1.1.4 Interrelated purposes

In addition to comments that cited a single field of impact of MWT, a further group of responses revealed that respondents perceive there to be multiple, deep, relationships between and across the potential fields of impact. As illustrated in the responses below, these interrelationships indicate that respondents believe MWT can address multiple purposes simultaneously. For example, that MWT can support safe work practices while also addressing policy or legislative requirements. For example, one respondent commented that MWT's purpose was to *"Ensure workers have the training, thought necessary by the organisation, according to legislation of org(anisation) needs, in policy, procedures or equipment that is required to be safe at work for workers or in providing care services."* Other respondents pointed to the benefits to workflow efficiency, for example: *"Teaching the skills and*"

knowledge to create a safe, cost effective, time-effective work environment for workers. And deliver the appropriate services to patients." For another respondent, accountability, and the potential for litigation against WA Health were central reasons. They commented, *"The purpose is to ensure that* workers are educated in the areas of safety etc (sic) but another reason is to protect the organisation against claims that training wasn't provided and to make sure KPIs are met".

#### 5.3.1.2 Frequency of purpose

The individual purpose most frequently stated (over 63% responses to this survey item) was that MWT is intended to address safety issues. The following response encapsulates the multiple elements of safety referred to in the data and includes references to patient, workforce, and organisational safety: *"Primarily, mandatory training is about safety. This applies to patients, workers, and visitors - safety of information and privacy, response to an emergency, prevention of complications, safety in the healthcare environment. Even if a course is proactive about culture or workplace improvement, it is all underscored by safety-accreditation standards exist to ensure the organization is safe."* 

Within the theme of safety, respondents referred to the safety of patients, visitors, and the workforce. Workers' safety was cited most frequently (50% of all safety related comments), for example: *"To encourage safe work practices, "Health and safety of all workers"*. The next most frequently cited group of comments (32%) linking patient and workers' safety. A relatively small cohort of responses (3%) referred to patient safety as an independent purpose for MWT. A further small cohort (3%) referred to organisational safety, usually in

relation to other risks, for example, risks that "... affect patients and the organisation both at a clinical and corporate level". Implicit in the group of responses that focused on safety is a perception that health care workplaces are places of inherent risk, and that it is in the interests of patients, visitors, the workforce, and the organisation, to mitigate those risks. Significantly, respondents did not question whether these risks exist, rather they stated or implied that risks exist and that MWT is one means of addressing them.

Respondents identified other purposes of MWT but less frequently than safety issues. The second most frequently identified theme (16 % respondents to survey Item 7), identified MWT as a requirement to meet accreditation and national safety and quality standards. Respondents perceived MWT as contributing to the process of meeting externally prescribed industry standards: "... *it appears to be for the benefit of the organisation that all their boxes are ticked – to meet accreditation standards.*"

The next most frequently coded theme was that proposing MWT supports organisations to meet regulatory, legal, or legislative requirements (10%). A small number of comments (4%) referred to MWT meeting organisational key performance indicators (KPIs).

Where respondents defined MWT as impacting on workers (approximately 50 % of responses), they referred to the value of both acquiring, and maintaining, skills and knowledge through training. 1.5% respondents referred to MWT supporting workers' *"competence"*. Other comments (8% of respondents) referred to MWT offering *"baseline"* or *"minimum training"* to support workers to conduct their job. A similar proportion of responses referred to MWT as a

means for the workforce to keep up to date about "*the rules*" of organisational policies and processes.

Less than 5 % responses were classified into four further themes. MWT as a contributor to the reduction of patient, worker, and organisational risk was raised by 3.6% of respondents. *"Professionalism"* was cited by the same small number of respondents who described MWT as assisting workers to be *"more professional"* or meet *"professional outcomes"*. Efficiency and effectiveness, and achievement of service quality, were referenced as purposes of MWT by 4.1% of respondents.

## 5.3.1.3 Attitudes to mandated workplace training

As described in Chapter Three, the vocabulary and grammatical construction of responses were analysed to explore respondents' attitudes to MWT. Most responses were simple declarative statements that do not include vocabulary, or grammatical emphasis, to indicate that the respondent held strong views on the subject. For example, the response: *"To keep workers current and up to date with processes and procedures"* indicated no strong belief about the subject. In contrast, a small proportion of responses (less than two percent) suggested strong personal views on the subject. Responses included statements both strongly supportive and strongly critical of MWT. The language used in these responses included the use of emotionally laden vocabulary, emphatic grammar and punctuation, and references to personal beliefs. Less than one percent of respondents expressed positive comments about MWT, such as *"I think it's great – it keeps you up to date with everything"*. Just over one percent of respondents indicated a negative perception of MWT

this group of responses suggested an element of cynicism or scepticism about the value of the training to the individual participant and a perception that MWT is imposed on workers by management or the organisation for purposes that the respondent did not support. This included pejorative references to MWT being a *"Box ticking exercise – no purpose as far as I can tell"*, and cynicism around MWT's use to protect organisational reputation, such as, *"To make the department look better in the public eye in response to bad episodes that made it into the press"*, and *"for managers to cover their backsides"*. One comment referred to *"box-ticking exercise"* of MWT and the current processes of healthcare accreditation as having" *…little effect on the overall aim of improving patient outcomes and safety."* 

#### 5.3.1.4. The impact of demographic variables

Analysis of survey responses within different workforce groups (i.e. work role groups, employer, age, years of health work experience, years of WA Health experience) showed limited variation across and within cohorts. That is, the themes identified in each workforce cohort were largely consistent in their reference to MWT as supporting skill and knowledge acquisition, safe practice, policy, procedures, and legislative compliance, achievement of KPIs and support for accreditation and management of risk. Each cohort included a small number of critical references to MWT being a compliance exercise rather than focused on learning. The limited differences identified between the groups are reported below.

#### 5.3.1.4.1 Work role

Medical staff (N=32) were more likely than other work groups to express negativity (50% of medical respondents) or ambivalence (18% medical

respondents) about the purpose of MWT and were less likely than other workforce groups to report the purpose of MWT as being to improve safety or workforce skills. They were more likely than others to indicate MWT is an organisational compliance strategy to meet legislative, reporting, or other organisational requirements. Reponses from this group included reference to the organisation's goals and structures, for example, "To meet arbitrary KPIs...". Medical respondents were highly critical of what they perceived to be unjustified rationales for MWT, for example, "Purely a tick box so that managers can present a KPI at their meetings and justify their positions! Administration positions are the fastest growing sector of public health in Western Australia" The absence of educational value was cited, for example one doctor commented that "Most of it is not truly training or educational". Similarly, the impact of MWT on their personal work responsibilities was framed negatively, for example: "To torture medical staff and waste our already overburdened and under resourced work hours. I know it is well-intended, but the amount is ridiculous and a considerable amount irrelevant. Most of the relevant content is already well known to us". The themes and attitudes of medical respondents to MWT are well illustrated by two responses: 1) "It has evolved into more of a protection mechanism for the health service to cover them legally and tends to be reactionary to inquiries and complaints. A small proportion of the content informative and useful to frontline workers" and, 2) *"Like all Health dept (sic) policies they are inflicted on staff by faceless people* in offices with clipboards that do not seem to bother consulting with staff before or after the latest directive. As a result, hospital staff resent (sic) Mandatory Training and do it begrudgingly."

Responses from the nursing cohort (N=57) were less emotionally expressed than those of the medical respondents. Only one response, "Can be a waste of time especially when new starters have so much to learn in their first few weeks at work. They often forget a lot of it." was interpreted as indicating a negative attitude to MWT. Overall, the focus of most nursing responses was on the value of MWT to support skills acquisition and maintenance, for example, "To ensure staff are appropriately equipped with the knowledge and skills require to do their job". The most frequently cited purpose of MWT (54 % nursing respondents) was to support the maintenance of "basic" and consistent levels of skills and knowledge, for example, "To ensure that all staff have a baseline understanding of the organisational, operational and ethical functions and expectations of the health department and to provide specific, critical skills and knowledge training required of these providing patient care". A proportion of statements (37% nursing respondents) linked the purpose of skill and knowledge maintenance to the delivery of safe care, for example, "To ensure staff can perform essential skills to ensure the safety of patients and themselves" and, "To maintain up- to-date knowledge & skills in order to provide safe and effective patient care as well as a safe working environment for staff".

Allied health and health science respondents (N=63) responses largely indicated an acceptance of MWT as a requirement of the workplace, while still reflecting some concerns about how it was implemented. Most of this worker group used simple statements to state their perceptions of the purpose of MWT with the key themes being the upskilling of workers (60% allied health respondents), supporting safety in the workplace (36.5%), knowledge of

current protocols and policies (19%), and awareness and management of risk (9.5%). A small number of responses referred to MWT as supporting legal compliance (7.9%), supporting organisational accountability (6.3%) and contributing to the development of organisational culture (4.7%) and accreditation (4.7%).

Data from the remaining cohorts (Business, finance, information communication and technology (ICT), management, executive and nonclinical) were grouped (N=45) for reporting. Findings and can be summarised in one respondent's statement: *"For workforce safety, to meet regulatory requirements, to ensure consistency for audit standards, for best practices, to education and develop the workforce."* This group focused on keeping skills *"up to date",* particularly within administrative and clerical workforce whose responses included *"I think it's very important for mandate (Sic) training - it keeps us updated to changes".* 

#### 5.3.1.4.2 Employer

The key differences noted between respondents working in different AHSs are summarised in Table 5.1 and indicated some variations in terms of the range and frequency of purposes described, and the dominant attitudes to MWT. Of all areas, AHS 2 respondents appeared the most satisfied with MWT in that they made no negative comments about MWT and were more likely to refer to MWT as supporting organisational values.

## Table 5.1

| Respondent themes re  | the purpose of MWT   |  |   |
|---|--|--|---|
| High Frequency  | Area Health Service 1  | Area Health Service 2  | Area Health Service 3   |
|   | Total comments=76 from 50.6 % AHS 1 respondents  | Total comments=49 from 35.2% AHS 2 respondents                         | Total comments=66 from 89% AHS 3 respondents  |
|   | Maintenance of staff skills & knowledge Safety (patient, staff & visit   To support workplace safety Maintenance of staff skills |  | Maintenance of staff skills & knowledge   |
|   |  |  | Safety (patient, staff & visitors)  |
|   | Maintenance of standards, to comply with legislation, meet accreditation standards.  | Support accreditation  | Support accreditation   |
|   | Comply with policies & procedures  | Meets legislative requirements   | Legislative compliance  |
|   | Meet Key Performance Indicators  | Supports organisational values & beliefs, equitable health care access | Organisational accountability   |
|   | Address previously identified problems   |  | Risk mitigation   |
|   | Support professional behaviour   |  | Meet Key Performance Indicators   |
| Low Frequency   | Address risk   |  | Support practice integrity  |
| Reponses unique Multiple negative references to to AHS compliance & "tick box" training |  | No negative comments<br>MWT supports organisational values             | Purpose of MWT includes organisational<br>accountability & overview of "the bigger picture" |

#### Purpose of Mandated Workplace Training by Area Health Service

AHS 1 respondents (N=76) most frequently (27.6% respondents) cited the purpose of MWT to be the maintenance of skills, knowledge and/or competence for example, "*To maintain professional, practical skill necessary for safe patient care,*" and "*To ensure all employees have a base level of knowledge to safely carry out their jobs*". 50 % of respondents in AHS 3 (N=66) also referenced skill maintenance as the most frequent purpose of MWT.

In contrast, respondents in AHS 2 (N=49) most frequently cited MWT as being to support workplace safety (55% of AHS 2 respondents), as illustrated by one respondent who noted: "*To ensure all staff are aware and understand requirement (sic) of workplace health and safety*". Other AHS 2responses referenced how skill development supports safety, with comments referring to workforce safety, patient safety, staff safety, community safety and workplace safety "...both physically and psychologically". In AHS 1, seven responses (9.2 %) used language that indicated that the use of MWT to meet compliance and reporting requirements was not a valued or useful one. Respondents noted, for example, that MWT is required *"To comply with legislation. Most have little to no relevance to us as clinicians."* and *"Largely a tick box exercise with very little supporting evidence that it makes any difference to performance"*. In contrast, in a theme unique to AHS 2, three respondents (4 %) referred to MWT's potential to contribute to the creation of a system of shared values or beliefs within the organisation. Two referred to MWT supporting integrity and ethical practice within the organisation and two referred to MWT as supporting equity of access to health care.

#### 5.3.1.4.3 Age

Respondents in the age cohorts 41-50 years and above raised two themes that were not present in younger cohorts. The first theme referenced historical MWT practices and indicated that previous MWT practices were valued more highly than current practices. These specifically referred to the use of face-to-face study days and training sessions in preference to the current e-learning based programs (N=4). The second theme referenced the lack of an evidence base for MWT (N=7) and that respondents do not believe that MWT achieves its intended purpose (N=3).

#### 5.3.1.4.4 Years working in health

The only difference in perceived purpose of MWT noted within cohorts of workforce with varying years of experience in health, was that MWT as a strategy for KPI reporting and risk management was only referenced in cohorts of respondents with over 11 years work experience in health.

#### 5.3.1.4.5 Years in WA Health

Respondents with less than 5 five years of work experience in WA Health were the only cohort to refer to MWT's purpose as being limited to supporting essential skill and knowledge acquisition, safe practice, compliance with policy, procedures, and legislative compliance and to support accreditation. Groups with more experience in WA Health referred to these purposes in addition to risk mitigation and achievement of organisational KPIs. The only negative comments about MWT were identified in the cohort of respondents with over 11 years of experience in WA Health.

#### 5.3.1.4.6 Conclusion: Impact of demographic variables

Collectively these findings support the hypothesis that workforce perceptions of the purpose of MWT may be influenced by the workforce's employer, work role, their years of experience in the health sector and their years of experience in a single organisation (WA Health). It can be speculated that the mechanisms behind these differences hypothesised may reflect both the impact of prior experiences on individual workers, for example, the longer someone has worked in an organisation and the more frequently they have repeated MWT, the more opportunity they have had to understand the purposes and practice of MWT. Alternately psycho-social processes such as organisational or profession cultures which preference particular expectations, beliefs or behavioural norms may explain differences between cohorts (Merriam & Bierema, 2014; Paradi & Sulkin, 2017, Sukhera et al., 2020).

## 5.3.1.2 Survey Reponses Items 20 and 21

Findings from the *analysis* of MWTS Item 20 and 21 responses broadly align with the themes regarding the purpose of MWT identified in Item 7, with the

addition of some unique observations. Item 20 and 21 responses included positive, negative, neutral, or mixed statements about MWT's purpose. Positive statements referred indirectly to the purpose of training, for example, "*MWT is a necessary part of maintaining our basic skills, and to ensure the essentials are not forgotten*" and "*MWT is for educating the literate and for developing an inclusive working environment*". The main theme emerging from these positive statements was that MWT's purpose is to develop and maintain skills and knowledge that will support safe practice, as exemplified in the response: "*Mandated workplace training in WA is a vital tool in keeping staff skilled and proficient in emergency and difficult situations. Mandated training is designed to keep staff and patients safe"*.

In contrast, negative responses highlighted respondents' perceptions that the purpose of MWT can relate to organisational goals that are not valued by the workforce, for example, *"so managers can tick a box to verify compliance to placate accreditors"* and *" based around being compliant with regulations of the hospital accreditation industry and may have little effect on patient outcomes"*.

Collectively the data from MWTS Items 7, 20 and 21 demonstrated that there are a range of perceptions about the purpose of MWT and that when it was perceived to support safe and quality work practices respondents viewed it positively, and when it was perceived to be a compliance practice, it was viewed negatively.

#### 5.3.2 Quantitative findings

MWTS Item 8 is a multiple-choice question in which the respondent can select response options to indicate their understanding of the intended purpose/s of

individual training programs, to indicate if they did not know the purpose of a program, or indicate the purpose is something other than the options provided. Of the 260 responses the most frequently identified purpose of MWT for seven of the 10 programs examined was to maintain and improve safety. The three remaining programs were most frequently identified as being delivered to 1) address legal compliance (Record Keeping Awareness and Accountable & Ethical Decision Making) or 2) to support organisational values, beliefs, or culture (Aboriginal Culture Learning). Only a small number of respondents (< 2.2%) indicated the purpose of training to be anything other than the four response options provided and even fewer indicated they did not know the purpose. Findings are summarised in Table 5.2.

## Table 5.2

## Purpose of Mandated Workplace Training by Program

| Program                               | Percentage Response: Purpose of Mandated Workplace Training |                                 |                        |  |        |            |  |
|---------------------------------------|---|---------------------------------|------------------------|--|--------|------------|--|
|                                       | To improve & maintain safety                                | To meet accreditation standards | To comply with the law | To promote values, beliefs, or culture | Other* | Don't know |  |
| Record Keeping Awareness              | 19.8  | 30.98                           | 41.57                  | 5.49                                   | 1.37   | 0.78       |  |
| Prevention of Bullying                | 30.23   | 19.68                           | 25.48                  | 23.55                                  | 0.88   | 0.18       |  |
| Prevention & Management of Aggression | 45.45   | 22.73                           | 16.91                  | 13.91                                  | 1.09   | 0.18       |  |
| Manual Handling                       | 46.72   | 27.03                           | 18.73                  | 5.60                                   | 0.77   | 1.16       |  |
| Life Support                          | 46.51   | 33.13                           | 12.57                  | 4.79                                   | 0.8    | 2.20       |  |
| Infection Prevention & Management     | 45.45   | 34.66                           | 12.69                  | 6.06                                   | 0.38   | 0.76       |  |
| Hand Hygiene                          | 47.95   | 36.26                           | 9.36                   | 6.04                                   | 0.19   | 0.19       |  |
| Emergency Procedures                  | 43.99   | 30.87                           | 20.15                  | 4.44                                   | 0.18   | 0.37       |  |
| Accountable & Ethical Decision Making | 19.89   | 24.09                           | 30.78                  | 23.71                                  | 0.96   | 0.57       |  |
| Aboriginal Cultural Awareness         | 11.92   | 22.18                           | 10.46                  | 52.72                                  | 2.30   | 0.42       |  |

"Note: Respondents are not required to define "other". Bold = most frequent response

Over half of the respondents selected a single purpose for each of the programs (Range 52- 66% responses per program). Accountable & Ethical Decision Making was most likely to have only one purpose ascribed to it and

hand hygiene least likely. Hand Hygiene programs were those most frequently ascribed two purposes, emergency procedures three purposes, and bullying programs four. Findings are summarised in Table 5.3.

#### Table 5.3

## Multiple Purposes of Mandated Workplace Training by Program

| Program                               | Number of purposes selected for MTW program |    |    |    |    |    |    |    |     |
|---------------------------------------|---|----|----|----|----|----|----|----|-----|
|                                       | 1   | %  | 2  | %  | 3  | %  | 4  | %  | 5   |
| Record Keeping Awareness              | 181   | 58 | 59 | 19 | 58 | 19 | 12 | 4  | 310 |
| Accountable & Ethical Decision Making | 180   | 58 | 63 | 20 | 31 | 10 | 33 | 11 | 307 |
| Aboriginal Culture Learning           | 199   | 66 | 45 | 15 | 44 | 15 | 13 | 4  | 301 |
| Prevention of Bullying                | 169   | 56 | 46 | 15 | 39 | 13 | 47 | 16 | 301 |
| Manual Handling                       | 177   | 58 | 56 | 18 | 47 | 15 | 22 | 7  | 302 |
| Aggression Prevention                 | 180   | 59 | 41 | 13 | 44 | 14 | 37 | 12 | 303 |
| Hand Hygiene                          | 159   | 52 | 84 | 27 | 50 | 16 | 9  | 3  | 302 |
| Life Support                          | 174   | 57 | 67 | 22 | 51 | 17 | 10 | 3  | 302 |
| Infection Prevention & Management     | 168   | 55 | 63 | 20 | 54 | 18 | 18 | 6  | 303 |
| Emergency Procedures                  | 161   | 53 | 57 | 19 | 64 | 21 | 18 | 6  | 300 |

Bolded digit=mode response for number of purposes

Unique across all MWT programs, the purpose of Aboriginal Culture Awareness training was most often perceived to be to promote values, beliefs, and culture. Only 11 % respondents considered it to be related to safety.

#### 5.3.2.1 Impact of Demographic Variables

To test the association between the purpose ascribed to MWT and the demographic variables of the respondents (Age, work role, employer, years in health, years in WA Health) Cramer's V statistical measure was applied using

the Statistical Package for the Social Sciences (SPSS) Program. Findings indicated a weak statistically significance (<.001) association between employer and perceptions of purpose of eight of the ten programs, and between work roles and the purpose of six of the training programs. Respondents' age also showed a small but statistically significant association with the selected purpose for manual handling and aggression prevention programs only. No statistically significant association was identified between years in the health sector or years in WA Health and the perceived purpose identified for any of the ten MWT programs. See Table 5.4 for the findings.

## Table 5.4

Statistical Association: Demographic Variables and Purpose.

|                                       | Variables |           |       |                 |                    |
|---------------------------------------|-----------|-----------|-------|-----------------|--------------------|
| Program                               | Employer  | Work Role | Age   | Years in Health | Years in WA Health |
| Record Keeping Awareness              | .439 *    | .262      | .209  | .250            | .256               |
| Accountable & Ethical Decision Making | .319 *    | .275 *    | .266  | .240            | .266               |
| Aboriginal Cultural Awareness         | .323 *    | .318 *    | .226  | .240            | .266               |
| Life Support                          | .278 *    | .274 *    | .205  | .248            | .235               |
| Hand Hygiene                          | .287 *    | .207      | .256* | .211            | .188               |
| Manual Handling                       | .283 *    | .260 *    | .276* | .246            | .233               |
| Aggression prevention                 | .273      | .233      | .278* | .259            | .237               |
| Prevention of Bullying                | .309 *    | .222      | .266  | 189             | .264               |
| Infection Prevention & Management     | .265*     | .231*     | .186  | .100            | .184               |
| Emergency Procedures                  | .267      | .245*     | .210  | .180            | .186               |
|                                       |           |           |       |                 |                    |

CRAMER'S V TEST OF ASSOCIATION

\*Approx significance <.001

#### 5.3.3 Interview data

Two of the three interviewees (JH and BZ), both educators, explicitly referred to the purpose of MWT. Interviewee JH commented that in relation to MWT there were "*Problems with the title.* "*Mandated*" means lots of things to different people. We are trying to change that to Safety skills or Essential Safety skills and get rid of the title mandated." When asked to expand, they noted that the rationale for changing the name was to highlight to workers the purpose and intended impact of the training, that is, to support safe practices in the organisation.

In contrast interviewee BZ, described the purpose of MWT as being "for the organisation not the person" and focused their commentary on compliance and risk management rather than safety. In response to a question asking whether, as someone with a work background in the education sector, the need for MWT in the health sector was understood, they commented: "Um ...(pause) yes...most of them (Ed: The workers in her health service) and I understand why they are doing it, and the question I would have is that a lot of it is for the organisation not the person. It's to cover their responsibility and their legal requirements so they can stand up with their hands on the bible and "Well we trained them"... rather than for the people themselves." BZ indicated that they believed this was "... still a valid reason for doing stuff", however throughout their interview BZ repeatedly returned to question the educational value of MWT as it was currently delivered to the workforce in her service. BZ also referred to MWT being valuable for risk mitigation specifically. Referring to the dangers health workers can face working with marginalised people in the community they referred to: "...and the things that have gone wrong are

not covered by mandated training. And I wonder about that... Well home visiting is fraught with danger, absolutely, and show me the training that deals with that!". This line of discussion suggested that BZ believed that one of the purposes of MWT was to reduce risks and support the safety of workers, and that there were gaps in MWT requirements that, if addressed, could usefully assist workers to work more safely in the community.

Clinician interviewee SL's references to the purpose of MWT were indirect and arose when they sought to contrast WA Health's approach to MWT with that of the WA Department of Fire and Emergency Services (DFES) where they had previously worked. In describing the differences in cultural attitudes to MWT between the two organisations, they noted: *"I think that ... DFES, as an organisation, are just more ... they are more onto it. So…here in WA Health I find it's a bit more "Augh. (Sigh) I've got to do my mandated training. I've just got to do it". Where it's just such a cultural ingrain (sic)... I tick this. I tick this... oh... I haven't done this yet. Tick, Tick, Tick. ". When asked why this was the case, they indicated that, consistent with the other interviewees, the purpose of MWT is ideally to address safety issues, and that this purpose was better understood in DFES. That is: <i>"I think it's because they all understand how important it is to be safe. So a lot of their stuff is around safety and I think ...it was a bit about code of conduct and stuff... but everything else.... If I don't do this I'm going to die!".* 

Collectively the data from the three interviews were consistent with that found in the survey responses from workers. The interview data provided nuanced evidence that the issue is complex and that MWT might serve multiple, valid purposes (Compliance, reporting, patient, and staff safety) simultaneously.
The data also identified that interviewees view organisational culture, and how MWT requirements are communicated to workers, as having an impact on the workforce's understanding of the purpose of MWT.

#### 5.3.4 Summary of Findings

This analysis found that the WA Health workforces' perceptions of the purpose of MWT is complex and allows for the potential of MWT to meet multiple purposes simultaneously, while also identifying the main purpose of MWT as being to train staff on issues that support safe work practices.

Organisation accreditation, and the achievement of organisational reporting requirements such as KPI reporting and legal compliance, were also consistently identified (by approximately a third of the workforce) as further purposes for MWT. The qualitative data however demonstrated that for some respondents, particularly medical staff, achievement of organisational purposes alone are not seen as a valued or appropriate rationale for requiring all workers to engage in training. References to MWT being used to mitigate risk make up a small cohort of responses.

Both qualitative and quantitative data indicated that there is a relationship between the purposes identified and some demographic variables. Specifically, the more experienced respondents are, the more likely they are to demonstrate a more expansive understanding of the multiple purposes MWT may address. Respondents with more work experience are also more likely to question the value of MWT and to challenge whether there is evidence to support its efficacy and impact.

The analysis also found evidence of a weak statistical association between both an individual's role and their employer, and their perceptions of the purpose of all but one of the ten MWT programs investigated (Aggression prevention and management programs being the exception).

The potential for MWT to achieve unintended purposes was also raised by a small number of, mainly experienced, respondents most of whom work in AHS 2 who refer to MWT potentially contributing to the building of a positive organisational culture.

Collectively the findings showed that respondents' perceptions of purpose are largely consistent with the organisation's reported intent of MWT (i.e. to support safe practice), and there is no unitary understanding of purpose understood by every worker. The range of worker's responses allows for the potential that MWT can achieve multiple purposes, and that some purposes (safety) are perceived as more valued than others (compliance). As such, there is not a consistent, shared understanding of the purpose across the workforce and their employers.

# 5.4 Chapter conclusion

This chapter described findings that address the second of the research questions: How does the PHS workforce perceive the need and purpose of MWT? In summary, the surveyed respondents are tolerant of the need for MWT and largely perceive its purpose to relate to safety - for staff, patients, and the organisation. Respondents also allow for the potential of MWT to address multiple purposes simultaneously but value a safety purpose more highly than meeting legislative requirements, addressing risk, or influencing

risks or influencing values and beliefs. Where MWT is perceived to exclusively address organisational compliance issues, respondents are likely to express negativity.

Both the qualitative and quantitative data analysis suggests there is at least a weak association between some worker demographic variables and their perceptions of MWT purpose. Quantitative data suggests a weak association between perceived purpose and the work role, age, and employer for at least some programs and qualitative data suggests that age may impact.

The following chapter continues with the findings on workers' perceptions of MWT and will focus on workers' assessment of the impact and value of MWT.

# Chapter Six: Workforce Perceptions of the Impact of MWT and Optimising Impact

# 6.1 Introduction

This is the second of three chapters describing the study findings related to respondents' perceptions of MWT. It focuses on whether the workforce studied believes MWT achieves its purpose, their perceptions about the impact of MWT and how MWT might be designed to be more impactful. The chapter opens with a description of the dataset and follows with findings of the analysis of the quantitative and qualitative data.

# 6.2 The dataset and analysis

Workforce perceptions of the impact of MWT were elicited via the *Mandated Training Workforce Survey* (MTWS) (See Appendix A) and workforce interviews. Four quantitative survey items elicited rating data specifically addressed achievement of purpose or impact (Items 9, 10, 11 and 12), and one qualitative item requested comments about how MWT might be designed to have a positive impact (Item 13). In addition, two general survey items (Items 20 and 21) provided data on achievement of purpose and impact.

# 6.2.1 Quantitative survey data analysis

Findings from the analysis of the four quantitative survey items are described in the following sections.

#### 6.2.1.1. Achievement of purpose

In Item 9, respondents indicated the degree to which they believed the purpose of each of the 10 MWT programs was achieved by selecting one of four multiple choice response options (Intended purpose is fully met; Intended purpose is partially met; Intended purpose is not met; Cannot comment). The three programs with the highest levels of perceived achievement (Hand hygiene, emergency procedures and life support) were identified by just over half of the respondents as fully meeting their intended purposes. The program with the lowest level of perceived achievement was the prevention of bullying. Between 73.51% and 91.39% of respondents believed the purposes of all individual programs were partially or fully met (See Table 6.1).

#### Table 6.1

# Achievement of Purpose by Program

| Program                               | Purpose Fully Met | Purpose Pairtially Met | Purpose Not Met  | Cannot Comment   |
|---------------------------------------|-------------------|------------------------|------------------|------------------|
| Record Keeping Awareness              | 28.15% <b>85</b>  | 45.36% <b>137</b>      | 16.56% <b>50</b> | 9.93% <b>30</b>  |
| Accountable & Ethical Decision Making | 27.24% <b>82</b>  | 48.84% <b>147</b>      | 15.28% <b>46</b> | 8.64% <b>26</b>  |
| Aboriginal Cultural Awareness         | 28.24% <b>85</b>  | 51.83% <b>156</b>      | 13.29% 40        | 6.64% 20         |
| Prevention of Bullying                | 23.33% 70         | 49.00% <b>147</b>      | 21.33% 64        | 6.33% 19         |
| Manual Handling                       | 42.05% <b>127</b> | 40.40% 122             | 11.92% 36        | 5.63% 17         |
| Prevention of Agression               | 27.81% <b>84</b>  | 53.31% <b>161</b>      | 12.25% <b>37</b> | 5.63% <b>20</b>  |
| Hand Hygiene                          | 61.92% <b>187</b> | 29.47% <b>89</b>       | 4.97% 15         | 6.62% 11         |
| Life Support                          | 54.15% <b>163</b> | 24.92% <b>75</b>       | 3.99% 12         | 3.64% 51         |
| Infection Prevention and Management   | 46.86% 142        | 38.28% <b>116</b>      | 4.29% 13         | 16.64% <b>32</b> |
| Emergency Procedures                  | 56.44% <b>171</b> | 32.67% <b>99</b>       | 5.28% 16         | 10.56% 17        |
| All Mandated Training                 | 19.11% <b>56</b>  | 64.16% <b>188</b>      | 8.53% <b>25</b>  | 8.19% <b>24</b>  |

#### 6.2.1.2 Impact on quality of work

Respondents (Range N=260-277 per training program) rated their perceptions of the impact of each of the ten training programs on work quality (Item 10, 0=negative impact, 100=extremely positive impact). There was a general congruence of responses across programs with most programs rated as having a moderately positive impact on the work undertaken within the participant's organisation. Based on mean scores, hand hygiene had the highest rated impact, followed by life support (See Table 6.2). Two programs (Infection prevention and management, and emergency procedures) were rated an equivalent third. The programs with the lowest rate impact were Record Keeping Awareness and prevention of bullying programs.

#### Table 6.2.

#### Achievement of Purpose by Program

|    | Program                               | Minimum | Maximum | Mean  | Std Deviation | Variance | Count |
|----|---------------------------------------|---------|---------|-------|---------------|----------|-------|
| 1  | Record Keeping Awareness              | 0.00    | 100.00  | 59.86 | 20.88         | 435.84   | 276   |
| 2  | Accountable & Ethical Decision Making | 0.00    | 100.00  | 61.91 | 21.65         | 468.55   | 274   |
| 3  | Aboriginal Cultural Awareness         | 0.00    | 100.00  | 66.38 | 23.31         | 543.56   | 277   |
| 4  | Prevention of Bullying                | 0.00    | 100.00  | 59.51 | 23.20         | 538.28   | 277   |
| 5  | Manual Handling                       | 0.00    | 100.00  | 64.21 | 22.85         | 522.10   | 273   |
| 6  | Prevention of Agression               | 0.00    | 100.00  | 76.96 | 22.44         | 503.24   | 273   |
| 7  | Hand Hygiene                          | 0.00    | 100.00  | 74.96 | 23.29         | 542.40   | 276   |
| 8  | Life Support                          | 0.00    | 100.00  | 74.21 | 22.92         | 525.50   | 260   |
| 9  | Infection Prevention & Management     | 0.00    | 100.00  | 73.32 | 23.30         | 542.84   | 271   |
| 10 | Emergency Procedures                  | 0.00    | 100.00  | 73.37 | 22.59         | 510.19   | 276   |

Further analysis was conducted using non-parametric statistical analyses. A Kruskal-Wallis test (selected on the basis that there was no normal distribution of responses for the dependent variables) was used to test the hypothesis that individual categorical variables (i.e. The demographic details of work group, age, employer, years in health, and years in WA Health) impacted on employee's ratings of the impact of each MWT program, and MWT overall. The analysis identified a significant relationship (p<.05) between ratings of the impact of the training programs (Record Keeping Awareness, Accountable and Ethical Decision Making, and prevention of bullying) and the three independent variables of employer (AHS), years working in health, and years working in WA Health. No other independent variables showed statistical significance.

Ratings (N=251) on the impact of MWT overall on the delivery of safe, quality care in WA Health (Item 12, 10-point scale, 0=no impact, 10=significant impact) showed a mean impact rating of 6.13 with a standard deviation of 2.67 and variance of 7.15, indicating that respondents rated MWT as having a small positive impact on care (See Figure 6.1).

# Figure 6.1.





Non-parametric statistical analysis (Kruskal-Wallis test) tested the nullhypothesis that demographic data (work role, employer, age, employer, years in health, years in WA Health) had no impact on the distribution of responses on the overall impact of MWT and found that one independent variable (work group) showed a statistically significant relationship (p=<.001) (See Table 6.3).

#### Table 6.3

Kruskal-Wallis Test of Relationship Between Demographic Variables & Ratings of Overall Impact of Mandated Workplace Training

| Demographic Variable | N   | Test Statistic | Degress of Freedom | Signifiance | Null Hypothsis |
|----------------------|-----|----------------|--------------------|-------------|----------------|
| Age                  | 250 | 8.306°         | 6                  | .217        | Retain         |
| Workplace            | 250 | 4.801°         | 4                  | .308        | Retain         |
| Years in Health      | 244 | 7.077°         | 4                  | .132        | Retain         |
| Years in WA Health   | 250 | 4.265°         | 4                  |             | Retain         |
| Workgroups           | 250 | 41.484°        | 8                  | <.001       | Reject         |

# 6.2.1.3 Usefulness of MWT for individual workers

Basic statistical analysis (See Table 6.4) of responses (Response range=256-269 per individual program) rating the personal impact of each of the individual MWT programs on individual respondents (Item 11) indicated that, based on mean response, hand hygiene, emergency procedures and infection prevention and management programs were rated as having the greatest impact, and Record Keeping Awareness, Accountable and Ethical Decision Making and prevention of bullying training were rated as having the least impact. All programs were rated as having above a 50% level of usefulness indicating that all programs were perceived to have at minimum a minor positive impact.

#### Table 6.4.

|    |                                       | Response | s       |       |               |          |       |
|----|---------------------------------------|----------|---------|-------|---------------|----------|-------|
|    | Program                               | Minimum  | Maximum | Mean  | Std Deviation | Variance | Count |
| 1  | Record Keeping Awareness              | 0.00     | 100.00  | 55.94 | 32.04         | 1026.45  | 260   |
| 2  | Accountable & Ethical Decision Making | 0.00     | 100.00  | 57.34 | 31.56         | 996.05   | 256   |
| 3  | Aboriginal Cultural Awareness         | 0.00     | 100.00  | 66.08 | 29.72         | 883.18   | 269   |
| 4  | Prevention of Bullying                | 0.00     | 100.00  | 69.72 | 30.98         | 959.48   | 250   |
| 5  | Manual Handling                       | 0.00     | 100.00  | 75.66 | 28.55         | 814.92   | 269   |
| 6  | Prevention of Agression               | 0.00     | 100.00  | 63.52 | 32.99         | 1088.41  | 260   |
| 7  | Hand Hygiene                          | 0.00     | 100.00  | 64.96 | 29.84         | 890.52   | 260   |
| 8  | Life Support                          | 0.00     | 100.00  | 60.82 | 30.43         | 925.14   | 262   |
| 9  | Infection Prevention & Management     | 0.00     | 100.00  | 71.30 | 29.45         | 867.03   | 260   |
| 10 | Emergency Procedures                  | 0.00     | 100.00  | 72.31 | 28.32         | 801.85   | 267   |

# Personal Impact of Mandated Workplace Training

Further statistical testing explored the relationship between scaled responses indicating the personal impact of individual programs, and each demographic variable. One-way ANOVA test results indicated a relationship between respondents' perceptions of the personal value of MWT and the demographic variables of employer and work roles. The employer variable influenced ratings on 9 of the ten MWT programs (Record Keeping Awareness being the exception). The variable of work role showed a statistical relationship with four programs only - Record Keeping Awareness, life support, infection prevention, emergency procedures (See Table 6.5).

# Table 6.5

ANOVA TEST

| Variable  | Programs                              | Sum of Squares | Degree Freedom | Mean Square | F      | Significance |
|-----------|---------------------------------------|----------------|----------------|-------------|--------|--------------|
| Work Role | Record Keeping Awareness              | 48238.162      | 8              | 6029.770    | 6.922  | <.001        |
|           | Life Support                          | 740.497        | 8              | 92.562      | 4.293  | <.001        |
|           | Infection Prevention & Management     | 805.031        | 8              | 100.623     | 4.643  | <.001        |
|           | Emergency Procedures                  | 624.453        | 8              | 78.057      | 4.078  | <.001        |
| Employer  | Accountable & Ethical decision Making | 787.376        | 2              | 393.688     | 14.209 | <.001        |
|           | Prevention of Bullying                | 904.382        | 2              | 425.191     | 10.577 | <.001        |
|           | Aboriginal Cultural Learning          | 1633.513       | 2              | 866.757     | 26.302 | <.001        |
|           | Manual Handling                       | 707.402        | 2              | 353.701     | 15.799 | <.001        |
|           | Aggression Management                 | 1211.952       | 2              | 605.976     | 19.130 | <.001        |
|           | Hand Hygiene                          | 1334.085       | 2              | 667.042     | 27.533 | <.001        |
|           | Life Support                          | 927.976        | 2              | 463.988     | 22.456 | <.001        |
|           | Infection Prevention & management     | 1024.653       | 2              | 512.326     | 24.773 | <.001        |
|           | Emergency Procedures                  | 826.601        | 2              | 413.300     | 22.679 | <.001        |

# Demographic Variables and Personal Impact Ratings

# 6.2.1.4 Summary of Quantitative Analysis

Quantitative data analysis found statistical evidence that all ten MWT programs studied were perceived by respondents to achieve their intended purpose to a moderate to high degree (i.e. Ratings of between 70 and 90 % full or partial achievement of purpose). Hand hygiene, emergency procedure training and infection prevention training were all cited as most likely to achieve purpose.

Statistical analysis also found that there were weak associations between some worker demographic variables and their reported perceptions of the impact of MWT. A statistically significant association (Kruskal-Wallis's test p=0.05) was found between work roles and ratings of overall impact of MWT on safety and quality of care. Ratings of the impact of three individual programs, Record Keeping Awareness, Accountable and Ethical Decision Making and prevention of bullying programs were found to be impacted by the three variables of employer, years in health and years in WA Health (Kruskal-Wallis's test p=0.05). A one-way Anova test showed a small (<0.001) statistically significant association between ratings of the impact of three MWT programs and the variables of work role and employer.

#### 6.2.2 Qualitative survey data analysis

Qualitative data on the impact of MWT on work practices was elicited via three survey items (Items 13, 20 and 21) and findings of the analysis of this data are reported below, firstly in relation to the general perceptions of the impact and value of MWT, and secondly in relation to how MWT might be designed to optimise impact on positive work practices.

#### 6.2.2.1 Perceptions of impact

Data from Survey Item 20 and Item 21 provided evidence of three central themes in respondents' responses on the value of MWT: 1) beliefs that MWT as it was delivered at the time of the study had no or limited value, 2) beliefs that MWT is essential and valuable, and 3) beliefs that MWT should be valuable but needs to be improved.

The 229 responses to Item 20 (Sentence completion: *Mandated workplace training in WA is...*) were coded into key themes. Approximately 50 % of responses referred negatively to the planning, design, and experience of MWT, for example," *Poorly* 

organised", "Boring"," Tedious" and" Something to endure". Within this group were comments referencing the impact of MWT, for example, "Currently ineffective", "Ticking boxes each year and not learning anything relevant to the work that relates to our roles." and "Generally not useful nor does it massively positively influence workplace practices, behaviour, culture, and ethics." Approximately 25% of responses referred positively about MWT and largely referenced impact, for example, "very worthwhile", "a valuable tool", and "is great, educational and helpful".

Within the 87 responses to Item 21 (*Please provide other comments, reflections, or thoughts on MWT*) 12% referred to the value of MWT, half positively and half negatively. Negative comments included references to the absence of evidence of the value of MWT, for example, *"The evidence of the effectiveness of mandatory training in its current form is lacking and is obvious in the very piecemeal fashion in which it is currently delivered."* and *"There is no evidence base that I know of which shows that Mandatory Training is of any benefit."* Positive comments all referenced specific programs or impacts, for example, *"I value the impact of annual mandatory training in preventing injury"* and *"In some situations the face-to-face learning is effective (manual handling, basic life support, and mental health workshops)"*.

Reponses to Item 20 and Item 21 included references to the desire for MWT to be more effective, with the implication that respondents perceived value in the concept of MWT but that they did not feel it was executed effectively. For example, "*Mandated training may be useful or useless, it depends not on the topic or whether it is mandated, but the content.* " and "a patchwork quilt with some good bits and some bits that need replacing". 16 responses (8 % Item 20 responses) referred to "*Necessary but…*" and cited negative aspects of MWT including "not very useful", "too low level and

*repetitive", "not very effective",* and *"is poorly resourced".* The overall theme of the findings from the qualitative data about the value of MWT can be summarised in one response, *"MWT is a necessary evil that can be reconfigured to be less evil."* 

#### 6.2.2.2 Design for impact

This section describes the findings on how respondents believed MWT might be improved. It incorporates findings arising from the analysis of responses to the survey Items 13, 20 and 21.

Survey Item 13 required an open text response to the request: *Tell us how mandated workplace training can be designed to have a positive on your behaviour and that of your colleagues.* Survey Item 20 is a sentence completion task (*Mandated training is ..."*) and Item 21 requested *"Any other comments..."*. Responses from the three survey items were analysed using the five-stage thematic coding process described in Chapter Three. Data were analysed both as a grouped dataset of all responses, and as sub-datasets to allow for comparison of responses between groups within the different demographic variables categories (i.e. work role, employer, age, years in the health sector and years in WA Health).

#### 6.2.2.3 Analysis of complete dataset

Item 13 yielded 197 responses with over 250 individual suggestions for improvement. Item 20 yielded 229 responses of which 29 were suggestions for improvement and Item 21 yielded 87 responses with 67 suggestions for improvement. The data offered a rich array of commentary within six primary inter-related themes of: content relevance, learning program design, organisational support, program delivery, program administration and other.

Each theme is described below, in order of frequency of comments from highest to lowest. Figure 6.2 describes how these themes intersect and the dominant commentary within each of the primary themes.

# Figure 6.2

Participant Perceptions of Mandated Training Design Improvement

| Primary Themes  | Dominant Commentary   | Indicative Participant Response  |
|---|---|--|
| Ensure<br>Relevance<br>To role/clinical area/work tasks | Role/profession/work task relevant<br>Based on 'real life' scenarios/case studies<br>Recognises prior ability<br>Teaches those that need it what they need<br>to know   | "I would like to see workplace training<br>related to the job I'm doing.<br>Not one size fits all"   |
| Improve<br>Design                                       | Less repetition/review frequency<br>requirements based on competence levels<br>More hands on/less e-learing<br>More interactive (face-to-face & e-learning)<br>Refresh programs more often<br>More training in situ-teaching on the run,<br>real time training<br>Incorporate competency assessment | "Needs to be in real time, practically<br>based, not just online. Needs to be<br>tailored to the persons (sic) role"   |
| Increase<br>Organisational<br>Support                   | Allocate time & space to complete<br>Content reinforced in the workplace &<br>modelled by exec/managers<br>Consequences if learning content not<br>applied in workplace<br>Learning content can be achieved in<br>the workplace<br>Equity of expectations   | "Must be accompanied by a<br>conversation with a line manager abou<br>its (sic) effectiveness or via a team<br>meeting discussion to reinforce the<br>messages"  |
| Improve<br>Devliery                                     | Skilled trainers with understanding of<br>the workplace<br>Trainers embedded in workplace<br>Trainers more fleible/less didactic<br>Aboriginal content delivered by<br>Aboriginal people  | "It is quite insulting to have training<br>provided by inadequately trained<br>presenters who only have a surface<br>understanding of their material when<br>it has already been studies (sic) at a<br>higher level by the participants" |
| Improve<br>Process                                      | Recognition of prior learning<br>• Make MWT expectiations of workplace<br>groups transparent to all<br>Make enrolment procress simpler<br>Include in supervision & performance<br>review discussions  | "Put all the info (sic) about what<br>training is required and whether and<br>when we're completed it in one place<br>then provided refreshers and updates   |
| Other   | Demonstrate the value of MWT through<br>evidence<br>Engage staff in MWT design<br>Meet staff learning needs not origanisation<br>compliance needs<br>Don't bully staff engage   | "A lot of the training we do is boring<br>and repetitive it feels more like the<br>dept wanting to make sure have<br>covered the bases than caring about<br>what we are trained in"  |

#### 6.2.2.3.1 Relevance

The dominant theme in the data were the need for MWT to be relevant to the individual. Over half of the comments referred to relevance, for example, "More relevant to the actual place of work", while another subset of responses referred indirectly to relevance, for example, "It needs to be more relatable to the individual and the area they work in". The desire for MWT to be personally relevant was expressed in terms of first-person comments by only six respondents using terms such as "I want" or "I need" statements. The remainder of the comments referred to relevance to specific workplace contexts. These were described as specific workplace roles, tasks, or physical locations, for example, "Mandated workplace training would have more impact if the content was reflective of the roles the staff play within the organisation." and "Content more relevant to the role ... ". Comments consistently referred to the need for training to reflect the realities of the work environment as perceived by individual respondents. Comments indicated that respondents perceived there to be a need for targeted, focused, "relevant" training instead of the current training which they referred to as "generic", "blanket", or "general" training.

Within the theme of relevance three sub-themes were identified. The first arose from a subset of health professional respondents who perceive that training is not relevant to people working in their role. This cohort reported that their professional training, practical expertise, and recency of practice should preclude the need for MWT on some topics based on the existing competence of their occupational group. For example, "*Professional training already comprehensively covered these areas, so I don't think there is a need for them* 

to be elaborated on, other than for purposes of reinforcement", "...making physiotherapists complete manual handling training is a waste of time and money when they are the experts in this field" and, "... anaesthetists should not be required to do basic life support annually". These comments arose only in relation to clinical task training (i.e. Life Support, Manual Handling).

The second most frequently cited sub-theme related to the need for training to reflect how different professions practice in the workplace. For example: *"Refine course to ensure they are relevant to the profession they are aimed at", "Targeted to groups. i.e. Different training for physio' versus OT versus orderly.",* and *"More specific training groups for different craft groups e.g. Nurses vs doctors vs allied health staff."* While not explicitly stated in any response, these responses imply an underlying perception that workers in different work roles apply the skills and knowledge delivered in MWT in different ways. Within this theme non-health professional respondents also discussed the need to ensure content is relevant to their specific work groups, for example, one respondent referred to their occupational group specifically toward *clerical staff.",* while another referred to the specific responsibilities if their role by stating there is *"…no value in providing certain clinical/ emergency/ manual handling if nurses are in management roles and have no clinical need"*.

Another relevance-related sub-theme referred to the need for specific work role or work area content to be integrated into the program design to improve relevance and promote the value of MWT. Comments referred to the inclusion of *"real-life"* workplace scenarios and critical incident case studies to better communicate the objectives of MWT and improve the training relevance. For example, reference was made by one respondent to: "I wonder if real life SAC1 or SAC2 and/or CHOIR events could be used to demonstrate why some mandatory training is required." SAC refers to Severity Assessment Code and is used in WA Health to rate adverse clinical incidents. CHOIR is the online system used to report and manage staff hazards and incidents. Respondents indicated that by incorporating learning content from reported patient and/or staff accidents, errors in local work areas, or known local or profession risks and hazards into the training design, the relevance of learning and the value of training would be reinforced more effectively than in current MWT programs.

Other suggestions for improving the relevance of MWT discussed the need to engage individual departments, and clinical speciality areas in decisionmaking regarding MWT needs and preferred topics. One comment, for example, suggested that each "occupational group" should be supported to conduct their own risk analysis to determine what MWT should be undertaken by that group. Other comments indicated that individual departments should determine the training requirements of workers, for example, "Give each head of speciality the scope to deliver relevant training to department which meets specific needs to that department rather than generic rubbish."

The third sub-theme within relevance referred to limiting the requirement for MWT completion to workers with an identified learning need, such as, new workers or workers with an identified knowledge or skill deficit. Respondents referred to: *"Targeted to groups who show significant deficits rather than one size fits all approach."* and *"New and inexperienced or poor performing staff need to, but others should have the opportunity to opt out if line manager sees this does not add value to the overall skills sets of the individual or safety of* 

the workplace." The final category of improvement suggestions discussed allowing individual workers to determine their learning requirements and giving them the autonomy to access the training they felt addressed their learning needs, for example, "*Let us decide what we need!*". This concept was also expressed in responses that described workforce cohorts who are not currently mandated to attend training, but who feel they would benefit by attending training. For example, *"I work in engineering, we are in every corner of the hospital, yet it is non-mandated for us to complete aggression prevention or breakaway training because we are "non- clinical."* This issue particularly arose in relation to advanced aggression prevention and management training, which was not mandated for some workforce categories, but which many respondents reported would be of benefit to them.

#### 6.2.2.3.2 Program design

The second most frequently cited group of recommendations related to MWT program design. Recommendations for improvement referred to the format, frequency, and overall quality of the MWT learning programs which are described below.

#### 6.2.2.3.2.1 FREQUENCY OF TRAINING

The requirement for repeated training on the same subject was the most frequently criticised element of training design. The most frequently cited concern was that the timing of repeated training was perceived to be arbitrary and that there was no evidence provided to justify the value of annual, biannual, or triannual training repetition. For the most part, respondents suggested training is repeated more frequently than is required or justified and that this becomes a disincentive to participate. For example, *"Some of this*  mandatory training is so repetitive it becomes a chore that is difficult to keep up with, particularly for part-time employees". Less frequently respondents indicated that more frequent training would be of value, and a smaller number again were satisfied with the status quo. For example, one person suggested "Yearly mandated training brings the subject into our focused attention and had a positive cumulative effect over the years."

#### 6.2.2.3.2.2 TRAINING FORMAT AND CONTENT

The format, or delivery method of MWT programs was frequently referenced, with most comments indicating that face-to-face learning was preferred to e-learning. A small number of respondents indicated e-learning was efficient and could be justified as part of a blended or *"supplementary"* learning opportunity. The need for interactivity and *"less static*" delivery was frequently cited for both e-learning and face- to face training.

The need for the learning programs to be "engaging, "interesting," and "meaningful", and the potential to "individualise" programs to achieve this was frequently cited. Reference was made to the MWT programs that are frequently repeated. Respondents indicated that these programs needed to be updated to maintain staff engagement: "People get bored with the repeated sessions from year-to-year. Keep it fresh and realistic!". Negative comments from respondents referred to feeling "patronised" by training which was pitched well below the respondents' perceived skill and knowledge level, while positive references were made about training programs that offered opportunities for questioning of trainers, reflecting about their learning in a team, and learning together with work area colleagues.

A small number of comments referred to the testing or assessment elements that are included in some MWT programs. Perceptions about testing varied with some respondents indicated that some of the testing in place had little meaning, for example, "*At the moment everyone passes. Don't make it so easy.*" Others indicated a preference for more skill-based assessment.

In summary, data on the theme of improved program design largely focused on supporting more face-to-face learning, increasing interactivity of training programs, incorporating content of relevance within all programs, reviewing the value of repeated training requirements (including the frequency of repetition), and reviewing the methods and value of post-training assessments.

#### 6.2.2.3.2.3 ORGANISATIONAL SUPPORT

The issue of organisational support for MWT was conceptualised in different ways by respondents with six sub-themes identified, none of which was referenced more frequently than others. One sub-theme focused on the time taken to complete MWT with respondents consistently requesting an allocation of, or increase, in time to undertake MWT. For example, "*We need allocated time for education. Trying to fit it into a shift is not working.*" and "…*not given enough importance in time (sic) for staff to attend.*"

The second sub-theme referred to the need for organisations to be seen to consistently, and actively, support and endorse MWT. This was expressed in terms of the need for the practices covered in training to be consistently supported and applied in the workplace, for example, one respondent said, *"Any training is only as good as its implementation on the ground"* and another

"...only as good as the organisation, leaders and individual who takes responsibility to ensure they comply." The implication of this line of commentary was that if the practices taught in training were not practiced by all workers, there is little value in training. For example, "(*MWT*)... can only be useful when taken on by individuals as part of their commitment to the role and must be modelled and mentored to encourage positive practices to continue". Several comments referred to the need for both executive and management staff to model and reinforce the learning covered in MWT programs.

A third sub-theme was the need for training content to be consistent with achievable work practices. One respondent provided an example from their workplace whereby there were insufficient documentation storage systems to store and retrieve documents to the standard described in the mandated Record Keeping Awareness training. Workplace bullying training was also singled out for attention by numerous respondents with comments that the content provided in the training did not match respondents' experiences in the workplace, for example, "*The HR processes do not follow the Guidelines when a report is made and this needs to change if the training is going to have an effect*".

The fourth sub-theme found that a small cohort of respondents believed there was inequity regarding the requirements for MWT across different staff groups, and that only some respondents were required to undertake MWT. For example, "Why do only nurses have to do mandatory training?", "Everyone has to complete the same training irrespective of seniority." and "Make mandatory training mandatory for doctors too!". This suggested a lack of

understanding of current MWT expectations which does require *all* workforce groups to undertake some MWT.

The fifth sub-theme referred to the consequences of people failing to complete training or to implement the behaviours trained in MWT. Comments referred to the lack of consequences should people fail to perform to the standard they are trained to achieve and indicated that this devalues MWT. Respondents suggested strategies to improve this situation including:

1) increasing meaningful post-training assessments,

2) on-the-job follow-up to ensure workforce compliance with trained behaviours,

3) using supervision and performance review meetings to review and feedback performance on trained behaviours to workers, and

4) reinforcement of trained behaviours by managers in the workplace.

The final sub-theme referenced the need for MWT to be approached as a WA Health system-wide issue and to allow for recognition of prior learning across sites within the systems. Respondents wrote about the challenges for a mobile workforce that may work at multiple WA Health sites and how the lack of a single MWT management system, different requirements for training at each site, and limited opportunities for recognition of prior learning (RPL) creates additional workload and frustration. For example, *"I work across multiple area health services and am required to do training for each area, which can become time consuming."* and *"Many sites are unable to RPL from one to the other making it wasted time on behalf of the workforce.* A further comment noted that *"Corporate Induction should be for WA Health not each Health* 

*Service Provider*", suggesting that much of the material covered at sites could be delivered centrally via WA Health.

#### 6.2.2.3.2.4 PROGRAM DELIVERY

Multiple suggestions were proposed to improve the standard of training delivery. The need for improvement in the delivery of face-to-face programs was emphasised, with targeted reference to trainers.

#### Trainers

Respondents discussed the negative effects of attending training led by poorly skilled trainers. For example, "It's quite insulting to have training provided by inadequately trained presenters who have only a surface understanding of their material when it has already been studied at a higher level than the trainers." and "Much of the training is very patronising to consultant medical staff". The quality of trainers was most frequently discussed in terms of trainers needing to understand the relevance of the training to the participants, and to hold current knowledge of both the topic being taught, and the realities of how the training topic might be applied or practiced in various work locations. Respondents referred to, for example, the need for training "... by trainers who have recent exposure to the frontline" or "... needs to be delivered by individual (sic) with a greater depth of knowledge than themselves" (Ed: The participants).

Reference was also made to the absence of trainers within two organisations, for example, "...we need dedicated trainers for these roles... there is no manual task trainer at the hospital – a huge gap."

Nine respondents requested that Aboriginal cultural learning be delivered face-to-face by Aboriginal presenters, as opposed to the online modules currently offered. Comments included: "*Aboriginal culture-have an indigenous person come and speak to us. More personal, meaningful and has a greater impact.*" and "*Aboriginal cultural learning presented by an Aboriginal person, was far more beneficial than online learning*".

#### Program administration

The potential to improve administrative processes around MWT also emerged as a theme. Suggestions for improvement included 1) recognition of prior learning for staff moving from different organisations or roles, 2) ensuring that it is easy for workers to access relevant information about what MWT is required for all workers in the organisation, how to enrol and access training, how to access their training records, and 3) regular monitoring of compliance and skills via supervision and performance review discussions. Data from Phase 1 of this study indicates this is already embedded in some jurisdictions.

#### 6.2.2.3.2.5 ADDITIONAL FINDINGS

Fifteen individual comments did not fall within the five broad themes of MWT improvement described previously. These suggestions for MWT improvements included:

1) ensuring staff understand the purpose of MWT and the intended outcomes,

2) ensuring learning content is current and evidence based,

3) engaging workers, and health consumers, in the design and delivery of MWT,

4) explicitly demonstrating the value of MWT through evidence,

5) avoiding bullying staff to engage in MWT, and

6) focusing on workers' learning needs rather than organisational compliance issues.

A small number of respondents (N=5) recommended the elimination of all MWT, with the only rationales provided being that departments should have delegated responsibility for deciding the training topics required of their staff, or that workers should be enabled to decide their own training requirements. Finally, one innovative suggestion was elicited via Item 20 and discussed the option of requiring MWT as part of pre-employment training: *"Universities should be training Health Care Professionals to be competent BEFORE they get jobs in hospitals "* 

#### 6.2.2.3.2.6 SUMMARY OF DESIGN FOR IMPACT

In summary, the WA Health workforce offered a rich array of suggestions for how the design and delivery of MWT might be improved to be more impactful. These proposals are expressed in one respondent's comment that MWT could be improved with an "*Increase in flexible learning and blended learning so there is both electronic and face-to-face learning using real-life scenarios and simulation*". Additionally, respondents clearly want allocated time to undertake training, want to understand the relevance of training to their role in the organisation and, want to only repeat training where there is evidence that it will impact on learning. They want to be engaged in the design and delivery of learning programs and want these programs to be delivered by skilled and

knowledgeable trainers. Respondents want the training to be engaging and, most were happy to attend training if it was perceived to be relevant to them.

#### 6.2.2.4 Impact of demographic variables

Response data from MWTS Item 13 were grouped within demographic variables to explore whether the variables impacted on the suggestions for MWT improvements. Findings are summarised below.

#### 6.2.2.4.1 Work role

Differences in the suggestions for improvements made by respondent undertaking different work roles are summarised in Table 6.6. Consistent themes across all work groups included the issue of allocated time for MWT, and the issue of relevance.

The latter theme varied with respect to *how* this theme was expressed in different work role groups. Medical staff referred to relevance in terms of their clinical specialities and expertise in some subjects, for example, questioning the need for surgeons to do hand hygiene training when this is integral to their capacity to perform their role safety. Allied health respondents referred to the need for profession relevance, for example, training should be specifically designed for physiotherapists and occupational therapists, while nursing and clerical staff referred to relevance in terms of the role or location in which they worked.

Themes unique to work roles were noted. Only allied health respondents referred to the need for repercussions or consequences if workers fail to consistently perform the behaviours promoted in training programs. Only medical staff referred to the need for evidence to support the need for, and

efficacy of, mandated training. Nursing and non-clinical staff were the only groups to raise the issue of designing training for workers from non-English speaking backgrounds, while administrative/ clerical respondents were the only group to raise the issue of ensuring workers with low levels of computer literacy can engage in MWT.

The breadth of topics covered in commentary from nursing and midwifery respondents was larger and less homogeneous than other work role groups. This was the only group to include multiple positive comments about current MWT arrangements. While some respondents reported valuing online learning from a convenience perspective, overall, the nursing and midwifery cohort focused on a preference for face-to-face, on-the-job training.

#### Table 6.6

| Design Improvements by Work Role |  |
|----------------------------------|--|
|                                  |  |

| Workforce Group           | Most Frequent Themes  |
|---------------------------|---|
| Nursing & Midwifery       | Focus on on-the-job, face-to-face, practice-based training and "teaching<br>on the run" to improve relevance to the role/location |
| Allied Health             | Relevance (To location/ profession)<br>Systems for accountability for adherence to trained practices<br>Allocated time            |
| Medical                   | Relevance (To profession, to role)<br>Evidence based i.e.: demonstrate the efficiency/ impact of training<br>Allocated time       |
| Other clinical            | Allocated time  |
| Business/Finance & IT     | Easier accessibility to training & records<br>Post training review with supervisors   |
| Administration & Clerical | Relevance (To non-clinical staff/ role)<br>Face to face training preferred<br>Allocated time required                             |
| Management & Executive    | Want interactive training<br>Allocated time   |
| Other non-clinical        | Relevance   |

# 6.2.2.4.2 Employer

The key findings from the data grouped by employer are summarised in Table 6.7. The main themes were consistent across all employers (i.e. relevance to work areas, use more localised case studies and scenarios in face-to-face training, e-learning only as an adjunct to face-to-face training, questioning the value of repetition of training). Two of the three Area Health Services (AHS) groups recommended Aboriginal Cultural Awareness training be delivered face-to-face and suggested that MWT be co-designed and delivered by workers to improve quality and relevance.

# Table 6.7

| Design improvements by Employer | Design | Improvements | by | Employer |
|---------------------------------|--------|--------------|----|----------|
|---------------------------------|--------|--------------|----|----------|

| Employer | Most frequent themes:  |
|----------|--|
| AHS 1    | Improved design: Face-to-face, practical, interactive & scenario based<br>Aligned with the organisation's values<br>Based on adult learning principles<br>Co-designed by trainers & learners<br>Regularly reviewed |
| AHS 2    | Practical, faceto-face, case based & interactive.<br>Training "on-the-job"   |
| AHS 3    | Relevant: to roles, location, or profession<br>Supported by the organisation<br>Review frequency   |

Within AHSs some specific themes were emphasised as summarised in Table 6.7. 140 comments from AHS 1 respondents (N=96) included specific suggestions for improvement to MWT at AHS 1 work sites including:

1) addressing a perception of a "*culture of bullying*" which results in workers questioning the value of bullying training,

2) return of access to a nominated training room,

3) a proposal that workers should be able to opt out of required training if they can demonstrate competence,

4) a request to extend optional manual handling training to workers groups not currently in scope,

5) a preference for all MWT to be hosted on one Learning Management System and, 7) that training be part of the supervision and workers' performance reviews discussion.

AHS 2 respondents (N=53) generated 114 individual comments. Themes unique to this group included the need for organisational support for MWT (Expressed in terms of senior staff to model behaviours taught in training), and comments about the need to improve MWT assessments because current processes are not considered an accurate measure of learning outcome, practice, or performance. Other unique issues were:

1) the need for training for administrative workers in community settings facing distressed patients with mental health conditions,

2) exemption of nursing workers in management roles from MWT,

3) a perception that only nurses conduct MWT (*"Why is it only nursing provides this training?"*) when in fact other professions also deliver training, and

4) a suggestion that training be delivered by external contractors to ensure consistency of teaching and assessment.

AHS 3 respondents (N=60) provided 95 comments and included specific suggestions for improvement including:

1) reducing the scope of workers required to complete restraint and seclusion training (Part of managing aggression programs on some sites) to eliminate staff in role where training is not considered relevant to them,

2) upgrade the organisation's document management systems to ensure the standards taught in WA Health's Record Keeping Awareness Training can be achieved by workers,

3) institute meaningful consequences if workers don't follow trained practices,

4) MWT learning to be reinforced by executive and managers post-training,

5) address the lack of a dedicated manual handling trainer at one site at the time of data collection, and

6) support access to accredited life support training for workers who require it for their professional registration.

#### 6.2.2.4.3 Age

Suggestions for improvement were largely consistent across all aged cohorts with minor variations between groups.

References to the need for trainers to have current, practical skills were noted in responses from respondents over 41 years of age only. Similarly, references to the need for senior staff and managers to model and reinforce the lessons taught in MWT were raised by respondents over 51 years of age only (See Table 6.8).

# Table 6.8

#### Design Improvement by Age Groups

| Age         | N=  | Key themes unique to age group                                       | Key themes across all age groups  |
|-------------|-----|--|---|
| <21years    | 0   |  | More interactive  |
| 21.20 марта | 4.4 | NU   | <ul> <li>Practical, case based</li> </ul>                                     |
| 21-30 years | 14  | NII  | Relevant to role, profession or area  |
| 31-40 years | 39  |  | <ul> <li>Easy access to learning</li> </ul>                                   |
| 41-50 years | 52  | Trainers need to have current,<br>practice-based skills & experience | <ul> <li>Cultural expectation that MWT skills<br/>used in practice</li> </ul> |
|             |     |  | <ul> <li>Consequences of MWT Skills not</li> </ul>                            |
| 51-60 years | 56  | Need for senior staff & managers to reinforce lessons taught in MWT  | practiced   |
| >60 years   | 30  |  |   |

#### 6.2.2.4.4 Years working in health

As summarised in Table 6.9, respondents with less than 5 years of experience in the health sector focused on the practical implications of accessing and having time to complete training. Comments were neither critical nor supportive of MWT and instead focused on how requirements and processes impact the individual. Respondents in the 5 to 10-year experience group focused both on the need for time for training and the need for relevant, practical, scenario-based learning experiences. This group also expressed support for the current MWT arrangements with comments reflecting an understanding of the broader organisational implications of MWT, such as the need for executive and management to model the behaviours covered in training, and to reinforce learning in the workplace. Comments from the 11 to 20-year experience group included reference to the need for evidence about the value of MWT and a request for less repetition. Comments regarding the quality of training, the need to apply adult learning principles to program planning and delivery, and the need for training designed to address specific learning outcomes appear only in cohorts with over 11 years of experience. The overall focus of this more experienced respondent group, the largest of the dataset, is on the quality and outcome of training and a questioning of the value of repetition.

Responses from the cohort of respondents with 21 to 30 years of experience include some positive responses about the value of MWT. The issue of the need for relevance was more often articulated by this group in terms of relevance to individual workers, rather than to role and locations. Comments reference, for example, targeting workers with skill or knowledge gaps for training rather than applying training to all workers. This group also referred to the need for training content to be regularly reviewed for currency and relevance.

The final cohort of respondents with over 30 years of experience in health raised one unique topic - the desire for respondents to be able to provide feedback and to contribute to the design of MWT.

# Table 6.9

| Years In Health | Most Frequent Themes   |
|-----------------|--|
| < 5years        | Practically based training preferred<br>Time to complete<br>Convenience of access (LMS, online, on the job)  |
| 5 – 10 years    | Face-to-face, practical, relevant to role<br>Allocated time<br>Need for management/ executive support  |
| 11- 20 years    | Relevant to role<br>Interactive training<br>Less repetition<br>Better quality teaching than enables learning<br>More reinforcement on the job / support from manager |
| 21- 30 years    | Relevance – including individual choices re what to learn in what format<br>Less repetitions<br>Need for currency  |
| >30 years       | Relevance<br>Time to complete<br>Codesign  |

# Design Improvement by Years in Health Sector

# 6.2.2.4.5 YEARS WORKING IN WA HEALTH

The coded themes of comments from respondents categorised into five cohorts grouped by years they have worked in WA Health were largely consistent, with variations only in the most frequently expressed theme in each cohort. The cohort with the most experience in WA Health, referred more frequently than other groups to the need for co-design by trainers and learners and the need for trainers to be specialists in the subject matter being presented. Table 6.10 provides a summary of findings.

#### *Table 6.10*

#### Design Improvement by Years in WA Health

| Years In Health | N= | Key Themes Identified          |
|-----------------|----|--------------------------------|
| < 5years        | 19 | Interactive                    |
| 5–10 years      | 38 | Face-to-face                   |
| 11-20 years     | 75 | Scenario & case-based learning |
| 21-30 years     | 34 | Codesign by trainers & learner |
| >30 years       | 26 | Specialist trainers            |

#### 6.2.2.4.6 Summary: Impact of Demographic Variables

There were only subtle qualitative differences in the suggestions for MWT improvement within variable groups. Collectively, most respondents, regardless of work role, age, experience, or work location wanted training that is relevant to their role and location, is interactive, and is preferably delivered face-to-face. Smaller numbers of respondents in all demographic groups preferred training that is regularly reviewed, co-designed by trainers and learners, and based on adult learning principles. Where assessment of learning is completed, it should be meaningful and all MWT leaning should be supported by organisations through appropriate allocation of time and reinforcement and support by managers and supervisors. Collectively, there was no consensus regarding the frequency or duration of training repetitions with equivalent numbers of comments supporting less, and requesting more, MWT repetitions.

It was clear from the data that work roles, age and years of experience had some impact on the design improvements suggested. Respondents with less experience in the sector (less than 21 years) were most accepting of MWT as it is currently delivered but were concerned about having time to access the training. Older (over 41 years of age), and more experienced respondents (over 21 years of experience) were more likely to comment on the quality of training and propose strategies to improve it, including applying adult learning principles, co-design, and evidence-based practice. The older age groups (over 41 years) were also more likely to question the value of MWT and to express concerns about inexperienced trainers.

Within work roles, medical staff were most likely to suggest the training should be based on evidence of efficacy, while nursing staff were more likely to be positive about current MWT. Allied health and health science staff were the only group who discussed the need for consequences if workers did not follow trained practices, and the non-clinical respondents were the only groups to identify the challenges of accessing MWT for workers with low digital literacy or English as a second language.

These findings suggest that the design of MWT should consider, at a minimum, the potential for different learning needs of respondents in different work roles and with varying years of work experience.

#### 6.2.3 Interview findings

All three interviews elicited comments about the achievement of purpose, the impact of MWT, and suggestions for improvements to MWT. The interview data were consistent with the data arising from the MWTS previously
described in that all topics raised by the interviewees were also articulated by one or more survey respondents. Given the small number of interviewees further comment regarding whether the themes aligned with respect to any of the demographic characteristics of survey respondents and interviewees information cannot be made.

The interview process, unlike the written survey responses, elicited extended responses which provided more complex explanations of respondents' views on each of the key themes.

JH questioned the value of some MWT. They noted their organisation had made some attempts to evaluate the impact: " So we try to - we do - satisfaction surveys on the training sessions themselves so they get evaluated, and we do - or we've started to do - a training practice audit of 50 real emergencies a year which give us an idea of whether the training (Ed: Resuscitation training) we have in places in actually comes to fruition in practice." With respect to the value of MWT they questioned, for example, the generic nature of much of the training and suggested instead that : "Largely drill down to which specific jobs need which specific training. A good example would be falls management - so we might have doctors who are not working clinically but they still have to do the falls management training even though they are not looking after patients anymore. So, I think tailoring mandatory training to the job position is a difficult one but an important one."

Interviewee JH also questioned the value of e-learning based MWT, stating: "We all know the problems with e-learning. It's an easy way out but I don't really know the value completely. I've not seen any evidence that just doing e-

*learning alone is really beneficial.*" They also described concerns with the arbitrary requirements for repetition of training particularly training of skillsbased activities: *"There is a lot of evidence that if you don't use certainly motor skills… if they are not being used, they need to be refreshed / replenished between 6 weeks and 3 months. We are just saying they need to be done annually so that is clearly not enough."* JH also proposed improvements to address this, for example, *"…we try to build in ways of refreshing skills within the annual cycle so a lot of the SDNs (Ed: Staff Development Nurses)will run sessions on an aspect of MTW - perhaps a scenario or simulation just to keep it in the forefront of people's minds."* 

JH's detailed further suggestions on how to improve the impact of current MWT practices, which referenced the term "CRAFT group" to describe individual professional groups (e.g. medical speciality groups, nursing groups). They spoke of the need for "...more blended learning - not pure e-learning." and described how e-learning can be useful in pre-training evaluation to fine tune face-to-face learning content: "We use e-learning to recognise prior learning in these skills and if they need to refresh those skills they can do so - as much or as little preparation skills on the e-learning as they need - and then we just make sure in face-to-face that they can do what it is they are supposed to be able to do." They also spoke of the value of training in multi-professional work groups: "...make it more interprofessional - rather than having the single CRAFT groups training together we are getting the people who work together to train together." and the formal allocation of time to complete MWT, for example, "... certain CRAFT groups - I'm talking medicine in particular - have difficulty getting quarantined time off."

JH referred to the potential value in centralising and standardising training. Citing the centralised model of mandated training used in the National Health Service (NHS) in the UK, they suggested there could be value in introducing this system in their organisation: "I would realign our education and training establishment into one service, so we don't have the siloed case that we currently have." In JH's organisation that is medical, nursing and corporate education services all managing different part of mandated training, and "There are lots of different alliances and I think it would be more sensible and more streamlined if we all reported to the same people and, were are more focused... we all focused on the one... that is we were all in alignment." In contrast, JH also suggested that the organisation should target training to specific groups, for example, "I think you tailor the education for the specific CRAFT groups to get buy-in from those CRAFT groups because they just become more difficult and there's more content you have to present. I think that's the ideal". These references were interpreted as a call for more centralised coordination and management of MWT which would support the delivery of targeted education programs to address identified learning needs. JH also emphasised a preference for blended and face-to-face training over e-learning and spoke of the value of "*refresh*" activities such as simulation practices and workplace-based reinforcement to consolidate and support retention of learning between formal mandated training sessions.

Interviewee SL, a clinician, also referred to the value of MWT, indicating that they felt basic life support and code blue (medical emergency) training has a positive impact, and cited an experience in which recently completed evacuation training meant that they were confidently able to respond to a real

life evacuation: "... the fire alarm stuff I find beyond helpful because - when the fire alarm went off today, when it clicked in...people said "What's that?, What's that? ", and I thought...I've done my mandatory training...I know what that means!". They also indicated that "... I'd like to think aggression prevention would be helpful but - I don't know- it hasn't come up," and that some courses, because they were not of immediate relevance to them, were easily forgotten: "So, Record Training I'm not going to lie I've pretty much forgotten about but I remember when I was training thinking - "Isn't this just the stuff we do at Uni?" and "...we did a second round of ethical decision making recently. It was like... I can't remember what it was." SL's comments were largely positive about MWT and referred to some current practices that should be retained, including clear communication about MWT requirement for workers: "It's been pretty clear what was expected - that was beyond helpful...having a clear expectation was good." and the efficiency of elearning: " I... think that for things like your fire alarms and your mandatory training evacuation e-learning is great. You can fit it in when your patients do not attend in Outpatients which is just phenomenally helpful." Further, SL indicated that they felt MWT was largely working effectively and appeared to be based on adult learning principles, for example, "With that mix of video and slide show and face-to-face I think that it's (sic) going quite well. I think its very adult learning principle. I think being treated as an adult here is helpful."

In direct contrast, interviewee BZ, an educator, commented that they did not feel MWT *was* grounded in adult learning principles, and further, that many of the learning evaluation quizzes were not meaningful. In reference to e-learning they noted: *"Well it's not very empathetic towards an adult learner. It just kind* 

of throws it at you and expects you to do the quiz. Well, the other thing too is that you'd be aware that may people cheat...so what's the value of that?". BZ also questioned the value of some training required of, for example, medical specialists when the specialists practice the trained behaviours routinely every day: "It's become a bit of a joke that one (Ed: Hand Hygiene e-learning). And also, I think it's a bit of a joke when the doctor has to do it three times because he fails it. You've got to wonder what sort of training this is and how relevant is it if he doesn't know the answers. And does he need to know the answers?". BZ did however state, in response to the question about whether they felt MWT had value: "Yes! There is some value. There is some value in every training. But whether there is enough value to warrant the number of hours across 40,000 employees is another question."

BZ's major concern around the achievement of purpose and value of MWT in their workplace setting was whether it met the learning needs of their unique workforce which included a large proportion of Aboriginal trainees undertaking workplace learning programs designed to support then to integrate into the WA Health workforce. In a broad ranging interview, which covered multiple issues, BZ expressed concerns such as whether the training was appropriate for people with limited formal education, how relevant much of the content was for individuals, how MWT was perceived and prioritised by this cohort who had other learning demands, and whether Aboriginal ways of learning were considered when the content was designed and delivered.

BZ made specific reference to management of aggression training being useful, while reinforcing the value of face-to-face over e-learning: "...one of the reasons it's great, and why people tell me its great is because they can ask

questions...about their own workplace. The online stuff has no facility for making it personal ". They made a similar argument to suggest that Aboriginal cultural e-learning could also be enhanced with a face-to-face element. Referencing the current WA Health e-learning programs (which they describe as "a lovely program") in comments they questioned whether there is evidence that most learners would fully understand the content without the aid of face-to-face interpretation: "Yes but who gets the message? How many people get the message is what I'm saying. Are they saying": "Ah ha!" oh my goodness it's like a river (Ed: a metaphor of a river is used in the e-learning to describe cultural impact)...oh it's like that"... or are they saying: "Yes ... Let's tick the box and just get moving on this...? ".

Collectively, the interview data reinforced that there is a complexity of perceptions and interpretations of MWT's value, and multiple opportunities to improve it. There was apparently consistent agreement across the three interviewees that MWT, while potentially initiated to address compliance issues, should be focused on achieving meaningful learning, and it should ideally be targeted to roles and work areas, and delivered via face-to-face training in preference to the currently extensive use of e-learning. Commentary from the two educators indicated that they have thought deeply about the value of the training and how best to deliver it to have optimum impact. Each interviewee also indicated they had considered the value of MWT in comparison to training delivered in other sectors, suggesting that they are critically engaged in reflection on the subject. The issues raised by interviewees were consistent with findings from the workforce survey with regards to suggested changes to improve the impact. The interviewees all

recommended that MWT be designed and delivered according to adult learning principles, that it recognises individual learner needs and that it be targeted to work areas or professional roles.

## 6.3 Summary: MWT value and design for impact

The analysis of workforce perceptions about whether MWT achieves its intended purpose, indicated that over 75 % respondents believed the intended purpose of MWT is fully or partially met. Further, the analysis found that there is a weak association between the worker demographic variables of work role, employer, years in health and years in WA Health and their reported perceptions of the impact of at least some of the MWT programs. Significantly the data suggests that while achievement of purpose is reported, a proportion of respondents do not support the use of MWT for compliance purposes alone.

The analysis of respondents' perceptions about how MWT might be designed for a positive impact offers a rich resource to guide MWT program design and delivery to optimise uptake and impact. The data provides suggestions applicable to the health services participating in the study including specific suggestions for how MWT might be improved for different workforce cohorts including work role groups, respondents of different ages, different years of experience in WA Health and years in the health industry. Suggestions all focus on improving the value of MWT to workers and the organisation by optimising learning, impact on practice and efficiency rather than MWT compliance outcomes. Collectively, the qualitative and quantitative data analysis indicates respondents want access to training that is relevant to specific roles and work locations, and which actively engages the learner in

interactive, preferably face-to-face, learning activities. Evidence from this study suggest program content should take into consideration the skill and experience levels of learners, particularly workers who by virtue of being long-term employees of WA Health, are required to repeat training multiple times. Respondents want to be consulted and involved in training program design, with the (not explicitly stated) implication that this supports the creation of more relevant content. Respondents also want to improve trainers' knowledge of localised issues so that relevant content can be incorporated into training programs. Where e-learning is used it should be as an adjunct to face-to-face training or as a tool to assess skills and knowledge status to inform face-to-face program design, and should be designed to be interactive, and to be accessible for workers with low digital literacy and English language skills.

Findings show respondents prefer to be supported to engage in training through the allocation of work time and an appropriate training venue, and managers and supervisor should model and reinforce taught behaviours post-training. The data also recommends improvements including specific changes to site practices, including the current MWT administration and management processes used within. Further, the data indicates that the workforce questions the value of repeated training and believe that the current requirements for it should be reviewed. Where there is justification for training repetition (either as a proven strategy to enhance learning or as a compliance requirement), the evidence and rationale for repetition should be explicitly shared with learners and the learning content of the repeated programs should be regularly reviewed and updated to support learners' engagement in the training. Finally,

by using clear communications about the purpose of, evidence for, and expectations about MWT. In addition, they suggest there is value in using one centralised learning management system and training naming conventions that would potentially support RPL for workers working in multiple WA Health facilities.

### 6.4 Chapter conclusion

This chapter reported on the study findings about the WA Health workforces' perceptions of whether MWT achieves its intended purpose, the perceived value of MWT to the organisation and to individual workers, and the workers' suggestions for how MWT might be designed and delivered to have a positive impact in the workplace. The key findings are that respondents perceive that MWT can address multiple purposes simultaneously and that they believe that MWT largely meets its intended purpose. Where the purpose of MWT is perceived to be compliance alone, respondents have multiple suggestions for how they would like to see MWT designed and delivered to optimise impact. Dominant within these suggestions was the need for training content to be relevant to individual roles, professionals, and work areas, and to be engaging and interactive, convenient to access, repeated only when evidence indicated a need, and delivered by skilled, competent trainers.

The following chapter will add to this evidence by reporting on the findings on workforce perceptions of engagement and disengagement with MWT.

# Chapter Seven: Workforce Engagement and Perceptions of Barriers and Enablers

# 7.1 Introduction

This is the final of three chapters describing respondents' perceptions of different aspects of MWT. This chapter focusses on respondents' levels of engagement with MWT, and their perceptions of the barriers and enablers of MWT engagement. It describes the relevant qualitative and quantitative datasets elicited via the *Mandated Training Workplace Survey (MTWS)* and reports separately on the findings of the analysis of each dataset. The chapter continues with an analysis of the data elicited via three semi-structured interviews and concludes with a summary of the integrated findings from all datasets.

### 7.2. The survey dataset

Two MWTS items elicited qualitative data (Item 14 and 17), and two quantitative data (Items 15 and 16) specifically related to respondents' engagement and disengagement with MWT. Further qualitative data on the subject were drawn from interviews and survey Items 20 and 21 (Both open-ended text requests for comments about MWT).

### 7.3 Quantitative survey data: Engagement

Item 15 elicited respondents' ratings (on a scale of zero=no engagement to 100=maximum engagement) of their levels of engagement with individual programs. The response rate ranged from 243 to 257 for individual MWT programs. The mean engagement rating level across all programs ranged

from 70.8 (Life Support Training) to 42.7 (Record Keeping Awareness). Notably, top-ranking programs were all face-to-face training (See Table 7.1 and Figure 7.1), which is consistent with qualitative findings presented previously indicate respondents' preference face-to-face learning.

# Figure 7.1



Ranked Mean Engagement Score for Each Program

Table 7.1

|    | Program   | Minimum | Maximum | Mean  | Std Deviation | Variance | Count |
|----|---|---------|---------|-------|---------------|----------|-------|
| 1  | Record Keeping<br>Awareness<br>(E-Learning)                 | 0.00    | 100.00  | 42.76 | 29.23         | 854.53   | 247   |
| 2  | Accountable &<br>Ethical Decision<br>Making<br>(E-Learning) | 0.00    | 100.00  | 45.35 | 29.46         | 867.74   | 246   |
| 3  | Aboriginal<br>Cultural Learning<br>(E-Learning)             | 0.00    | 100.00  | 58.91 | 30.18         | 910.75   | 253   |
| 4  | Prevention of<br>Bullying<br>(E-Learning)                   | 0.00    | 100.00  | 49.73 | 30.57         | 934.48   | 250   |
| 5  | Emergency<br>Procedures<br>(E-Learning)                     | 0.00    | 100.00  | 57.08 | 30.70         | 942.71   | 257   |
| 6  | Infection<br>Prevention &<br>Management<br>(E-Learning)     | 0.00    | 100.00  | 57.33 | 29.66         | 879.84   | 251   |
| 7  | Hand hygiene<br>(E-Learning)                                | 0.00    | 100.00  | 58.11 | 31.31         | 980.16   | 255   |
| 8  | Manual Handling<br>(Practical<br>face-to-face)              | 0.00    | 100.00  | 59    | 33.44         | 1118.30  | 246   |
| 9  | Management of<br>Aggression<br>(Practical<br>face-to-face)  | 0.00    | 100.00  | 60.31 | 31.72         | 1006.14  | 248   |
| 10 | Life Support<br>(Practical<br>face-to-face)                 | 0.00    | 100.00  | 70.81 | 30.69         | 942.13   | 243   |

# Levels of Engagement Individual Programs

Respondents' (N=237) level of engagement in MWT overall indicated a distribution across the 10-point scale from zero engagement to a 10 rating. The median response was midway (5) and the mean score 5.26 (Confidence interval of average 4.92 to 5.6) with a standard deviation of 2.7 (See Figure 7.2).

# Figure 7.2





RATING OPTIONS 0=MINIMAL ENGAGEMENT TO 10=MAXIMUM ENGAGEMENT

# 7.4. Qualitative survey data: Engagement

Responses (N=210) about the conditions that support feelings of engagement with MWT, included 20 responses indicating that respondents did not feel engaged at all in MWT. The key themes of these responses referred to people attending training only because it was mandated, criticism about the quality of trainers, and comments that workers should not be required to undertake training that is irrelevant to their role. For example, *"I don't feel engaged. I feel*  mostly it's a waste of time", "We have to do it to meet requirements for supervision and yearly updates", and "I do it because I am required to and because I don't want to be told I am non-compliant". Remaining responses (N=190) were pooled for analysis with a subset of engagement related responses from Items 20 and 21. A combined total of 292 engagement related survey responses, from 190 individuals, were coded using the coding process previously described (See Chapter Three). During the analysis process it was challenging to identify unique, independent themes within the data. Significant overlap between the coded themes was identified. For example, the themes of "relevance" and "purpose" are closely related. The seven primary themes that were finally identified were assessed as sufficiency different to justify classification as independent themes and accounted for all responses. The themes were effective training design, relevance, allocated time and place for MWT, purpose and value, effective trainers, organisational support, and new learning. Key issues identified within each theme are described below and summarised in Figure 7.3.

### Figure 7.3

Positive Contributing Factors to Mandated Workplace Training Engagement

| RELEVANCE                    | EFFECTIVE<br>TRAINING DESIGN  | EFFECTIVE<br>TRAINER  | ALLOCATED<br>TIME & PLACE | ORGANISATIONAL<br>SUPPORT   | PURPOSE &<br>VALUE                                      |
|------------------------------|---|---|---------------------------|---|---|
| Role<br>Profession<br>Self   | Face to Face<br>Scenario based<br>Interactive<br>Peer Supported<br>Evidence based | Skilled &<br>Experienced<br>Engaging<br>Respectful of prior<br>Iearning | Uninterrupted             | Modelled & valued by<br>staff & management<br>Repercussions if<br>non-compliant | To Self<br>To Workplace<br>To Colleagues<br>To Paitents |
| Most<br>Frequent<br>Response |   |   |                           |   | Le.<br>Freq<br>Resp                                     |

#### 7.4.1 Effective training design

The most frequently coded theme (N=132) concerned the design of training programs. Responses in this category referred to the training program design features and the learning experiences (e.g.: delivery format, content) that educators might manipulate to improve engagement. Overarching comments, for example, included *"It is well designed and of a high standard. Also needs to be as concise as possible within scope of the topic*". One comment referenced the potential for well-designed and delivered MWT to "…*promote deep learning and embed practice changes*".

The top five sub-themes within this category were, in order of highest to lowest frequency:

1) Face-to-face training was preferred over e-learning (e.g. *"It has a practical component"*, "...*hands on is better*").

2) "Scenario-based learning" based on real workplace risks and problems was seen as most useful (e.g. "when it has been designed to be specific for the attendees").

3) Training involving learner interaction was preferred. Face-to-face training should include discussion and active participation. E-learning should include interactive, frequently updated content such as engaging and challenging quizzes (e.g. "*I actively participate in learning or watch videos, not just reading lots of data*").

4) Learning with peers is preferred (e.g. *"I'm in a group with my peers where* we can discuss how it relates to our clinical areas of workplace").

5) Learning materials that are regularly updated and *"innovative"* are preferred (e.g. *"It was great to have a break from the usual presenters and the usual script due to COVID-19 precautions. The presenter and format need to be changed every few years to ensure this training that an employee receives yearly for several decades remains relevant, fresh, and remembered"*).

An additional design issue raised by four respondents was the need for training program design to acknowledge and accommodate workers' prior learning. For example, training is considered engaging when it "... helps me refresh my prior training/learning" and workers preferred training that "... is not a repetition of previous learning". Workers come to MWT with skills and knowledge previously acquired from pre-employment training, on-the-job training or practical work experience. Respondents complained that the learning content in many of the MWT training programs was already known to them and was practiced as part of their day-to-day working life. For example, "...it ...takes into consideration prior professional education and training and that most professional groups have mandated continuing professional development requirements anyway through the health regulator and/or their professional body". One respondent proposed that some MWT could potentially be delivered in training institutions and acknowledged as prior learning on entry to WA Health, thus avoiding the time and expended on delivering site based MWT for a cohort of recently graduated workers.

Additional comments from one or two respondents were also coded within this theme. Two responses referenced the need for e-learning quizzes to be more relevant to learning. For example, *"I particularly hate quizzes that ask obscure questions not relevant to essence of the content"*. Another two respondents

suggested that Aboriginal Cultural Training should be delivered face-to-face by Aboriginal people, rather than via the current e-learning program. Two addition respondents referenced the potential for training be *"accredited"* to improve worker's motivation to engage in the training. Accreditation would formalise recognition of the training by agencies and employers external to WA Health.

#### 7.4.2. Relevance

One hundred and one responses were classified within the "relevance" theme, making it the second most frequently identified theme within the engagement responses.

20 comments used the term *"relevance"* or *"relevant'* with no further explanation as to what the training might be relevant to. The remaining comments provided simple descriptions of relevance such as: *"My area of work."* (N=12); *"My day-to-day work."* (N=11); *"My profession."* (N=7) and *"My clinical practice."* (N=6) and *"The individual"* (N=6). Others provided more detail, for example: *"It is relevant to my position and adequately reflects the inherent risks of my position/profession.", "Allow clinical staff to train according to their profession and department requirements." and <i>"Tailor the training to the specific workplace - e.g. community site, inpatient unit, hospital ward, hospital outpatient clinic - and provide some training for non-clinical staff - e.g. admin staff. "* 

35 comments referred to MWT being engaging when the learning could be applied directly in the workplace, for example, *"Scenarios are directly* 

applicable to current workplace.", "It is relevant to my workplace and improves patient care." and "...applicable to real examples".

A small number (N=7) of additional comments cited relevance to the individual in the relation to both their work and personal learning goals, for example, *"It applies to my role within the health department or to my role outside of work."* and *"It serves my purpose for work and appeals to me".* 

Another small cohort of responses (N=7) contrasted relevance with the perception of mandated training being either a *"tick box"* exercise or compliance driven tasks, for example: *"When it's (sic) relevant to my day-to- day practice and not just given because it is legislated for."* 

# 7.4.3 Allocated time and place for training

Thirty-five responses emphasised the need for allocated time to complete MWT. Responses referenced the challenge of finding time within a busy working day to complete MWT, and the competing demands on their time. For example, people engage with MWT when "... there are no distractions or competing workloads etc." and "I always feel time poor to complete them...therefore don't enjoy when they are due to be completed." The term "pressure" was used (N=2) to refer to both the pressure respondents felt to undertake MWT in addition to other work responsibilities, suggesting some respondents conceptualise MWT as a task over and above their routine work tasks.

The need for appropriate environments in which to undertake the training was also referenced by five respondents, specifically the need for a quiet location, space *"off the floor"* and spaces with no distractions or interruptions.

#### 7.4.4 Purpose and value

The potential for workers' understanding of the purpose and value of MWT to positively impact engagement was evidenced in 32 responses. Comments indicated staff were more engaged when learning goals and expected outcomes were explicit. One respondent noted, for example: "*Just because something is mandatory doesn't mean I know why it's necessary.*" Key within this theme were comments that respondents needed to understand the rationale for, and value of, MWT, for example, "*I can see the relevance to my job role and there is evidence it will make me a better clinician.*" and "*I … understand the rationale for the training…*" and "*I know the training will have a positive impact on how I care for my patients*".

Eight comments suggested that neither the rationale for MWT nor evidence of its value, was transparent. For example," The evidence of the effectiveness of mandatory training in its current form is lacking and is obvious in the very piecemeal fashion in which it is currently delivered".

Seven comments referred to not feeling engaged when the perceived purpose did not align with their personal perceptions of value. Specifically, if the purpose of MWT was perceived to be "*supervision*", "*tick box*" and "*legislative requirements*", workers did not view this as a sufficient reason to engage. In contrast, purposes that supported engagement were those perceived to be more acceptable to respondents, such as supporting improvements to patient

care, positive impacts on day-to-day practices, and improvements to staff and patient safety, for example, *"I can see a purpose to it, e.g. staff safety, patient safety etc."* and *"I can see how it can have direct impacts on my work and my colleagues."* 

#### 7.4.5 Effective trainers

Twenty-eight comments referenced the value of an effective trainer to support feelings of engagement. The most frequently defined quality of an effective trainer was that they were "*engaging*." Comments described preferences for specific personal qualities of trainers (e.g." *Passionate*", "*Dynamic*", "*Interested and stimulating*"), the skills of trainers (e.g. "Well-versed", "*Qualified*", "*Competent*", "*Subject knowledgeable*.", "*Highly skilled*",) and trainers who are prepared to engage interactively with learners. For example, "*I welcome the opportunity to discuss particular situations with the trainer in the more practical sessions*."

Criticisms of current trainer behaviours and practices also provided insight into preferred teaching methodologies. Comments included references to *"Poor education standards"*, trainers with no recent practice experience, trainers with limited skills and trainers whose behaviours do not support interactive learning. For example, one person responded that they felt more engaged when "... trainer seems interested in assisting you with furthering your knowledge, not rolling eyes when a question has been asked."

#### 7.4.6 Organisational support

The final coded theme of factors contributing the engagement with MWT was that of the perceived organisational commitment to MWT (12 responses). Where respondents believed the organisation "took it (Ed: MWT) seriously" they were more likely to engage in the training. Organisational practices perceived to indicate this commitment included seeing peers and supervisors actively modelling the behaviours taught in MWT. For example, "...I can see my colleagues and supervisors engaging in similar behaviour." Other references were made to the need for behaviours trained in MWT to be reinforced by managers and policies, for example: "Mandated e-learning such as bullying creates an awareness... becomes useless when not backed with very specific policy which enables/ empowers the manager in decision making." Further, engagement was said to increase when MWT was effectively promoted to workers, for example, "The word "mandatory" I believe has a negative impact on delivery of these educational imperatives and many centres are now replacing this terminology with Essential Safety Skills session instead." and "The way it is sold to us at the moment is about ticking boxes not about skill development."

A final example of how the organisation might support MWT was a single respondent who referred to their preference for the whole of WA Health to use a single learning management system to support the tracking of MWT undertaken by workers in different health services.

Some responses conflated the allocation of time and places for MWT a measure of organisational support for the practice. As this link was not

consistently made, time and place were coded as a separate theme (See 7.4.3).

### 7.4.7 New learning

The final coded theme was identified in six responses which referred to engagement being linked to the opportunity to "*learn new things*". Respondents reported they felt engaged when *"I feel I am learning something I do not know"* and *"it teaches me something*". These comments were coded independent of references to prior learning cited in section 7.4.1, as the entire focus of the six response was on new learning.

# 7.5 Impact of demographic variables on engagement

Coded data from the response to survey Items 14, 20 and 21 were filtered into different workforce cohorts (i.e. work roles, employer (AHS), age, years of experience in the workforce and years of experience in WA Health) and reviewed. The key within-group thematic differences are presented below.

#### 7.5.1 Work roles

No consistent variation in perceptions of enablers of engagement between different workforce groups was identified. Data in all groups (Nursing and Midwifery, Medical, Allied Health, Administration and Clerical, Business, Finance, and IT, Executive and management and other clinical and nonclinical staff) referred to the key themes discussed previously and indicated a consistent proportion of respondents who reported not feeling engaged with MWT (<10% all work groups).

# 7.5.2 Employers

The same themes impacting workforce engagement in MWT were described by respondents employed at each AHS, with relevance being the theme most frequently cited at all sites. Some variation in theme frequency was noted between the AHS as described below and in Table 7.2

# Table 7.2

|              | AHS 1<br>N = 83         | AHS 2<br>N = 57          | AHS 3<br>N = 73                                |  |
|--------------|-------------------------|--------------------------|--|--|
| Highest      | Relevance               | Relevance                | Relevance                                      |  |
| +            | Applicable to workplace | Applicable to workplace  | Interactive training                           |  |
| C            | Face to face            | Face to face             | Allocated Time                                 |  |
| EQUEN        | Allocated time          | Effective trainers       | Training targeted at individual learning needs |  |
| EBYFR        | Engaging trainers       | Training based on        |  |  |
| THEM         | Learning new things     | evidence based practices | Effective trainers                             |  |
| $\downarrow$ |                         | Allocated time           |  |  |
| lanat        |                         | Regular updates of       |  |  |
| Least        |                         | content and presenters   |  |  |

# Engagement by Employer

# 7.5.2.1 Area Health Service 1

Responses (N=83) from the AHS 1 respondents focused on the relevance and application of training to the workplace (41% AHS 1 responses). Preference for interactive and face-to-face delivery over e-learning was consistently expressed, as was the need for allocated time which was noted by 15 respondents (18% AHS 1 responses). Two respondents used positive vocabulary (*i.e.: value "," enjoy"*) to describe their experience with MWT while five indicated they are not engaged in MWT at all. A further four noted that

they are engaged only because training is a mandated requirement of their workplace. Four respondents noted that learning "new" things supports engagement, and 12 respondents (14.5% AHS 1 respondents) referred to the need for engaging, interactive trainers. Four negative comments related to AHS specific practices were noted: 1) the loss of training records related to records being transferred between databases (SHIMS and the LMS), 2) the need to repeat training at this AHS despite having completed in at other workplaces and 3) negative comments about the training reminder process (i.e.: "...20 annoying reminder emails to complete the process."," ...the approach ... is on the borderline of being bullied...").

#### 7.5.2.2 Area Health Service 2

Responses from AHS 2 respondents (N=57) referenced relevance and applicability to the workplace most frequently (49% AHS 2 respondents) and emphasised the value of face-to-face training (21 % AHS 2 respondents). The need for effective trainers (10.5% AHS 2 respondents), allocated time (5% AHS 2 respondents), and the need for training to be delivered using *"evidenced based practices"* (7% AHS 2 respondents) was also referenced. Further, the need for content to be updated (5 % AHS 2 respondents) was considered important, for example, *"The presenter and format needs to be changed every few years to ensure this training that the employee receives yearly for several decades remains relevant, refreshed and remembered"*.

References to AHS 2 specific practices included comments that Aboriginal Cultural Learning should be delivered face-to-face by Aboriginal people (N=2), and that policies should align with the practices taught in MWT. Further concerns were raised about the quality of trainers, for example, *"Some* 

*(lecturers) have been off the floor too long and need to go back to the wards to understand what is happening",* and concerns about the promotion of training as a compliance requirement rather than a learning opportunity.

### 7.5.2.3 Area Health Service 3

Respondents from AHS 3 (N=73) referred to interactive training and relevant training with equal frequency (30% AHS 3 respondents). This cohort uniquely referred to the need for "*targeted*" training (8% AHS 3 respondents), which they defined as training that considers individuals' skills, knowledge, and learning needs. The issue of time to complete training (9.5% AHS 3 respondents), and the need for effective trainers (4% AHS 3 respondents) was also identified. 10 respondents (13.7% AHS 3 respondents) indicated they are not engaged with MWT and a further two indicated they are engaged only because it is mandated, for example, "*I do it because I am required to and because I don't want to be told I'm non-compliant. As a manager I feel frustrated that others don't adopt the same position, and that there is so much resistance to mandatory training.*", and "... in the annual training I skip straight through to the "learning sections", complete the question and get my certificate as quickly as possible so I can get back to my actual work. 0 engagement."

There were four references to AHS 3 specific practices. One commented favourably on the introduction of a blended learning program ("*The recent fire training was both online and hand-on. I think the hands-on training was very helpful alongside the online training.*"). One referred to poor trainer skills ("*Frequently over the years I have had to teach the teacher how to use manual handling aides to prevent everyone learning incorrect information and getting an injury.*") and another to expand the content on aggression management

training to be relevant to more work role groups ("*I think there should be a version for admin staff dealing with patients face-to-face/ via phone on the front line*"). The final AHS specific comments discussed respondents' perceptions of undue pressure on workers to complete MWT at accreditation time, for example "... the department secretary looks like she will cry from the harassment she's getting from Exec to get all the medical staff to complete their mandatory training requirements before accreditation."

### 7.5.3 Age

The key findings from an analysis of responses by age was that the need for relevant training was more frequently expressed in older cohorts than younger, and that older respondents were more likely to comment that they are not engaged with MWT, and that they value allocated time to complete training.

Respondents in the 21-to-30-year group most frequently referred to design features that assisted their engagement (i.e.: efficient access, interactive, hands-on, relevant training delivered by skilled competent trainers). In all other age cohorts, the major theme was the need for training to be relevant, interactive, and applicable to work activities.

Complaints about the need to repeat training occurred only in cohorts of respondents over 41 years of age and included 11 extended responses that explained in detail the need for training to be more than an exercise in compliance and instead address the specific learning needs of workers in the context of their workplace or professions. For example, one respondent noted: *"It is relevant to my workplace. I am happy to complete all training that is relevant to my work, but not happy (wasting my time and my employer's) when* 

I am required to do training that does not apply to my role. Yes, this DOES happen - the requirement needs to be looked at, to tailor it to the staff/patient needs. e.g. Falls is NOT a relevant component for a staff member who DOES NOT have patient contact - neither is patient handling".

The largest cohort of responses (Age 51-to-60-year, N=58) included the largest percentage of respondents (N=10,17%) who indicated that they did not feel engaged in MWT (e.g. "*I don't feel engaged. I feel mostly it's a waste of time*"). Another notable difference between this cohort and others was the more frequent references to 1) the need for time to do MWT (N=10), 2) the need for evidence-based programs (N=8), 3) comments (N=3) referring to "*harassment*" to complete training, and 4) the need for improvements in the quality of trainers (N=4).

The oldest age cohort of respondents aged over 61 (N=33) was the only one in which the need to "*learn new things*" was a theme.

### 7.5.4 Years in health

Analysis of data grouped by respondents' years of experience in the health sector indicated that each cohort identified the same reasons to engage in MWT, except respondents with less than 5 years of experience in the health sector. This cohort prioritised the need for interactivity and trainer competence over the need for relevance which was the focus of all other cohorts. Other minor variations are described below and summarised in Table 7.2.

Of note the six lengthiest responses were from respondents in the 21-30 years' experience cohort. Key themes within these comments were:

1) that there is value in training being available in "multiple modalities",

2) disengagement occurs when "I'm (sic) only doing it to please my bosses",

3) it is "wasting my time and my employers' when I'm required to do training that does not apply to my role",

4) training needs to consider professional prior learning, and

5) that educators need to be familiar with issues experienced by workers, for

example, "Educators have no idea about day-to-day work on the floor."

# Table 7.3

# Engagement by Years of Health Experience

| Years of Experience             | N  | Major Themes by Frequency of Reference  | Do Not Engage |
|---------------------------------|----|---|---------------|
| Less Than 5<br>Years Experience | 19 | 10 Interactivity in Training<br>6 Engaging & competent trainers<br>5 Allocated time<br>3 Valuing or enjoying MWT  | 0             |
| 510 Years                       | 29 | 10 Relevance & workplace applicability<br>4 Interactive learning preferred  | 4             |
| 11-20 Years                     | 65 | 30 Relevance<br>13 Time to complete Interactive learning; time to do training<br>4 Value of peer or colleague learning; effective trainers;<br>opportunities to learn new content | 0             |
| 21-30 Years                     | 44 | 21 Relevance<br>8 Time to complete training   | 4             |
| Over 30 Years                   | 46 | 24 Relevance & applicability to workplace<br>4 Value learning new things<br>2 Training based on best evidence training methods  | 7             |

### 7.5.5 Years in WA Health

Consistent with response variations of respondents in different age groups and years of health experience, comparing datasets from respondents with differing years of experience in WA Health demonstrated that respondents with more experience were more focused on the need for relevance and time to complete training, than respondents with less experience who were more concerned with the need for interactive, face-to-face learning. The key themes identified by respondents of different years of experience are summarised in Table 7.3.

Respondents with 5 to 10 years of experience in WA Health noted that their engagement increased when colleagues and supervisors use the trained behaviours, and when training considered the pre-existing skill level of learners. They also noted that not all courses required repetition. Respondents with 11 to 20 years of experience in WA Health noted that training can reinforce good practice, for example, "*reinforce what I already know – this gives me confidence that I am practicing (sic) appropriately.*"

# Table 7.4

# Engagement by Years in WA Health

| Years of Experience             | N  | Major Themes by Frequency of Reference  | Do Not Engage |
|---------------------------------|----|---|---------------|
| Less Than 5<br>Years Experience | 25 | <ul><li>14 Interactivity in Training</li><li>5 Relevance; Effective trainers</li><li>3 Desire for new learning</li></ul>  | 0             |
| 5-10 Years                      | 43 | 17 Relevance (12) & workplace applicability (5)<br>6 Time, effective trainer and interactivity  | 6             |
| 11-20 Years                     | 73 | <ul> <li>41 Relevance</li> <li>24 Face-to-face(16)/ interactive training (8)</li> <li>8 Evidence based or proven impact on safety &amp; quality</li> <li>7 Interest in learning something new</li> <li>5 "Short", "concise" or "efficient" training or time allocation for MWT</li> <li>4 Effective trainers</li> </ul> | 0             |
| 21-30 Years                     | 39 | <ul><li>16 Relevance</li><li>9 Time to complete training</li><li>4 Learning new material; Interactivity</li><li>3 Demonstrated value to the workplace "well designed"</li></ul>   | 0             |
| Over 30 Years                   | 28 | <ul><li>15 Relevance (12): Applicability (3)</li><li>2 Interactivity or face to face; effective trainers; time to do training; effective design</li></ul>   | 6             |

# 7.6 Qualitative survey data: Disengagement

Data on disengagement was elicited via the MWTS Items 17, 20 and interviews. Respondents cited multiple reasons for feeling disengaged from MWT, as summarised in Figure 7.4. Of note, a small cohort of respondents used emphatic, emotive language, and vocabulary to indicate they have significant concerns about current MWT practices. The key themes are described below.

# Figure 7.4

#### Factors Impacting on Disengagement



Frequent Response

Item 17 elicited data from 216 respondents who each described why they felt disengaged from MWT. Over 60 % of responses referenced more than one reason for disengagement, resulting in a dataset of over 270 individual comments. These comments were pooled with a further 29 responses from Item 20 and 68 responses. from Item 21 respectively. Most of the themes identified in this data set were congruent with the themes arising from the Item 14 responses on engagement described previously, however some subtle variations were identified. The disengagement themes are described in the following section. Where the frequency of response is stated, it refers to the percentage of individual respondents, noting that many respondents referred to multiple reasons for disengagement in their one response.

### 7.6.1 Mandatory workplace training design and delivery

The most frequently coded theme (N=61, 28% respondents) related to reasons for disengagement, was the design and delivery of MWT. Within this theme were five main issues. The first described disengagement occurring when training does not meet the needs of adult learners or support active learning, for example, "Accepting that adults learn in different ways and for learning to take place this needs to be addressed to meet the needs of the learner." Others noted "It's delivered without much thought to my learning needs." and "I'm presented with learning objectives that do not acknowledge my prior learning and expertise". The second theme was related to disengagement occurring when training takes too long, for example," The online wording is too long and wordy." or "The course content is too lengthy," Another respondent noted, "I feel disengaged when the courses take longer than 30 mins."

The third theme within MWT design and delivery was related to training that was perceived to be "boring", for example, "Clicking away just to get through *it*" and" *I know I just have to get it done and when it is not challenging.*" The perception of an over reliance on e-learning was the fourth theme of responses, for example, "*I am just sitting in front of a screen to learn.*", "*E-Learning does not ensure I learn anything.*", and "*I have to do the e-learning as its boring.*"

The final theme noted related to the issue of "*refreshing*" or "*updating*" training programs. This was expressed in two ways: 1) as a concern that programs were not updated frequently enough, for example," *The training is exactly the same as previous years.*" and, *c*onversely, 2) concerns that programs updates were not valued, for example," *The content or techniques differ wildly from year to year (manual handling).*"

Additional comments related to the design and delivery of training included references to respondents becoming disengaged when they have difficulty accessing training, for example, because they have no time, or cannot get to a training location, or cannot find e-learning programs on digital learning systems. Others referred to the *"Lack of consideration for Aboriginal staff, consumers or Aboriginal ways of working."*, or when there is no feedback about their performance on the training or in the workplace afterward, and when workers are not consulted in the design and delivery of training.

### 7.6.2 Relevance of mandatory workplace training

The second most frequently coded theme (N=59, 27% respondents) related to disengagement was training relevance. This was variously framed as a need for relevance to roles and individuals, and as a dislike of what was perceived as generic training. For example, the former was observed in comments such as *"Not relevant to my area of work."* and *"Procedures don't make a difference to my roles."* Examples of the latter included: *"…too general for the work situation with which I'm involved."* 

#### 7.6.3. Mandatory training as a compliance requirement

The next most frequently coded theme (N=40, 18.5% respondents) was compliance. Respondents wrote of feeling disengaged when training was delivered to meet legal, organisational or policy requirements. Seven respondents used language that denigrated the organisation, its managers and administrators who were perceived as the agents responsible for the enforcing unwanted training requirements. For example, respondents wrote that they feel disengaged from MWT when it was "...clearly designed to tick boxes and allow the organisation to respond to adverse events by saying that all staff have done xxx (sic) training in xxx (sic)so it's not their fault.", or when "It's a tick box exercise for managers to get done therefore they hassle staff to do pointless training not relevant to area of work."

One comment used language that implied a level of threat or warning to the organisation: "Leaders must consider VERY CAREFULLY anything they DEMAND of their employees. What happens next either strengthens or weakens the relationship and mutual respect between leaders and employees. So far Mandatory Training is not much strengthening that relationship and may be doing it harm. Employees immediately sport faults and mock the whole process. That's not good."(sic).

# 7.6.4 Training repetition

The requirement for training repetition was the next most frequently coded theme (N=37, 17% respondents) related to disengagement. It was often cited in succinct, short statements indicating that respondents did not see the need for, or value of, repeated training on the same subject. For example, *"It feels*"

repetitive, is taught too frequently." and "It's nothing new, it's repetitive". Others used extended, descriptive sentences to describe their perceptions or used powerful descriptors such as "forced" or "compelled", that suggested a sense of powerlessness over the requirement to repeat some training. For example, respondents noted "When it's a skill that only needs to be learnt once, is practiced (sic) everyday it doesn't need to be repeated annually i.e.: Hand washing, infection control." or "I have to (sic) do it every year, even though most of its not relevant." and " ... once completed I see no reason to have to repeat some of the online sessions."

# 7.6.5 Time

The issue of the lack of time to complete MWT was the next most frequently (N=31, 14% respondents) coded theme. Respondents expressed concern regarding 1) a lack of acknowledgement by managers or the organisation of the time taken to undertake MWT and how it impacts on other work responsibilities, 2) a perception of inequity between staff regarding the time available to different groups to do the training and, 3) the opportunity costs to the organisation when time spent on MWT could be more usefully used for other tasks. Comments indicated that MWT was conceptualised as a task to be completed in addition to, or outside of, core work responsibilities. Comments such as those cited below suggested that respondents did not necessarily perceive MWT as a part of their work responsibilities, rather, it was frequently described as an unwanted imposition on their primary work responsibilities. For example, *"I'm under the pump to do it when I'm at work doing my job and cannot focus on training."* or *"I'm too busy to do it. Some of* 

us are overworked and others not so much so they have the time to do it." and "I'm compelled to use valuable clinical time doing to do the training."

Reference was also made to the disproportionate time spent on MWT by parttime workers, for example, *"It takes a large proportion of the day when I only work two days a week".* Similarly, references to the perceived intrusion of MWT on other duties, or the intrusion of work tasks on MWT were also made. Overall, this theme can be summarised in one indicative response: *"Work is so busy that you don't seem to get a chance to take time out to complete. Therefore, you get very disengaged, and when you do engage it's very rushed."* 

# 7.6.6 Additional findings

Three further codes that arose with equivalent frequency (Approximately 7% respondents) were those of: 1) poorly skilled trainers, 2) the lack of the behaviours taught in MWT by supervisors or leaders, and 3) complaints that the training offered is at the wrong knowledge or skill level.

Regarding trainers, respondents reported experiencing increased disengagement when they perceived trainers to have limited experience and low levels of expertise, when the trainer was not engaged with the topic, or had poor presentations skills (e.g. "monotone voice", "not spontaneous", "not open to discussion or change"). Two of the 16 responses on this topic were particularly critical of trainers, noting that disengagement from training was high when "... presented by inexperienced, but "professional "teachers who can't answer basic question about the application of their teaching in our particular workplace and our patients." and "... implemented by non-clinicians,
and of such a low standard as to be practically time wasting". This theme was encapsulated in one response: "The educators are not interesting or interested."

References to respondents feeling disengaged when the behaviours taught in training were not modelled by organisational leaders indicate that the value of the training was diminished in the view of respondents if there was a perception that MWT was not valued by organisational leadership. For example, "We are made to the do the training and workers do not follow the rules and think it does not apply to them...it's so sad the hospital takes the time to say that it doesn't stand for aggression and bullying and yet it is strong in the hospital." Similarly, other responses indicated a lack of consequences if people did not follow the trained behaviours could result in disengagement. For example," I see other people I work with disregard what we've been taught." or "It's a policy or procedure that is not reinforced or supported in reality e.g. Antibullying., non-smoking."

A small cohort of responses (5 % respondents) referred to training delivered at the wrong skill or knowledge level for the intended audience. A sub-group of these comments used highly emotive vocabulary and language to suggest MWT was insulting to themselves or their profession on the basis that they are highly trained, skilled, and experienced professionals required to undertake MWT with learning objectives aimed at basic level skills or knowledge. For example, physiotherapists who routinely manage complex patient handling situations as part of their daily work activity, referred to manual handling training as not being relevant, for example, "...we have to practice pushing empty boxes across a plinth – this is totally irrelevant and very basic.", and

medical staff who are required to " complete competencies that have little relevance or are frankly an insult to my training."

#### 7.7 Impact of demographic variables on disengagement

Overall, respondents within each demographic group identified that the same elements impact their level of disengagement with MWT. The minor variations are described in the following section.

#### 7.7.1 Work role

Four of the six work role groups identified the lack of training relevance as the primary reason for disengagement with one cohort listing it as the second reason. As summarised below, there was some subtle variation in the frequency and emphasis of the other identified themes within specific workforce groups.

#### 7.7.1.1 Nursing & Midwifery

The most frequently coded theme in the nursing and midwifery responses was that online learning was disengaging. Responses noted, for example, "*It takes away the opportunity for shared experience and opportunity for asking questions*". Most responses referred to the limited opportunities online learning offers for interaction and engagement. For example, "*I feel it's easy to understand and engage if you are actively involved in the learning*.", references to feeling disengaged when: "*...you don't actually contribute in any way*.", and "*I prefer to be engaged and participating in some sort of interaction*." The next most frequently coded theme for this work group was the absence of perceived relevance of training to their role, noting that this may be either that

the training was not applicable or that it was not practical to apply in their role or workplace setting. The remaining themes were cited with similar frequency and focused on 1) the repetitive nature of training, 2) the perception that training is related to compliance and not learning (the term *"tick box exercise"* was used frequently by this group), 3) poor quality and ineffective trainers and 4) a lack of time to undertake training. The comments related to repetition were at times emphatic. For example, *"It's the same old material every single year. I've been in the workplace for 22 years and trust me the material never changes"* and *"Information I've been told every year for 15 years."* 

#### 7.7.1.2 Allied health and health scientists

Allied health and other non-medical or nursing clinical respondents (for example, health scientists) were focused on the relevance of training with almost half of respondents indicating that they felt disengaged from training when they see no relevance to their role. The next most frequently coded theme was that of repetition of training. Comments included references to the lack of changes to either the content or format of training that must be repeated regularly, for example," *The same e-learning package with the same test question used every year. The face-to-face training is the same every year. Very rarely have I learned anything new in the past eight years of mandatory training.* "Smaller groups of respondents in this group referenced, in order of frequency, 1) that they felt disengaged when training was perceived to only focus on compliance, 2) when there was a lack of time or competing priorities, for example, *"It feels less important than the work I'm missing on the ward"* and, 3) when trainers are not engaged in the training. The word *"boring"* was used by multiple respondents in this cohort, as were comments on the need

for training to be purposeful and engaging. Other issues unique to this cohort included references to 1) feeling disengaged when peers or others devalue MWT by sharing answers to MWT assessment quizzes, or 2) when people engage in training with no intention of changing behaviours, and 3) references to difficulty accessing training via a Learning Management System and, 4) difficulty accessing MWT when working part-time or given short notice to undertake training.

#### 7.7.1.3 Medical

Medical staff responses focused predominantly on the irrelevance of training to medical staff, with a sub-group of responses within this theme referring to the perception that medical respondents are trained, qualified, and experienced in the subjects addressed in MWT, for example, "Mandated to do something I am already qualified to do." The two next most frequently coded themes related to the perceived impost of MWT on time that would be better spent on clinical work, and the perception that MWT was designed to address organisational compliance requirements not learning. Comments used emphatic language that suggested compliance is not considered a justifiable reason for MWT. For example, "I'm compelled to use valuable clinical time doing tick box exercises that have little apparent benefit other than providing more admin staff employment." A further group of comments unique to medical staff related to frustration about email notifications to complete MWT. These included emotive references to be "threatening" and being "forced' or *"compelled"* to do training. One respondent in this group provided the longest response (250 words) to a survey item, the key theme of which is summarised

in this extract: "The entire mandatory training process is 'top down', compliance driven and maddening in its execution."

#### 7.7.1.4 Administration, clerical, management, and non-clinical roles

Key themes coded within this worker group included the need to understand the relevance of MWT and the perceived lack of uninterrupted time to complete MWT. Collectively the responses evoked a sense of being overwhelmed with responsibilities and unable to allocate time within work hours to address MWT. For example, *"There are phones constantly ringing, patients waiting to be admitted or arriving for procedures or appointments... you are trying to do it and keep getting interrupted."* The issue of training not being supported in practice was often cited by this workforce group, for example, *"When it's (sic) not put into practice, its (sic) not supported by OHS or Management."* Unlike other workforce groups, this cohort referred to challenges using online learning platforms, such as requirements to repeat learning content multiple times if elearning questions were incorrect, or difficulty accessing e-learning due to learning platform malfunction.

#### 7.7.2 Employer

There was general consistency in the coded themes related to disengagement within each area health service. Subtle variations between AHSs are discussed below.

#### 7.7.2.1 Area Health Service 1

The largest cohort of employer responses on MWT disengagement was from AHS 1 (N=82). The key themes coded within this group were those of training relevance, with time, a dislike of e-learning, and a dislike of training that was perceived to be required for compliance purposes only. The lack of interactive learning was the next most frequently coded. Comments on the issue of time indicated varying perceptions about whether MWT could or should be completed in work (paid) time, whether work responsibilities are, or should be, covered when staff are participating in training, and that MWT takes workers away from work that was regarded as more important, particularly clinical work. Respondents also referred negatively to the duration of MWT requirements.

Reference to the lack of interactive and engaging training included references to both e-learning and face-to-face training. Words such as *"tedious", "boring", "mundane",* and" uninteresting" were used frequently in reference to both. Specific criticisms of e-learning included 1) *"being presented with walls of text",* 2) products not developed in, or applicable to, the Australian context, 3) a lack of interaction within e-learning programs and, 4) scenarios that are not relevant to the workplace. Concern about repetition of training and MWT being targeted at skills or knowledge levels lower than the participants were the least frequently coded. Reponses specific to the MWT administrative process in AHS 1 included 1) complaints about the process for reminding workers to attend MWT (e.g. *"Reminder emails fill my inbox! This does not help my enthusiasm!"*) and 2) a lack of access to e-learning from home.

#### 7.7.2.2 Area Health Service 2

The AHS 2 respondents cohort focused on feeling disengaged when training was not relevant or applicable to their day-to-day practice. The next most frequently coded reasons for disengagement related to training repetition and a reluctance to engage in e-learning. The third most frequently coded reason for disengagement was poorly skilled trainers and training that was compliance driven. Additional issues raised by one or two respondents in the group included 1) challenges to booking into training, 2) complaints about having to travel to attend training that is not relevant to them, 3) complaints about the volume of training required and 4) concerns when other workers are negative about MWT or did not understand the" *importance*" and value of MWT.

#### 7.7.2.3 Area Health Service 3

Respondents in AHS 3 focused equally on the perceived irrelevance of training, on training repetition that was of no value, and on the poor design and delivery of training programs. Regarding relevance, respondents referred to training being too "general", to training not being specific to the discipline, or to the procedures trained making no difference to workplace practices. Comments referring to repetition discussed content being repeated too frequently, and training being repeated without content being updated or refreshed, for example, "It's the same every year, even the quiz questions are the same." and" It's the same old material every single year."

Reference to poor design and delivery of training included multiple references to training being *"boring", "non-interactive (sic)".* In addition, three responses referenced trainers being *"not an expert"* or *"not engaged themselves."* 

Complaints about online training were the next most frequently cited with five references to online learning platforms being "*unreliable*." Reference was made to online assessment quizzes being meaningless, for example, "...*you can just pick an answer until you get it right.*"

The final and least frequently coded themes related to a lack of time to undertake MWT and the perception that MWT is a compliance exercise rather than a learning opportunity. References to time noted to both insufficient time and interruptions to time when undertaking online learning. References to compliance referred to both accreditation requirements and organisations responding to adverse events. There were no examples of overtly negative or emotive responses within this cohort and overall, the perceptions of respondents AHS 3 were largely positive with some suggestions for improvement, as illustrated by one response: *"I recognise its value but would prefer the messages were reinforced in discussion with others. I want to feel that I am not the only one who is learning – not the only one who will now apply the lessons from the training."* 

#### 7.7.3 Age

The themes coded within different age groups were consistent, with small variation in emphasis and frequency of reference. All cohorts, except for the largest cohort (N=59, 51-60 years of age), coded lack of relevance as the primary cause of disengagement. Respondents in the 51-60 years of age group, most frequently cited poor program design and delivery being the cause of disengagement, referencing a preference for MWT to be: 1) "*challenging*," 2) include new (or for repeated training *"refreshed"*) content, 3) include

opportunities for application and discussion of learning, 4) consider the learner's prior skills and knowledge, and 5) be delivered by trainers who are actively engaged and skilled in program delivery.

In the cohort of respondents over 60 years of age (N=25), after relevance, the second most frequently coded theme was about poor trainers, referencing *"Limited experience"* and *"When the teacher is not switched on"*, and the requirement to complete training on topics they believe they are already skilled in.

Responses in the 41-50 years of age cohort (N=55) showed equal distribution of all coded themes while responses in the 31-40 years of age group (N=40) cited training that takes too much time as the second most frequent concern. This group describe time concerns in terms of the time required for training exceeding what respondents felt was reasonable for the value of the training, and that too much information was presented in individual training programs. This cohort had the highest level of opposition of all the age groups to both elearning and the process of accessing training. For example, this group referred negatively to multiple email reminders and comments on difficulty accessing MWT: *"It's laborious to book in."* 

In the smallest cohort (N=17, 21-30 years of age), the second most frequently coded issue was that training is not interactive and does not require active learning.

#### 7.7.4 Years in health sector

Coded responses from respondents with less than five years of experience in the health sector (N=15) focused almost exclusively on the design and delivery

of methods of MWT indicating that they feel disengaged when the training is online, when it is "*long*", when it is "*not well structured*". The approach of this cohort is summarised in the response: "*I will not really ever change my behaviours by reading information on a computer for 10 mins.*"

Respondents with five to ten years of experience in the health sector (N=22)also referred to poor design (e.g. lack of interaction, topics that should be delivered face-to-face being delivered online, poor assessment design) in addition to the lack of role relevance and lack of time to complete training. This cohort also referred to training being repetitious. The largest cohort of respondents (11 to 20 years of experience in the health sector, N=55), also noted poor design and delivery with frequent references to substandard trainers and training taking longer than required to cover the content. This cohort's most frequently identified concern (N=28) was the lack of relevance of the training to their roles and the repetition of training, for example: "I've have done it many times before and know the drill." This group also offered frequent negative references (N=12) to being taught information they already knew and practiced routinely. Further, the belief that training was a compliance exercise was cited as a reason for disengagement, as was the perception that they disengaged when peers or seniors in the organisation disregard the practices trained in MWT.

The most frequently coded theme related to disengagement in the cohort of respondentswith between 21 and 30 years of health sector experience (N=34) focused was the need for repeated training on the same subjects. This focus included a perception that much of the training was never updated. This cohort also questioned the value of the training, and the absence of designated,

uninterrupted time to do the training. References to a lack of relevance of training are expressed by this cohort of respondents as a preference for less generic and more targeted training.

Finally, respondents with over 30 years of experience in health (N=30) referred more frequently than others to their conceptualisation of MWT being a compliance driven requirement of the employer rather than a learning opportunity. This group cited this as frequently as the lack of relevance of training to their work roles as a reason to disengage from MWT. Poor training design and delivery was expressed in terms of frustration with the need to access training via learning management systems, inexperienced trainers, and an over reliance on e-learning. The requirement for repeated training on the same subjects, both within health organisations and across different health organisations, was also cited as a reason to disengage.

#### 7.7.5 Years in WA Health

Overall, the themes identified in the years of health sector experience aligned with those within the years of WA Health experience. Respondents with less than five years of experience in WA Health (N=15) referred almost exclusively to perceptions of poor design and delivery of MWT as the primary reason for disengagement. Criticisms included content of no interest, out-of-date content, lengthy presentations, or e-learning programs, an over reliance on e-learning, and poorly structured courses. The cohort of respondents with five to 10 years of experience in WA Health (N=22) also focused on the design and delivery of MWT and the lack of relevance to their work. Comments about poor design included references to the overuse of e-learning, lack of scenarios or examples

relevant to their work roles in both face-to-face and e-learning (e.g. frequent reference to being *"Too generic"; "Too simplistic"*) and topics delivered through e-learning that would be better trained face-to-face (e.g. Aboriginal cultural e-learning was cited three times). This cohort also expressed concerns about the lack of time to complete training and the relative value of training versus their role responsibilities, for example, *"...takes too much of my clinical time."* This age group also introduced the concern of disengaging from MWT if it is perceived be compliance-driven or if it is not supported by the organisation or peers, for example, *"It annoys me when other people don't take it seriously."* 

The data from respondents with 11 to 20 years of experience in WA Health (N=55) focused negatively on training repetition, for example, "I've done the same one for 20 years!", "Information I've been told every year for 15 years." and "...the same e-learning packages with the same examples, with the same test questions are used every year." This group held the view that MWT was compliance-driven rather than concerned with learning, for example, "It is boring and obvious the course is being done to meet organisational needs and not the individuals. This cohort described training as being irrelevant to their roles and said learning needs were rarely considered in the requirements for, and design and delivery of MWT. Consistent with other cohorts, this group indicated that both a lack of time to do training, and an "overreliance" on e-learning decreased engagement.

Respondents with 21 to 30 years of WA Health,(N=34) experience referred to all themes (i.e. lack of impact training, lack of relevance, lack of engagement opportunities in face-to-face and e-learning programs and overreliance on elearning) but focused on training as a compliance requirement rather than a

learning exercise, and referred also to the lack of time, or interruptions to time, that impacted on their training experiences.

The group with the greatest years of experience in WA Health (over 30 years, N=30) referred to every theme identified in other cohorts with no specific emphasis on any theme. The responses within this cohort can be summarised in one respondent's comments: *"It's boring, when its presented online, when there is no face-to-face, when you feel you are doing it to tick a box, when you don't actually contribute in anyway, when you can answer all the questions and get them correct without reading the program... when you have to complete it in your own time, when there is no feedback whatsoever."* 

#### 7.8. Interview findings

Data related to respondents' perceptions of engagement and disengagement were drawn from each of the three semi-structured interviews. The words *"engagement* "and *"disengagement*" were not specifically used by any of the interviewees however, the broad concepts were referenced by all. When questioned about MWT practices that are poorly attended or had limited participant engagement. Interviewee JH, an educator, spoke of the challenges workers experienced trying to get time to engage in MWT and specifically highlighted medical staff as being challenged in this area. They also referred to the value of allocated time for workers to engage in MWT: *"…certain … groups, I'm talking medicine in particular - have difficulty getting quarantined time off."* JH also noted that *"I think there is a cultural issue there as well*", commenting that medical staff engagement levels (as measured on MWT key performance indicators) have historically been less than nursing or allied

health staff. JH did not elaborate on the nature of the "*cultural issue*" but inferred that different professional groups hold different cultural perspectives of MWT. This was further reinforced by JH's suggestion that to improve clinical workers' engagement with MWT, training should be targeted at "CRAFT" groups (i.e. workers in clinical speciality areas) and focused on their specific learning needs. JH also stated that blended learning incorporating e-learning to either test pre-training knowledge and skills, or to provide theoretical background, followed by hands on skills-based learning increased participant's learning and involvement in MWT (i.e. engagement).

Similarly, Interviewee SL, an allied health clinician, referred to e-learning being used to support "refresher" (i.e. repeated) training to improve efficiency and reinforce the importance of encouraging workers to engage in training. SL spoke to the value of having clear advice regarding MWT requirements, and a dedicated training team available to provide guidance and support worker participation in MWT. Their experience was described as: "... it's (sic) pretty clear what is expected. That was beyond helpful – especially just rocking up and not having much idea of mandatory training, having a clear expectation was good". They also spoke of the value of having time to prepare to engage in MWT, with advanced planning, that is: "And you've usually had enough notice so it's not in a week's time ... its 8 weeks' time". SL also referred to an incentive offered in another State public service that ensured workers undertook training in paid work hours, and implied this would be a relevant incentive to encourage WA Health workers' engagement in MWT. SL raised the concept of "*reciprocity*" which they explained as being a sense of obligation to engage in training when bespoke training (Code Blue emergencies) had

been created: "...people have taken the time out to...create this for me. They've put so much effort into it, so I've got to put some effort into it."

BZ, an educator, spoke of the need for training to be timely, targeted, and preferably face-to-face to optimise workforce participation: "I think if you asked them (Ed: the workers in her organisation), they would say the most beneficial training is the training that's ad hoc or it's when we had a visitor in to talk about something...that stuff because it's kind of exactly what they need at the time." BZ also referred to "The problem is sort of one size fits all and it doesn't really fit us best". BZ's reference to "us" refers to the unique workforce at their organisation which included a high proportion of workers who are Aboriginal and who are engaged in workplace training programs, that is: "...we have Aboriginal staff who come in at entry level ... and they are not really required to have any qualifications"). BZ referred to the need to accommodate the specific needs of this workforce in the design and delivery of MWT programs. For example, "In everyday life we use a yarning model (Ed: for discussions) but when we're online learning we're not... it's online learning. That what I'm saying ... it's not terribly suited to our cohort. BZ also emphasised the value of updating content regularly and of ensuring that important training was repeated on an appropriate schedule. "Nothing much has changed in the six years I've been here. I don't think anything's been updated and the one thing that really gripes here in this organisation...is that the Cultural Awareness training is done once. So, someone can be working here for 30 years and have only done it once whereas they have to do the blessed hand hygiene and infection control every year!".

The main issues on engagement and disengagement identified in interview data were the need for training to be relevant to the targeted learners, the value of mixed teaching modalities (e-learning and face-to-face) to support learning, and the need for dedicated time to engage with MWT.

#### 7.9 Chapter Summary: Engagement and disengagement

This chapter described the findings about WA Health worker's perceptions of the factors that support worker engagement in MWT, what disengages workers and how MWT might be improved to optimise engagement. The findings inform three of the five research questions:

Q 3: How engaged is the PHS workforce in MWT?

Q 4: What factors are associated with PHS workforce MWT engagement?

Q 5: How do personal characteristics impact levels of MWT engagement?

The key themes coded within each dataset (i.e. qualitative and *quantitative* MWTS responses and worker interviews) were consistent and showed that where factors exist to encourage engagement, their opposite, or their absence, discourages engagement. For example, relevance is alternately expressed as: *"I see the relevance to my daily practice"* (Encourages engagement) or *"Not relevant to my area of work."* (Discourages engagement).

Triangulation of findings from the analysis of qualitative and quantitative data from the MWTS and qualitative interviews showed consistency in the themes reported by respondents as impacting on MWT engagement and disengagement. These included the need for relevance to work roles, professions, and individual learning needs and the need for both time and

"space" (cognitive and physical) to complete MWT. The data consistently showed that respondents were interested in learning on topics they perceive to be relevant and that they prefer interactive, face-to-face learning including opportunities to learn with their peers. The data identified a preference and need for skilled trainers with expertise in the training topic and its application to the workplace. Respondents also expressed a preference for "well designed" programs, that include up-to-date content and the application of contemporary, evidence-based teaching methodologies. Further, respondents want to see the behaviours and practices recommended in MWT being practiced by senior clinical staff, managers, and peers. Conversely, WA Health workers are disengaged with MWT when, as one respondent noted: "the training is uninteresting, non-interactive and not relevant. Plus, if the presenter(s) are not articulate, not knowledgeable, not engaging, not spontaneous and not open to discussion & change (i.e. accepting that adults learn in different ways and for learning to take place this needs to be addressed to meet the needs of the learner and the organisation."

Furthermore, the data suggests that demographic variables may influence respondents' perceptions about MWT engagement and disengagement. There was statistically significant evidence that age, employee, and years of experience were factors in the degree to which respondents report they engage with some MWT programs. There was also qualitative evidence from both worker interviews and MWTS responses. This evidence proposes that older respondents, and respondents with more experience in WA Health report they prefer to engage with training that is relevant, evidence based, designed with reference to adult learning principles, with current content. In contract,

respondents with less experience are more concerned with training being faceto-face and interactive. The data also showed that training practices differed across employers (AHSs), and worker responses reflected these variations. The issue of recognition of prior learning to support workers to move between AHSs, was raised by respondents in one AHS. There were also discernible, qualitative differences in how work role groups engaged with MWT. Medical respondents, and nurses with extended work experience, were more likely than other groups to engage with MWT when there was evidence that MWT had value and a positive impact on work practices.

In the words of one respondent, respondents are likely to disengage from MWT "when the training is uninteresting, non-interactive and not relevant. Plus, if the presenter(s) are not articulate, not knowledgeable, not engaging, not spontaneous and not open to discussion & change (i.e.: accepting that adults learn in different ways and for learning to take place this needs to be addressed to meet the needs of the learner and the organisation."

The following chapter discusses the key findings described in this and the previous three chapters and how they address the five research questions. The chapter also compares the findings of this study with the existing literature about the workforces' perceptions about MWT.

### **Chapter Eight: Discussion**

#### 8.1 Introduction

This study was initiated to explore workforce perceptions of mandated workplace training (MWT) and to inform strategies to address workforce reluctance to engage in MWT observed in one metropolitan public health service in Western Australia. A scholarly exploration of research on the history of MWT, how current practices had been arrived at, and evidence for the most effective way to deliver MWT identified gaps in the literature around the topic of MWT in general, and MWT in the context of public health systems. The review did however identify a body of literature on the principles and practices of adult learning (Knowles, 2011; Merriam & Beirema, 2011) and workplace learning (Billett et al., 2012; Billett et al., 2014, Billett, 2015; Illeris, 2014; Jacobs & Park, 2009) which can inform the delivery of effective learning opportunities in the workplace, including MWT.

This penultimate chapter explores the study findings relative to the existing evidence. It commences with sections that consider how the findings relate to the six research questions:

Q1: What MWT programs and delivery methods are used in the WA PHS sector?

Q 2: How does the PHS workforce perceive the need and purpose of MWT?

Q 3: How engaged is the PHS workforce in MWT?

Q 4: What factors are associated with PHS workforce MWT engagement?

Q 5: How do personal characteristics impact levels of MWT engagement?

Q 6: How do PHS workers perceive the impact of MWT on practice?

This is followed by a reflection on the implications of the findings for current practices of MWT within WA Health, before the chapter concludes with a summary of the key findings. Recommendations arising from this research are described in more detail in the final, concluding chapter.

# 8.2 Question 1: What MWT programs and delivery methods are used in the WA PHS sector?

This study is the first to collate information about current practices in mandated workplace training (MWT) across the metropolitan health services within WA Health. The study found unequivocal evidence that the organisation is expending significant resources on the design, delivery, administration, management and reporting of multiple MWT programs. Further costs include the paid work hours staff spend attending training. It described the number of MWT programs delivered (over 160), the learning topics addressed, and the workers required to undertake the training. The study found only three programs were delivered consistency across sites to all workers (three e-learning training programs - Accountable and Ethical Decision Making, Record Keeping Awareness Training and Aboriginal Culture Awareness Training mandated by WA Health Operational Directive) with the remaining programs individually determined, designed, and delivered at individual sites.

This research found no homogeneity across the multiple, metropolitan WA public health sites regarding to how MWT is managed. Nor was there a consistent rationale for mandating programs at each site. The process for

determining what training is mandated, how frequently it is required, how it is governed, how it is named, which workforce groups are required to undertake each training program, how it is delivered, the content, format, and delivery method of each program, who coordinates and delivers the program, and how workers' training attendance is recorded are determined by individual Area Health Services (AHS), with the result that practices vary considerably across sites. This variation does allow individual sites to address specific local learning needs. For example, the specialist Women and Newborns Hospital requires staff to complete multiple MWT programs on obstetric and neonatal care topics. However, it also potentially contributes to duplication of effort and increased costs when each site creates their own MWT program on the same topic, leading to increased costs for the WA Health system. Site variations can also create challenges for staff working across multiple WA Health services in that there is no consistent RPL process for these workers meaning that are required to repeat training at multiple sites. This finding that MWT is managed differently at each WA Health service is not inconsistent with other Australian health jurisdictions where MWT requirements are variously managed at a site, health service and state level, resulting in variation in the programs delivered to workers (HETI, 2023; Queensland Health, 2021). Notably international health services including the UK National Health Service are moving towards a practice of standardised learning objectives for mandated training, in part to support the capacity for workers to move across multiple services without having to complete additional training at each site (Workforce Development Trust, 2023). Similar practices operate in the Australian construction industry, whereby industry agreed learning outcomes have been identified and multiple

training programs designed to address the objectives. Workers can undertake training delivered by any registered training organisation (RTO) to address the same learning outcome and are issued with a White Card signifying the completion of the mandated training requirements for onsite safety. The White Card is transferrable across employers throughout the country (WA Department of Energy, Mining, Industry Regulation & Safety, 2024; Service NSW, 2023).

The study also found no central learning management system was used to host, manage, and report on MWT activities across WA Health and that this contributed, at least in part, to limiting individual agencies' capacity to offer recognition of prior learning (RPL) for workers working across multiple services.

The study found that the rationale for mandating training, as opposed to making it available for the workforce to access if desired, was not consistently articulated by organisations, to the extent that the study could not identify why some organisations had opted to mandate some training programs. Where articulated, the rationales were related to compliance with legislation, WA Health regulations and policies and, supporting safe practices. Furthermore, where a rationale for mandating training was provided, the rationale for the same program could be different at different sites. Similarly, the term "mandated training" was not used consistently across organisations. In some jurisdictions it was used to define the required training for all workers new to the organisation, while in others it was used to define only training required by legislation or organisational policy.

The final finding identified an organisational preference for delivering elearning over other learning methodologies, and the finding that all MWT delivered by WA Health were structured by the organisation, active in that workers need to actively engage in the learning activity, and either on-the-job (e-learning) or off-the-job (e.g. task-based hospital life support training). This finding showed that other workplace learning options such as shadowing, mentoring and on-the-job training are not utilised. The reason for this reliance on e-learning was not specifically explored in this study but can be speculated to involve the known benefits of e-learning to efficiently deliver learning to large, geographically diverse learner cohorts. It may also be associated with the capacity of the organisation, in terms of skilled educators, facilities and workforce, to create more complex learning opportunities. More controversially, it may be an outcome of organisations focusing only on the compliance requirements of MWT. That is, if there is no specific concern about the learning outcome of MWT, e-learning is a fast, efficient way of addressing compliance alone.

How then, does WA Health MWT compare with other organisations? Some findings of this study are consistent with existing literature which shows that most large organisations in Western industrial countries require workers to undertake MWT and that the training is primarily focused on either occupational health and safety or issues that support the practices of the organisation (ADT, 2021; Workforce Development Trust, 2024). Indeed, the topics delivered within WA Health are largely consistent with those described in health services in Scotland (NHS Greater Glasgow & Clyde, 2023) and England (Workforce Development Trust, 2024) and other Australian

jurisdictions (HETI, 2023; Queensland Health, 2021) except for Aboriginal cultural training which is not required outside Australia. No evidence was identified in the literature to suggest that the extensive number of mandated courses required in WA's Women's and Children's specialist hospital (N=71) are required in similar services interstate or overseas. Topics required in other international jurisdictions that are not currently required in WA Health include preventing radicalisation, equality, diversity & human rights, and conflict resolution required in England (Workforce Development Trust, 2024) and, in Scotland, public protection (i.e. Adult Support & Protection and Child Protection) (NGS Greater Glasgow & Clyde, 2023).

The findings of this study vary from evidence in the literature regarding the absence of centrally coordinated management of MWT. In WA Health MWT is managed independently in each health service, as in some other Australian jurisdictions (SA, ACT). In other Australian jurisdictions (Queensland and New South Wales) and in the United Kingdom (UK) MWT is governed and managed centrally by the public health organisation. In the UK the National Health Service (NHS) uses a Core Skills Training Framework which details eleven training topics, their intended learning outcomes, the rationale for mandating the training, the required frequency of training and the education standards (NHS Digital, 2024). These guide the delivery of training required for all workers in all health services across the system (Workforce Development Trust, 2024). Training is provided by various education providers, within and external to the public health organisation. The stated intent of this approach is to ensure that workers have the necessary skills to perform their work effectively, to facilitate the transfer of workers across the system by supporting

recognition of prior learning (RPL), and to meet legislative requirements (Workforce Development Trust, 2024). The framework also contributes to goals within the organisations' long term workforce plan that supports workers to upskill, enhances their sense of belonging and builds workforce capacity (NHS, 2023). Queensland Health has a similar MWT framework which includes the title, the workers required to complete the training, the duration and frequency of the training and the relevant legislation, policies or procedures justifying the need for mandated training (Queensland Health, 2021).

The study findings about the limited types of MWT learning opportunities provided to the WA Health workforce (i.e. two of eight possible learning strategies as defined in Jacobs and Park's (2009) conceptual model or workplace learning) demonstrates that, consistent with descriptions of other organisations (ADT, 2021) and health organisations in particular (HETI, 2023; NHS, 2021; Workforce Development Trust, 2024), WA Health relies on e-learning and task-based face-to-face training for all their program deliverables. The lack of descriptive evidence in the literature about how MWT is delivered in other organisation does not allow for comparison of WA Health practices.

There is evidence that organisations can have a positive perception of elearning as a convenient, cost-effective tool to deliver training to large, geographically distributed learner cohorts (Bloomfield et al., 2023; Chiu, 2021; Kimiloglu et al., 2017). Evidence of its ability to impact on workplace behaviours is however inconclusive. Kim and Chong (2023), for example, explored safety education for laboratory workers delivered via e-learning in South Korea and concluded that it was not achieving its intended outcome, in

part because workers did not see the relevance of the training, were not engaged in the e-learning, and did not perceive safety to be a significant concern. Learners keen to learn are more likely to indicate that e-learning is useful, although there is no evidence that it leads to long term learning or behaviour change. One comprehensive meta-analysis of the literature looked for evidence to support a \$US40 million strategy to deliver three e-learning programs (information security, workplace harassment and government ethics) to American Veterans Affairs employees (Peterson & McCleery, 2014). This meta-analysis identified minimal evidence in the literature (only seven of any initially identified 3,516 articles met inclusion criteria for analysis) about the efficacy of like programs. It concluded that there was no evidence of the value of these specific programs. With limited available evidence to support the learning impact of e-learning as a stand-alone learning strategy, the capacity of WA Health's multiple online programs to achieve learning and practice change can reasonably be questioned. As Jacobs and Parks' (2009) workplace learning model demonstrates, there are multiple alternate strategies to support workplace learning that are not currently utilised and which might be considered as viable alternatives to replace, or supplement, elearning.

Central to the issue of whether to extend MWT beyond current e-learning is the question of how organisations conceive the intended purpose of MWT and how this purpose is communicated to staff. WA Health, like other health organisations, cite compliance with legislation, policies, and guidelines as a major motivation for MWT. For organisations, the demonstration of compliance is an independent goal of MWT. Writing about compliance training to reduce

corporate misconduct and fraud, Chen and Soltes (2018) refer to corporations "paying immense and growing compliance costs without seeing benefits and yet they continue to invest – not because they think it's necessarily productive but because they fear exposing their organizations (sic) to greater liability should they fail to spend enough" (p. 11). They also recommended that the goal of training should also be to "improve employees' understanding of the rules" and "instil and perpetuate appropriate behavior (sic)." They argue that there should be more rigorous evidence to demonstrate thar staff behaviours change as proof of the efficacy of the training.

There is also significant evidence that employees also want MWT to be meaningful and offer them opportunities to learn and improve their skill and knowledge (Alcolado et al., 2014; Jevon et al., 2012; Gerada, 2019). The way WA Health employees are currently advised about MWT varies at each site but there is a consistent emphasis on compliance and that training is mandated. There may be value in focusing instead on the learning objectives of the training and the actual impacts intended should employees implement the trained behaviours. Adult learning principles emphasise that understanding and aligning with the purpose of learning is required for optimal learner engagement (Knowles, 2011; Peterson & McCleery, 2014).

Some of the incidental findings arising from the description of MWT in WA Health have been identified in other studies. For example, the lack of a consistent taxonomy to describe MWT is cited by Peterson and McCleery (2014) who note that it impedes the identification of research literature on the subject. Other findings are more difficult to discuss given the lack of evidence in the literature. For example, this study found that requirement for training

repetition vary across WA Health services, and that the rationale for the frequency is not consistent either within sites or at different sites. There is some evidence in the literature around the impact of repeated training (or dosage as it is referred to by some) related to physical task training, for example, typing skills (Baddeley & Longman, 1978), cardio-pulmonary resuscitation (CPR) (Anderson et al., 2019; Niles et al., 2017; Nishiyama et al., 2015; Patocka et al., 2015). There are fewer studies about other types of training (e.g. cognitive task training), and these are inconclusive (Rogers et al., 2020). This evidence indicates that there is reason to question whether the apparently arbitrary requirements for WA Health workers to repeat training can be justified, particularly as no evidence for the value of repeated e-learning was identified. In summary, the MWT required of WA Health workers is largely consistent with other health services with respect to the topics covered. The variation of delivery, management, and administration of MWT across different sites within WA Health is not consistent with other jurisdictions and does potentially contribute to duplication of costs and effort, and the ability to support RPL. It may however allow for more localised, targeted MWT content, although evidence from respondents in this study does not suggest that this is happening.

## 8.3 Question 2: How does the PHS workforce perceive the need and purpose of MWT?

This study provides new information about the complexity of how the WA Health workforce conceptualises the purpose of MWT. No evidence was found in the literature of other studies identifying what workers believe to be the

purpose of MWT. No comparisons with these findings can therefore be made. The following discussion explores the implications of the findings around perceived purpose.

When offered the option to select from a prescribed list of purposes generated from the limited, existing literature describing the purpose of MWT from the perspective of health service provider organisations, most of the workforce indicate more than one purpose for each of the required training programs. Depending on the program, between a third to a half of the workforce focused on the maintenance and improvement of safety in the workplace, with accreditation requirements a close second. This finding is consistent, to some extent, with the organisations' own stated purpose of MWT. That is, while the organisational literature provides limited data about the rationale for MWT, where it *is* documented, it refers to MWT addressing legislation, organisation, or WA Health policies.

The only significant variation to the focus on safety and compliance as the purpose of MWT, was their response to the Aboriginal Cultural Awareness program which they perceived to be aimed at changing organisational values, beliefs, and culture. This finding is concerning as the program aims to "enable people to develop their cultural competency and to improve cultural safety for Aboriginal patients, a population of high health risk in WA" (Aboriginal Health, 2023). The findings suggest a significant proportion of WA Health workers have not linked the training to the intention of improving safety for Aboriginal patients.

The free text descriptions of the perceived purpose of MWT provide an even more complex picture in which perceptions about the purpose of MWT are

aligned with, at times, emotional responses to the appropriateness or validity of the perceived purpose. These data reveal that respondents believe the purpose of MWT should be to support safe practices in the workplace and to skill the workforce to enable them to perform effectively in the workplace. Although legislative and policy compliance is identified as a purpose for MWT, the workforce does not consider it to be a valuable purpose by itself. That is, there is a preference for training that provides what the workforce perceive to be meaningful and useful learning. These findings are consistent with adult learning theories that posit that adults learn when there is a perceived need and where the training is relevant to their roles (Knowles, 2011). Understanding what workers perceive to be the purpose of MWT can assist organisations to promote and encourage MWT engagement. The findings clearly show that compliance alone is not valued as a rationale for MWT but that training which impacts on the safety of workers and patients is more highly valued. The evidence that not all respondents perceive MWT to support safe practice suggests a need to better link MWT's promotion and content with its intended purpose. Organisations can better explain MWT's purpose to workers to encourage their engagement. This might require describing the relevance of training to specific roles or work settings, for example, by providing data on the frequency of incidents that MWT is intended to prevent or reduce in a specific work area (e.g. Manual handling injuries and hand hygiene related infections).

The finding that respondents identify multiple (over 60) additional topics that they believe should be mandated for training highlights that respondents believe there can be value and purpose in MWT. This is consistent with some

evidence in the health literature which demonstrates that respondentswant additional training on specific clinical skills or tasks (Harvey et al., 2019; Talaulikar et al., 2014; Verzini et al., 2008); broad clinical skills (Berry, 2014; Glasper, 2019; Hunt, 2014) and non-clinical issues (Gordon et al., 2019; Coole et al.,2015). There is also evidence in this study and the literature that articulates workers' concerns about organisational barriers that restrict their access to MWT, for example, during the COVID-19 pandemic when training was deferred (Duggan et al., 2022; Wright, 2018). These reports reinforce that workers value access to training both as a learning tool and to achieve CPD targets. In this study, the purpose of the new training programs suggested by respondents is not articulated but given the topics proposed, it can be speculated that workers wish to engage in training that supports effective team communications, workplace safety and specific clinical skills. This study did not identify why respondents believe the additional training should be mandated rather than just available to access. Furthermore, it does not describe the specific contribution additional training would offer to themselves, their workplace, colleagues, or patients. The volume of additional topic suggestions however indicates that respondents do perceive some value in mandating training.

In summary, the finding that the WA Health workforce consider the main purpose of MWT to be to address safety issues can used in the promotion of the value of MWT. By demonstrating the link between training and intended safety outcomes, organisations can encourage workers to engage with the training. The challenge may be in having sufficient, robust evidence to

demonstrate that training does in fact lead to learning transfer and safe practice.

#### 8.4 Question 3: How engaged is the PHS workforce in MWT?

For the purposes of this study, engagement was defined as "how actively involved and interested a person is in the training". Employees of WA Health are required as a condition of employment to complete MWT therefore the issue of engagement may be seen as largely irrelevant given the ultimate measure of concern to organisations is compliance rates (MWT completions). This approach however ignores the opportunity costs of failing to meaningfully engage workers in training. Evidence demonstrates that active engagement in workplace learning is more likely to result in new skills or knowledge being acquired, retained, and applied in practice (Bryson & Hand, 2007; Kelly, 2013; Kuh et al., 2010; Parsons & Taylor, 2011). Further evidence shows that it has the potential to impact positively on employees' sense of commitment and loyalty to, and reciprocity with, their employer (Tian et al., 2016; Chen et al., 2002). By approaching MWT as "a tick box" compliance exercise, as multiple respondents in this study describe it, rather than a learning activity, organisations risk not realising the potential return on investment that MWT represents.

This study found that respondents' levels of engagement with MWT overall are broad ranging but largely ambivalent. The highest mean engagement score of the ten individual MWT programs was 71 on a 100-point rating scale (Lowest engagement score 42.7), and the mean overall (all programs) rating score was 5.26 on a 10-point rating scale. While no comparative measures of

engagement or disengagement were identified in the literature, the finding is consistent with the qualitative literature, and the qualitative findings of this study, which describe a variety of responses to MWT ranging from requests for more and better access to MWT (Duggan, et al., 2022; Fleenor et al., 2022; Harvey et al., 2019; Talaulikar et al., 2014) to outraged rejection of the need for MWT (Gerada, 2019; Hills, 2015; John, 2015; MacDonald, 2019). The findings indicate a diversity of views which is, perhaps, to be expected given the size and complexity of the workforce, which encompasses a range of roles, levels of training, skills, and knowledge (Australian Institute of Health and Welfare, 2022). The challenge the findings represent however is how to increase levels of engagement to improve learning outcomes.

Qualitative descriptions that describe MWT as "torture inflicted on ...staff" or "something to endure" and "definitely needed and totally recommend it to everyone" demonstrate the range of attitudes reflected in the data. At its most extreme respondents express an element of cynicism or scepticism about the value of the training to themselves or the organisation, a phenomenon previously noted in the literature (Gerada, 2019; MacDonald, 2019). Similarly, the perception that MWT is imposed on workers by management or the organisation for purposes that the respondent did not support has also been reported in the literature (Hartzband & Groopman, 2020). Pejorative references to MWT being a "Box ticking exercise – no purpose as far as I can tell", and cynicism around MWT's use to protect organisational reputation, such as, "To make the department look better in the public eye in response to bad episodes that made it into the press", and "for managers to cover their backsides" reflect this.

Despite these negative elements, most commentary reflects a recognition that MWT is *"in part absolutely necessary and in part just ticking a box"* and *"a patchwork quilt with some good bits and some bits that need replacing"*. That respondents want to be engaged in good quality MWT is evidenced by the finding that almost half of the respondent cohort requested at least one additional training topic with a total of 67 new, individual topics proposed. While no other research studies exploring workforce levels of engagement with MWT were identified, the findings from this study are consistent with the literature that reports concerns about the quality and quantity of MWT required in public health systems across the world (Alcolado et al., 2014; Gerada, 2019; Hills, 2015; Jevon et al., 2012; John, 2015; Mythen & Gidman, 2011), the number of requests to increase MWT to meet specific needs identified by workers (Glasper, 20119; Harvey et al., 2019; Fleenor et al., 2022; Wright, 2018).

Additional important findings from this research are that workers' reported levels of engagement vary with programs and that the programs with the highest levels of engagement are the three delivered as task-based, face-toface training (Life support, manual handling, and management of aggression). It also found that even these showed a mean engagement score of less than 70 on a 100-point scale, suggesting there are opportunities to improve the levels of worker engagement with MWT. No comparative data were identified in the literature.

Significantly, most respondents indicated they were willing to engage in education and training, including mandated training, where they saw a purpose to the training and value when they perceive an opportunity to learn

and improve their skills and practice. By delivering MWT that is not engaging, WA Health is failing to capitalise on the investment expended on delivering MWT. Further, by leveraging workers' preparedness to engage in meaningful training, WA Health may realise organisational benefits such as increased overall worker engagement, improvement to workplace practices and related increases in safety and quality metrices.

### 8.5 Question 4: What factors are associated with PHS workforce MWT engagement?

As discussed above, levels of engagement varied between individual

programs with face-to-face programs having greater levels of engagement than e-learning. Engagement levels were also high when the MWT program was perceived to be relevant and of value to respondents in their roles. Respondents will complete MWT *"because its mandatory"* but do not consider themselves engaged in the process unless it has relevance to them. This finding aligns with adult learning theory previously described.

The findings from the qualitative data describing engagement and disengagement identified that moderators, or factors that impact how engaged respondents are with MWT, include learners' understanding the intended purpose and value of the training, use of appropriate training delivery methods (face-to-face or blended learning preferred over e-learning), perceived quality of trainers, undisturbed time to complete training, content relevant to worker's role and responsibilities in the workplace and demonstrated organisational commitment to ensuring behaviours taught in MWT are reinforced and supported in the workplace. Respondents are more likely to disengage when

training is perceived to be a compliance, "*tick box*" exercise rather than what they perceive to be a genuine learning opportunity. Respondents provided a rich array of proposals to increase levels of engagement including ensuring content is regularly reviewed, that it involves active learning, that it contains meaningful assessments where relevant, and provides evidence regarding the efficacy or value of training.

As no equivalent studies exploring workers' perceptions of MWT in other health organisations were identified in the literature, it is not possible to comment about whether these findings are unique to this worker cohort. The findings however broadly align with adult learning theories (Knowles, 2011) and workplace learning research (Illeris, 2011), which propose that an adult learner preferences relevant and timely learning opportunities, and training facilitators with recent, relevant work or technical experience in the domain in which they are training (Bjerregaards et al., 2016; MacDonald, 2019).

This study found that WA Health employees' reported levels of engagement with MWT is impacted positively by perceived relevance of training to their work role, their work area and/or profession; understanding and perceiving there to be purpose and value in the training; effective training design that encourages interactive team training; allocated time to engage in training and organisational support for training. This study also found that the need for allocated space for training and delivery by skilled trainers was a critical contributor to engagement. These findings (exception for space and trainers) are consistent with a recent literature review of barriers and enablers on mandatory training (McAuliffe & Gledhill, 2022) that identified the same enablers in addition to training delivered in a variety of modalities to
accommodate different learning styles, regularity of training and feedback on performance. They also identified barriers to MWT engagement (time, cost, and lack of relevance) that have been reported by others (McAuliffe & Gledhill, 2022).

# 8.5.1 Understanding value

The finding that respondents need to understand the value of MWT to feel engaged is challenging in that, as described in the literature review, value can be perceived differently by different workforce groups (e.g. MWT value for organisations may be limited to compliance rates while workers value learning new skills and knowledge). Further, there is limited evidence to demonstrate that much of the training currently delivered in the workplace training domain results in learning or learning transfer into workplace behaviours (Blanchard et al., 2002; Campbell et al., 2019; Lamont & Brunero, 2018; Johnston et al., 2018). As such, organisations have little to base an argument to demonstrate the value of MWT to workers beyond referencing the achievement of compliance requirements and reporting participant satisfaction or participant reports of value. Therefore, all organisations delivering MWT, including WA Health, should aim to routinely conduct critical reviews of the impact of programs delivered and promote a more systematic approach to evaluation that considers learning outcomes, learning transfer and the behavioural impact of training. Positive evidence arising from this could be applied to promoting MWT to the workforce.

# 8.5.2 Trainers

The critical evaluation of training program requires access to a workforce skilled and knowledgeable in adult learning principles, teaching and learning methods, and program evaluation. Evidence from this study indicates a degree of concern about the quality of some educators working across the WA Health system, with specific reference to a perceived lack of ability to design and support interactive learning incorporating experiences relevant to specific work areas. There is evidence in the literature that many workplace educators do not have formal training in education (Cranton & King, 2023: Ong et al., 2022). Further examination of the current educator workforce in WA Health could be warranted to ensure appropriately skilled and qualified staff are employed in roles that impact on MWT delivery.

# 8.5.3 Training format

The findings that the workforce feels most engaged in face-to-face interactive training incorporating scenarios relevant to the workplace is important and raises the question of why WA Health currently relies predominantly on e-learning programs to deliver their MWT suite. While the rationale for this practice was not specifically identified in this study, it is likely based on evidence that e-learning is both a cost-effective method of delivering training to diverse and geographically dispersed populations (Bloomfield et al.; 2023; Chiu, 2020; Kimiloglu et al., 2017) and offers benefits such as consistency, and the opportunity for self-paced learning (Gegenfurtner et al., 2016; Greene & Marcham, 2019). Evidence about the learning value of e-learning, however, is mixed, with some researchers indicating "There is very limited evidence

demonstrating when and how e-learning best enhances education and learning" (Regmi & Jones, 2022, p. 2). Barratt-Pugh et al. (2011), discussing safety training in the construction industry, describe the risk that online learning offers only transmissive learning rather than the transformational learning that will support changes to behaviour and organisational. E-learning programs that do support learning are well-structured, with clear learning objectives that align with content. They are contextualised to the settings in which the learning would be applied, are interactive and enhance the relationships between trainers and trainee and align with meaningful assessments. Well-designed elearning is also effective when used as part of a blended learning program that builds on previous learning (Kim, 2006; Regni & Jones, 2022). In addition, pragmatic practice concerns such as access to computers, and adequate technical literacy to support workers to navigate online platforms and the elearning programs are also required (Beckett, 2023; Naciri, 2021; Reljic et al., 2023; Tabatabaeichehr, 2022). In short, while e-learning is a useful tool to cost effectively achieve compliance targets for large organisations, it needs to be well designed, interactive, and relevant to workers to be fully engaging, and to achieve learning outcomes. This evidence might be usefully applied to the design of WA Health e-learning. Alternately, the organisation could consider transitioning to more face-to-face training as preferred by workers.

# 8.5.4 Resourcing of MWT

Transitioning from the current e-learning to face-to-face modes of MWT delivery would require a review of the resources currently allocated by WA Health organisations to support MWT. Face-to-face delivery is labour-intensive and requires access to appropriately skilled facilitators.

This study found that respondents are concerned that they receive training from appropriately qualified trainers, and that the definition of 'appropriate' means different things to different respondents. For some respondents this means people with real life experience in the learner's work setting or role. For others it is someone with either formal or informally recognised teaching skills such as the ability to support reflective practice, or to create learning environments in which questioning, and peer learning is encouraged.

The education workforce models described in the health literature, and the grey literature of health services, are myriad. In some settings workforce education and training is delivered by senior clinical or technical experts as part of their routine duties (Cranton & King, 2003; Ong et al., 2022). Other organisations have centralised training units with a workforce responsible for delivering education across the whole organisation (NMHS, 2020). Standalone education units for allied health respondents are relatively recent (Nehyba et al., 2009), however independent medical, and nursing and midwifery education services have been long established to support the clinical workforce and are often staffed by health professionals who work clinically and deliver education both on and off-the-job. Yap and Medler (2018) provide an Australian overview of nursing workplace education models and Geffen (2014) describes the history of Australian medical education. The literature suggests that training for non-clinical health sector workers is generally delivered by corporate training or organisational development units (NMHS, 2023). Once again, there is sparse evidence in the literature regarding the relative value of each model and their capacity to deliver the required training. However, those models that allow for workers in different roles within the organisation to be

engaged in the design and delivery of education delivered to their work area might be considered effective in developing programs relevant to that area.

Another relevant concept from the literature is that of co-design where training participants are active agents in the design and delivery of training targeted at them (Bryson, 2020; Davies et al., 2022; Cheung et al., 2023; Cole et al., 2022; St John & Akama, 2022). The implications for organisations planning to implement a co-design model of training with their workers include the need to allocate workers time to be involved in the planning and delivery of education. Given the diversity of the WA Health workforce and the finding that respondents want training relevant to their work areas and professions, this could include workers from different work areas and workers from different professional groups being engaged to design training to multiple individual settings or work roles. Cost-benefit modelling of the resource strategies would also be required to ensure investment value. Practically, this may also be challenging to operationalise at this time when the health sector is experiencing workforce shortages (Boniol et al., 2022; Duckett, 2005).

Implementation of any significant change to how education services are resourced and managed, or any changes to how MWT is designed and delivered, would ideally apply robust change management principles to optimise the uptake of changes and minimise disruption, as evidence suggests that failure to do so is likely to result in workers disengagement and poor sustainability of changes (Hays, 2007; Hiatt & Creasey, 2012; Seefeldt et al., 2022).

# 8.5.5 Organisational support

The final element to discuss in relation to findings about moderators of engagement and disengagement of the WA Health workforce in MWT is that of organisational support. This study found that respondents described organisational support for engagement in MWT in multiple ways. They referred to the need for clear messaging about MWT requirements (i.e.: what training is required, by whom and in what time frames) including clarity about RPL from other sites. Ease and efficiency of access to training including access to learning management systems, simple booking processes, physical locations, or quiet learning spaces were also requested. Further, the workforce referred to the allocation of quarantined time to complete training and, the potential for training time to be covered by other workers who could undertake their normal duties. Ensuring that the content of training was achievable with the workplace was also desirable. Finally, respondents referred to the need for supervisors, managers, and executives to model the behaviours taught in MWT, to reinforce the behaviours taught in MWT in the workplace, and to hold workers to account if they do not demonstrate these behaviours.

The findings of this study are consistent with the current evidence that organisations impact workplace learning. Factors such as organisational culture or climate, and supervisor behaviours, both before and after training, can impact the take-up and motivation to engage in workplace training, and the transfer of that training into workplace practices and behaviour (Baldwin et al., 2009; Bryson & Hand, 2007; Noe & Winkler, 2009; Parsons & Taylor, 2011). Comments from the WA Health workforce were consistent with findings from other industries that indicate workers' perceptions of how genuine and

committed an organisation is to their development impacts positively on their preparedness to engage in MWT. For example, in the construction industry, it been reported that online learning does not lead to transformation learning when there a lack of "managerial legitimacy" (Barratt-Pugh et al., 2011, p.199) in which managers are actively supporting staff to engage with the learning content in the workplace. Other strategies to increase engagement include 1) ensuring training or support is offered to address development or performance gaps, 2) engaging workers decisions about training content, methods and learning objectives, 3) tailoring training to workers' individual development needs and 4) providing regular monitoring and support of their performance during and after learning through feedback and coaching (Santos & Stuart, 2003). Similarly learning transfer is more likely to occur when the training is co-planned with the worker and targeted to their personal needs, when the learning is immediately applied in the work setting with support from supervisors, and when feedback is provided about how skills are applied in the workplace (Kyndt et al., 2014; Maurer et al., 2003; Maurer & Tarulli, 1994; Noe at al., 2010; Park & Eun-Jee, 2018; Sandars et al., 2011; Santos & Stuart, 2003).

Evidence from the literature suggests that supervisor support is even more important for learning motivation and transfer when training is mandated rather than voluntary (Salamon et al., 2021). That is, supervisors can play a vital role in increasing MWT engagement by providing encouragement to attend training, credit for and support to try new competencies in the workplace, time to practice, recognition and credit for application of skills (Arefin & Islam, 2018).

There is no single unified theory or model of organisational support for workplace learning (Bosset & Bourgeois, 2015) that WA Health might apply to address the worker feedback identified in this study. Key issues from the literature include implementing strategies to ensure that "...the employee feels supported by the organisation because the organisation cares about their opinion and is willing to help or shows concerns" (Kyndt et al., 2014, p. 316), and that the organisation values their contribution to both the workplace and learning (Eisenberger, 2002). Worker recognition programs, supervisor support, and feedback mechanisms for workers should therefore be considered, in addition to financial support, time allowance, workload reduction, flexible work hours to support training attendance (Bosset & Bourgeois, 2015). WA Health could also more explicitly communicate the strategic link between the MWT and the organisation's objectives and to use situational cues and consequences at the level of the individual workplace (Rouiller & Goldstein, 1993) to create a learning culture in which "...organisational members share perceptions and expectations that learning is an important part of everyday work life" (Tracey et al., 1995, p. 241). Situational cues can include peer and supervisor reminders to use the practices trained in MWT, and consequences if practices are not utilised. The former strategy has been used to good effect in an eight-year Australia-wide initiative to improve hand hygiene practices in the health system which includes regular auditing of on-the-job hand hygiene practices and feedback to workers via auditor and supervisor verbal feedback and work area posters and communication tools (Grayson et al., 2018).

In summary, the elements identified by WA Health respondents as contributing to their levels of engagement and disengagement with MWT align with current literature evidence. No evidence regarding what might be considered an optimal level of engagement with MWT was identified in the literature, however there is evidence that the greater the engagement in a learning task, the greater the likelihood of learning and retention (Bryson & Hand, 2007; Illeris, 2011; Kelly, 2013; Marton et al., 1997). It is acknowledged that compliance is usually the only reported measure of MWT within organisations, however workers are more likely and willing to engage in training if the conditions described in this discussion are met.

The initial prompt for this research was the experience of frustration that resources (educators' time and attention) were being deployed to cajole, coerce, and encourage workers to engage in training when these resources could have been more efficiently and effectively deployed elsewhere. Increased engagement may therefore also contribute to organisational efficiency. Evidence shows that learner engagement is influenced by individual learner characteristics including their levels of self-determination (Chui, 2021) and self-efficacy (Austin, 2023); whether they are orientated to proactively seek out learning (Raemdonck et al., 2014; Schwartz, 2019; Webber, 2004), and their perceptions of learning needs (Sankey & Machin, 2014). However, organisations can encourage engagement through manipulation of multiple factors. The finding that WA Health workforce is at best moderately engaged with MWT suggests that each of the factors impacting engagement need to be reconsidered in relation to the overall approach to MWT and in relation to specific programs.

# 8.6 Question 5: How do personal characteristics moderate levels of MWT engagement?

Findings from both the qualitative and quantitative data analysis showed that individual learner characteristics can impact on workers' engagement with MWT and therefore should be considered in the design and implementation of MWT. All demographic data investigated (age, years in health, years in WA Health, professional role, and employer) were shown to have some relationship with levels of workers engagement with at least one of the ten MWT programs investigated. Research evidence that might explain the mechanism for this impact is not conclusive, however the available data and some speculative connections are discussed below.

### 8.6.1 Age, years of health sector experience and years in WA Health

A worker's period of service in the health sector and years of experience in WA Health might impact their knowledge and understanding of the organisation and potentially their attitudes towards it and its MWT requirements. Respondents with greater experience in an organisation will have experienced the requirements for repeated MWT training and will have had the opportunity to observe the impact. This process may account for the findings of this study that older, more experienced respondents are more likely to question the value of MWT, to seek evidence for its efficacy and to be critical of training quality when they have been required to undertake the same training multiple times. The learning needs of this cohort should be considered in the design and delivery of training to avoid the risk of disengagement from MWT, particularly as this worker group are likely to be in senior, leadership roles in the organisations where they can advocate for the value of MWT and provide positive role modelling by actively engaging in MWT.

Others have speculated that older workers may be challenged to engage in some workplace training due to limited levels of digital literacy (Arbogast et al., 2018; Fleming et al., 2017). In this study's qualitative data set the issue was raised by respondents in the over 51 years of age administrative worker cohort, but also by senior clinical respondents referring to workers who use English as a second language and workers with low digital literacy levels. As such, learner digital literacy should be another parameter to consider in the design of MWT e-learning. Other factors identified in the literature related to age include life stages, motivation for training, levels of cognition and alignment of organisational objectives and personal goals (Davies et al., 2017)

#### 8.6.2 Employer

The finding that employers (i.e. AHS) may influence levels of engagement is also consistent with the evidence previously described, that organisational culture and expectations can impact on respondents' willingness to undertake some work tasks such as training (Bosset & Bourgeois, 2015; Grossman & Salas, 2011; Kyndt et al., 2014; Noe & Winkler, 2009). This study found that respondents in one AHS were more positive about the MWT experience relative to others, in that they made no negative comments about MWT and were more likely to refer to MWT as supporting organisational values. The finding provides an opportunity for WA Health to explore this organisation's culture and practices to identify practices that influence workers' attitudes to MWT. Lessons learned can then be applied to other AHSs.

### 8.6.3 Work role

This study collected data from respondents working in multiple clinical and non-clinical roles and found a relationship between the work role undertaken and engagement with MWT. In relation to professional workers, the concept of professional tribes has been previously identified in the health literature (Hunter, 2013; Liete, et al., 2024; Mandy & Louw, 2018), particularly in relation to interprofessional learning and safety practices (Braithwaite et al., 2016; Weller et al., 2014). Professional tribalism refers to different cultural attitudes, beliefs and unspoken expectations of professional groups which guide practice and behaviour. Others relate the observed behavioural difference to the cultural norms of a workplace or team setting (Chen et al., 2022; Braithwaite et al., 2016; Tian et al., 2016). Both concepts are useful tor explaining differences between the responses of different work role groups. Similarly, the different work tasks undertaken by different work roles may also contribute to the different perceptions of the value of MWT. A doctor, for example, who undertakes multiple hand hygiene practices as part of their work in surgery may feel less need to engage with an annual mandated online elearning program than an administrative assistant who does not routinely use hand hygiene. The potential for variation should be considered in the design and delivery of MWT and could be addressed via co-design with workers within each work role group.

# 8.6.4 Summary

Evidence from this and previous studies that learners' personal characteristics can impact on their engagement with and learning from training align with the

elements of adult learning principles (Knowles, 2011) and foundation workplace learning theory (Illeris, 2011). The mechanisms behind these differences can be hypothesised to reflect both pragmatic realities (e.g. the longer someone has worked in an organisation and the more frequently they have repeated MWT, the more opportunity they have to understand the impact of MWT's on a practice), or psycho-social processes such as organisational or profession cultures which preference particular expectations, beliefs or behaviour norms within that culture (Merriam & Bierema, 2014; Paradi & Sulkin, 2017; Sukhera, 2020). Regardless of factors causing the difference, their existence supports the thesis that a "one size fits all" approach to MWT is less likely to achieve intended learning outcomes than one in which the target participants' characteristics are assessed and integrated into the planning and delivery of training. The potential value of this approach is the resulting improvements in learning outcome and learning transfer that can arise.

# 8.7 Question 6: How do PHS workers perceive the impact of MWT on practice?

Data on the achievement of purpose and MWT's impact on safe work practice found that over 70 % of respondents believe the purpose of MWT is partially or fully achieved, for all ten MWT programs. As the study found, the respondents most frequently cite the purpose of MWT as supporting safe practices, which suggests a degree of satisfaction that MWT positively impacts workplace safety. The factors influencing variations in achievement ratings for the ten programs are not evident however it can be speculated that the finding

that skills-based training programs and those focused on high-risk practices (i.e. hand hygiene, emergencies, infection prevention) are more likely to be rated as impactful may indicate that most respondents more easily understand the purpose of these programs and the link between training and practice than some of the less tangible topics that are perceived as having lower risks or less immediate, observable risks (e.g. record keeping practices). If this hypothesis is correct, organisations need to better illustrate the risks that MWT is intended to address and communicate the link between training and practice to workers. It also speaks to the need for better evidence of the value of MWT, as discussed previously.

Ratings of MWT's overall impact on the work quality of the organisation and on personal practices of individuals aligned with the achievement of purpose and indicated a moderate impact on practices. Work role was the only variable found to influence overall impact ratings, while a relationship between the variables of work roles and employer influenced ratings of usefulness for individuals. Both findings reinforce the importance of considering the learning needs of respondents in different roles and in different organisations in the design and delivery of MWT programs.

The evidence about the impact of MWT programs against which to compare these findings is limited. The body of evidence on the issue of learning transfer is the most relevant to consider. Learning transfer in the context of organisations is the application of learned skills and knowledge in the work setting (Grossman & Salas, 2011; Sorenson, 2017). Evidence suggests it comprises three elements: the learner, the training program, and the organisation. In the context of MWT, the latter two variables are available for

manipulation by organisations to influence. Meta-analysis of transfer evidence suggests that organisational support incorporating peer and supervision support are critical. For example, Park and Eun-Jee (2018) found that supervisors can impact on learner training readiness, motivation to transfer and job performance by encouraging workers to identify their developmental learning needs. Literature informed by social exchange theory - a psychological theory that proposes human behaviour is moderated by social interactions (Cook et al., 2013), shows that high levels of perceived support for learning transfer from both supervisors and peers improves task performance (including training) and encourages "organisational citizenship behaviour" (Tian et al., 2016. p. 2), or discretionary behaviour based on the social and psychological norms of the organisation. Creating a "social norm" that MWT is a requirement of the workplace, that it is valued by the organisation, and which people with formal and informal influence in the organisation may increase compliance and engagement. Others have noted that personal relationships (with peers and colleagues) play a significant role in transfer behaviour (Chen et al., 2002; Farh et al., 2004) and may vary between collectivist as opposed to individualistic cultures (Chen et al., 2002; Hui et al., 2004). In a comprehensive meta-analysis of the literature, Govaerts and Dochy (2014) attempted to identify the specific behaviours of supervisors that impact learning transfer. They identified both supportive behaviours and supervisor "sanctions" or "negative support" (Govaerts & Dochy, 2014, p. 85) that dissuade employees from using new skills in the workplace. Their synthesis identified 24 individual behaviours that supervisors could utilise to support employees to transfer their learning into the workplace behaviours. In

this study, respondents report supervisor behaviour at odds with those recommended. For example, Govaerts and Dochy (2014, p. 86) state: "The Supervisor is tolerant of mistakes trainees make when trying to apply training on-the-job". In contrast WA Health respondents report they would prefer to be engaged in training "when the trainer doesn't roll their eyes when I make a mistake" or "when the trainer does ignore me if I ask for help". Other factors shown to support transfer have been discussed in the previous section on engagement and include organisational messaging about the value of training and intrinsic and extrinsic rewards (Baldwin & Ford, 1988; Noe & Winkler, 2009; Tannenbaum & Yukl, 1992), opportunities to practice learned activities (Baldwin & Magjuka, 1991), and the creation of learning programs that incorporate real life scenarios (Ford et al., 1992; Leberman, 2006; Rouiller & Goldstein, 2022).

Many of the suggestions offered by WA Heath respondents about improving the impact of MWT work align with the evidence in the learning transfer literature. For example, respondents refer to the need for organisational support expressed as clarity and equity of MWT requirement across workforce groups, allocated time to do MWT, learning content applicable to the workplace, reinforcement of learning in the workplace, modelling of the behaviours by senior staff and managers, consequences if learning is not applied in the workplace. They also discuss a preference for face-to-face scenario-based training linked to the realities of work to improve relevance and applicability of the training.

In summary, the WA Health workforce report that the currently delivered suite of ten MWT programs have some impact on practice but that there are

opportunities to improve that impact. There is value in using the extant evidence on how organisations can optimise learning transfer to support the design and delivery of effective MWT. In addition, consideration of the learning needs and requirements of respondents in different work roles, and with varying years of work experience, may also contribute to the delivery of evidence-based training programs that optimise impact, and may be the catalyst for increased engagement in the programs.

# 8.8 Implications for current mandated training practices in WA

# Health

Collectively the findings from this study provide evidence that WA Health, consistent with other national and international public organisations, is investing significant resources creating and delivering over 160 MWT programs on a range of topics. The training is delivered to comply with legislation and policy, and to address safety issues. The WA Health workforce is moderately willing to engage in MWT which most report has a moderate impact on improving workplace safety. Respondents report that MWT could be significantly improved and provide an extensive suite of suggestions for how this could be done. Suggested improvements include: 1) retaining but improving some of the current MWT requirements, 2) adding additional training topics relevant to the individual, 3) improving the relevance of the training to their roles, 4) increasing training interactivity, 5) ensuring high quality trainers design and deliver the content, and 6) improving organisational support for the training. All suggestions by respondents align with contemporary best practice adult and workplace practices. The findings are consistent with the limited

literature evidence of workers' perceptions of MWT in other health systems (Alcolado, 2014; Gerada, 2019; Mythen & Gidman, 2019).

The implications of these findings for MWT practice in WA Health are that there is potential to improve workers' levels of engagement and improve the impact of training within WA Health and, potentially, other organisations. When the rationale for delivering MWT is compliance with regulations, legislation, and policies, an organisation can focus only on achieving compliance rates for MWT. However, there are opportunities to realise greater return on the investment in MWT by improving learning outcomes and learning transfer (Chen & Soltes, 2018).

# 8.9 Chapter conclusion

This chapter explored how the study's findings aligned with the extant literature on adult and workplace learning, and workers' perceptions of MWT, with reference to the six research questions. It demonstrated that MWT practices overall within WA Health are not inconsistent with those in other Australian jurisdictions concerning the topics mandated, the decentralised nature of decision-making regarding the topics to be mandated, the design and delivery of training, and the administration and management of the process. The volume and range of topics delivered as MWT are also consistent with international health organisations and other industries and affirms that WA Health is expending significant resources to design and deliver training, and that workers are spending multiple hours participating in this training.

The chapter also identified that there are opportunities to learn from evolving practice changes in the construction industry and the UK health sector around

standardising MWT program learning outcomes to support large, decentralised health services to improve efficiency and reduce requirements for workers to repeat MWT at multiple services.

The chapter discussed findings that the WA Health workforce incorporates a range of opinions about MWT ranging from angry dismissal to ambivalence to positive regard which aligns with the limited available data on the subject. Similarly, the finding that personal characteristics of individuals, including their age, work role, year of health experience, years of WA Health experience and employer may influence their perceptions of MWT, and how they engage with it is consistent with previous evidence.

Finally, the chapter discussed the multiple suggestions offered by the workforce about how MWT might be made more engaging and impactful. The suggestions closely align with the evidence already available about adult and workplace learning principles and best practice, indicating that these are not currently consistently applied across WA Health organisations. This discussion demonstrates that this study offers significant insights into what the workforce believes will improve their engagement in, and the value of, MWT. In concert with existing evidence about how to optimise adult workplace learning and practice changes, the findings offer practical direction for the delivery of effective MWT.

The next and final chapter of this thesis will introduce a proposal for a MWT framework to guide the delivery of best practice MWT based on the findings of this study and the extant literature. This framework has the potential to offer organisations, including WA Health, a benchmark against which to review the

current MWT practices at each site, and a tool to develop effective MWT program that will potentially result in improved the uptake and impact of MWT across the organisation.

# **Chapter Nine: Conclusion & Recommendation**

# 9.1 Introduction

This study was initiated in response to workplace challenges in a large public health service in Perth, Western Australia (WA). The organisation requires all workers to undertake mandated workplace training (MWT) at the commencement of service and at regular intervals after that. Educators responsible for delivering this training reported difficulties achieving and maintaining the 100% training compliance rate required by the organisation. A literature review across multiple domains including, but not limited to, adult learning, education, health education, organisational psychology, and human resources, was initiated to identify strategies to address low compliance. The review identified extant evidence of how adults learn and how workplace training programs can be designed to optimise uptake, learning, and learning transfer (the application of learned skills and knowledge in the workplace). The literature review also identified gaps in the evidence that relates explicitly to MWT, workers' views on MWT, and MWT in the public health sector. To address the evidence gap, this study was designed to investigate workers' understanding and perceptions of MWT, to inform how the uptake and impact of MWT might be optimised in the PHS context.

The study aimed to answer six research questions:

Q1: What MWT programs and delivery methods are used in the WA PHS sector?

Q 2: How does the PHS workforce perceive the need and purpose of MWT?

Q 3: How engaged is the PHS workforce in MWT?

Q 4: What factors are associated with PHS workforce MWT engagement?

Q 5: How do personal characteristics impact levels of MWT engagement?

Q 6: How do PHS workers perceive the impact of MWT on practice?

The mixed method study recruited volunteer workers from nine WA metropolitan public health services for three interrelated data collection processes. In Phase One of the study, workers nominated by the participating service provided details of the MWT required of their workforce. Details sought included the topics trained, target participants, duration, format, and learning objectives of each program, and how frequently workers were required to complete the training. A map of MWT was developed, and the data therein was used to develop a *Mandatory Training Workplace Survey* (MTWS) used to seek workers' views on MWT. In Phase Two, this survey was distributed to workers at the nine participating sites, and 365 volunteer participants completed at least some of the survey items. In Phase Three volunteer workers were interviewed about their experiences with MWT.

Qualitative and quantitative data were collected and analysed. Simple statistical measures were used to describe the quantitative findings, and associations between the demographic variables of respondents (i.e. age, employer, work role, years in the health sector, years in WA Health) and their responses to quantitative survey items were also explored using nonparametric statistical analysis. Qualitative data were explored through thematic analysis to identify the key themes of workers' views on MWT.

The findings of this study, described in detail in Chater Eight, contribute to the extant literature on MWT and workplace learning in several ways. In summary the study identified that, consistent with health sectors internationally, WA Health is investing significant resources into the delivery of MWT for their workforces, at the commencement of service and at regular intervals thereafter. It identified that respondents are keen to engage in workplace learning if they see it as relevant to their work role, work area or themselves. It also identified that there are a broad range of perceptions of MWT within the workforce, ranging from highly supportive respondents who value and engage with MWT, to those who feel it is too focused on compliance, not learning, and therefore, not a valuable activity worth engaging in. Overall, the workforce is tolerant of current MWT programs and believe they impact moderately on their work practices. Respondents described the purpose of MWT in multiple ways, most often related to supporting workplace safety, and believe MWT contributes moderately to this goal. No evidence from the literature indicates whether this is consistent with other organisations. However, the finding that respondents did not value MWT which is purely focused on compliance rather than meaningful learning, does align with evidence from the literature. The study also identified that employee perceptions about MWT can be impacted by their employer, work role, age, years of health sector experience and years in WA Health. Finally, the study identified a rich resource of strategies that respondents believe would increase the uptake and engagement in MWT, and potentially increase their learning and the transfer of learning into practice.

Comparison of the findings of this study with the extant literature show that WA Health delivers MWT consistent with many contemporary organisations in the

health sector and other industries. That is, significant resources are allocated to the creation, management, delivery, and reporting of MWT related to the core business of the organisation – the delivery of safe, quality healthcare. Consistent with other organisations, training is required of the WA Health workforce at the commencement of their service and at regular intervals after that.

Further, the study found that respondents mainly consider the MWT's purpose to be to support workplace safety and that MWT can serve multiple purposes simultaneously. Respondents also believe that MWT essentially achieves its intended purpose.

The study found that, unlike some organisations, WA Health relies mainly on e-learning to deliver this training, with few skills-based face-to-face training options offered. The literature describes other workplaces using learning strategies such as on-the-job training, simulation, coaching, and mentoring to support workplace learning. However, no evidence was found in the literature to indicate they have been used to support MWT specifically. Nonetheless, this finding presents an opportunity to consider the use of alternative teaching strategies for MWT.

Additional findings, also consistent with the literature, indicate that individual characteristics and the prior experiences, knowledge and skills workers bring to MWT may impact their perceptions and willingness to engage in MWT. It is critical that training design considers these factors if MWT is to be more than a compliance reporting tool.

Finally, the study found that WA Health respondents are happy to engage in some of the MWT topics currently delivered and would like to see additional topics mandated. Engagement is optimised when respondents perceived MWT to be relevant to themselves, their profession, or their work role and when it is interactive, well designed and delivered by skilled trainers. Health worker respondents wanted training to related to real-life scenarios, to consider their prior skills and knowledge and be applicable in their workplaces. Finally, they want their organisation to support them in accessing and using the skills acquired during MWT by allocating time and places to complete training as well as supervisors and managers who model the use of the trained behaviours. Peers who are supportive of MWT and support colleagues to apply their behaviours in the workplace are also valued. Respondents would like to be engaged in designing and delivery of MWT to ensure its relevance and appropriateness for their learning needs. Respondents' suggestions all align with current evidence on best practice adult and workplace learning and should ideally be considered in the design of MWT programs in any organisation.

# 9.2 Contribution of the study

This study contributes to existing evidence regarding MWT training in several ways. Firstly, the study affirms existing knowledge regarding adult's preferences for learning opportunities. The finding that WA Health workers preference face-to-face, scenario-based learning with their peers on topics of immediate relevance to their work or personal goals, is consistent with previous evidence (Culley, 2005; Billett et al., 2012) and reinforces that these

preferences must be considered when designing and delivering training to workers so that engagement and the opportunity for learning are optimised.

Secondly, the study provides new evidence regarding contemporary MWT practices in the Australian health sector, a topic which has received scant attention previously in the health or other industry sectors. By describing in detail current practices in one public health sector service the study contributes detailed new knowledge about the topics mandated for training in the sector and how this is delivered. This new knowledge highlights the breadth and depth of the practice, the extent of organisational investment in the practice and the systemic inconsistencies currently in play. In so doing the study highlights opportunities for improvement and further research in WA Health and potentially other health sector organisations.

The study also provided evidence of the potential for codesign and delivery of training to improve the relevance and appeal of MWT for workers. The finding that some workers are happy to contribute to training design has not been evidenced in the MWT practice literature previously although it is cited theoretically as a consideration.

Finally, the study affirms the value of qualitative research methodologies in this domain. Health professional education research has been accused of having an over reliance on quantitative research methods (Ajjawi, 2022) however this study demonstrated the value of descriptive methodologies that have been used to useful effect in the workplace training domain for many years (NVCER, 2017; Billett et al., 2012, Billett et al., 2024).

# 9.3 Limitations of the study

This study affirmed the need for, and value of, future research on MWT. Specifically, it demonstrated that MWT is a significant and costly practice in WA Health, and other organisations, and that the research evidence of its value as a learning tool is limited. It further found that workers value access to MWT when it meets specific conditions which they perceive lead to effective and impactful learning. Many of these criteria have been previously described in the extant literature but, this study found they are not consistently applied in practice in WA Health. This gap between theory and practice, or knowledge translation, is ripe for future study.

This research provided insights that may inform future research in the domain of MWT. Reflections are offered here with the intent of acknowledging the limitations of this study and identifying directions for further investigation into MWT.

This study used knowledge and research from multiple domains-education, workplace training, organisational development, human resources, computer science and health. Each domain provided a different lens through which evidence about workplace learning and MWT can be viewed. An early decision to exclude literature from the vocational education domain proved problematic as it resulted in the omission of a considerable body of work from the past two to three decades during which the sector has extended their research base into the broader domain of workplace learning for organisations. As such, useful information that may have informed study design was overlooked. Using information from other domains however, the study attempted to integrate the

multiple domains into the design of the research and the interpretation of the findings, to utilise all available evidence on the subject. The integration was achieved to the extent that final recommendations link the findings of this study with the literature evidence from different domains. Future studies may consider exploring MWT through the lens of a single domain (e.g. adult learning, training, health education). This would allow for comparison of the relative value of the contribution of each domain to scholarship on the subject.

The methods used in Phase One to source data about the current MTW required of the workforce in each AHS depended on the preparedness of the organisation and their nominated contact person to respond to requests and release information. Despite the assurance that all relevant information would be made available for the study, this could not be verified. Some data may therefore be incomplete; however, it has been assessed as sufficient for the purposes of this study. Further, the data captured represents details of MWT for each site at one point in time only (mid 2020). Advice from participating site nominees was that MWT content changes periodically therefore the exercise to map MWT requirements and related findings are relevant for that period only. The interrogation of data from this phase of the study identified other potential lines of research enquiry. This study did not explicitly explore compliance rates at each site. It may have been useful to explore whether the core concern driving this study (The lack of worker engagement with MWT) was a concern for other sites and to explore potential factors impacting the findings. Similarly, there may be value in further exploring workers' understanding of the MWT required of them, how they acquired that

information, and whether their understanding aligns with their employer's expectations.

In Phase Two, the study did not recruit the target number of participants to the *Mandated Training Workplace Survey* (MTWS), thus limiting the statistical power to complete the planned analysis of within and between demographic variable comparisons. Recruitment strategies were constrained by WA Health's conditions for research approval (i.e. no direct contact or promotion with potential participants was permitted) and competing demands on the workforce arising from the COVID-19 pandemic. However, future organisation-wide research recruitment processes might consider more targeted survey recruitment. This was also the first time the MWTS was administered, and one minor amendment to the survey is recommended prior to future utilisation. Specifically, Item 8 relating to the perceived purpose of MWT, should be revised from a multiple-choice question to an open-ended question, to better understand the survey respondent's understanding of the purpose/s of MWT.

Once again, the inclusion of literature from the vocational training sector may have informed the design of the survey tool as this methodology is used routinely in this domain (Billett et al., 2024; O'Dwyer, 2021; White et al., 2018)

The failure to recruit more than three interviewees was also a significant limitation of the study. Interview techniques are used frequently in the vocation education domain (Billett et al., 2024) and have been proven to provide rich qualitative data with significant practice relevance. It is acknowledged that as a health professional, study design decisions may have been based on unconscious preferential bias toward quantitative methodologies as described

by Ajjawi (2022). Reflecting on the volume and quality of data elicited through the three data collection methodologies, future studies could be more usefully focussed on qualitative data, potentially using interviews or other qualitative data collection methods focussed on collection of lived experience of the learners Delphi method, narrative analysis, (e.g., case studies. phenomenology, hermeneutics). It is acknowledged that having only three interview data sets reduces the strength of the study to claim that collated data were validated through triangulation. That said the themes emerging form the interview data set were consistent with those arising from the survey.

Finally, the study focused on the MWT practices and workers of metropolitan health services in one state in Australia. The findings are immediately relevant to that context and might be considered, with caution, to inform practices in other WA Health services, health services in other Australian states and potentially health services in other countries or organisations in other industries.

# 9.3 Implications of the findings

The findings of this study have implications for MWT practices in the metropolitan health services participating in the study. They are immediately relevant to how MWT is currently promoted, governed, designed, delivered, managed, and reported in the participating sites. Practice changes have already been implemented at the health service in which the researcher works. For example, changes have been made to how the rationale for MWT, the learning outcomes of each program, and the workplace practices intended from MWT are communicated to workers. In addition, a mandated life support

training program has been redesigned from a 90-minute didactic face-to-face session to a 15-minute e-learning theoretical learning program and a 15minute competency assessment. The findings may also inform other metropolitan and rural WA Health services and are likely to apply to other Australian health jurisdictions and potentially to health services internationally, or organisations in other sectors requiring workers to undertake MWT.

Specifically, the study found that the participating health services are not consistently applying current, best-practice adult and workplace learning approaches to their delivery of MWT, in part because organisations focus on compliance, not learning. These factors contribute to disengagement, low MWT compliance rates, poor learning transfer and outright resentment of MWT by some workers. In other words, optimising uptake of MWT depends on ensuring a focus on the learning components of MWT, that is, the intended learning outcomes and learning transfer. Providing engaging learning opportunities that workers see as relevant to their roles and by providing an organisational context to support the transfer of the learning into practice, workers will be more inclined to engage in MWT.

To support this focus, it is recommended that WA Health consider adopting a consistent framework to support the application of the strategies respondents in this study have recommended, as well as the evidence in the extant literature. This framework is proposed to scaffold the design, delivery, management, administration, and reporting of MWT to elevate current practices. The framework embeds ongoing research with the aim of providing a constant feedback loop about the impact of programs. The program evaluation data will inform WA Health MWT practices and contribute to

addressing some of the current gaps in the evidence about optimising the value of MWT and workplace training in general.

The following sections of this chapter describe the proposed MWT Practice Framework and how it might be implemented in WA Health.

# Figure 9.1

Proposed Mandated Workplace Training Practice Framework

# ORGANISATIONAL SUPPORT

- Communication re
- Purpose
- Learning objectives
- How to access
- Ease of Access
- Allocated time
- Supervisor support
- Peer & management modelling
- Learning culture

# RESOURCES

- Staff
- Skilled & qualified trainers
- Stakeholder representatives
- Supervisors skilled in learning support
- Communications skills
- Learning management systems
  experts

Learning Management Systems Training accommodation

- Simulation facilities
- Training equipment
- Computer access for e-learning

# MANDATED WORKPLACE TRAINING PROCESS

Rationale for Mandated Training

- Workplace or Pre-Employment Requirement?
- **Target Audience**
- Program Co-Design
- Learning Outcomes
- Delivery Modality
- Content
- Frequency
- Pre & Post Training Assessment
- Evaluation
- Naming & Coding
- **Communication Strategy**
- Access Strategy
- Implementation Strategy

# 9.4 Practice recommendations: A proposed MWT practice

# framework

Based on the findings of this study and the extant literature, a new best practice framework for delivering MWT in WA Health is proposed. The framework consists of three elements that jointly support workers' engagement and learning transfer: resources, organisational culture, and a systematic process guide to the design, delivery, and evaluation of MWT. Each element of the framework incorporates multiple components, each of which are described in detail in the following sections and represented in Figure 9.1. While beyond the scope of this thesis is it worth noting that many of the recommendations described would be applicable to the process of delivering non-mandated workplace training. As such, readers should not view the framework is designed to integrate with, and complement, existing workplace training process.

# 9.4.1 Framework Element 1: Organisational support

The literature indicates that to support learner motivation to engage in training and to encourage learning transfer, organisations need to create a culture where workers feel valued and supported to learn and practice their new skills (Grossman & Sala, 2011; Hughes et al., 2020). Cultivating a workplace culture with a shared perception and expectation that learning is a social norm of the organisation will encourage workers to engage in learning (Baldwin & Ford,1988; Grossman & Salas, 2011; Noe & Winkler, 2009). Respondents in this study referred to the need for supervisors, peers, and organisational leaders to support MWT by modelling and encouraging the implementation of learning in the workplace.

Workplace cultural expectations can be embedded into human resources practices such recruitment, selection, onboarding, and supervision processes so that the value of continuous learning is emphasised and prioritised in the workforce (Alerasoul et al., 2022; Curado et al., 2015; Tracey et al., 1995). Practices can include incorporating teaching and learning responsibilities in the job descriptions of each work role and by holding managers accountable for allowing workers time to access MWT training. Using development-focused performance review processes that focus on workers' learning needs will provide further support, as would ensuring that supervisors are skilled in coaching and mentoring to support staff to practice and transfer of learning into workplace behaviours (Alerasoul et al., 2022; Bossett & Bourgeois, 2015).

Effective communication to the workforce about the rationale for mandating a training program, the learning outcomes, and intended purpose of MWT, and the link between the intended learning outcomes of MWT and their applications to the workplace is critical, as is the allocation of paid time and appropriate learning spaces (actual and virtual) in which MWT can be conducted (Illeris, 2011; Noe & Winkler, 2009). Respondents in this study noted that delivering training *"in a cupboard devalues the whole process"* and that *"I feel disengaged when… the* (Learning Management System) *system keeps crashing and locking me out so I have to start all over again"*.

Easy access to MWT training records for workers and supervisors can increase workers' sense of control and self-directedness as can the potential

for recognition of prior learning (RPL). Providing mechanisms for workers to demonstrate their skills before being required to undertake training can reduce workers' reported frustration at being required to repeat or attend training on subjects the worker is already skilled in. RPL could be assessed before the first training session, or at the start of their employment. As one survey respondent in this study noted, prior learning may also be considered as a precondition of employment, as is currently the case in some other industries. For example, in the Australian construction industry, completion of a general safety induction course, completed and paid for by the prospective employee), is a prerequisite for many employers (Construction Training Group, 2023). RPL requires systems that allow for the comparison of learning between organisations. With respect to WA Health, this study found that there is no consistent lexicon or naming conventions for MWT programs. The result is that programs with very similar content are named differently at different sites. This practice does allow for organisations to contextualise program names to build a positive cultural sense of organisational and management support for the program; for example, the Charlies and Osborne Park Aggression Risk Management (CARM) program is named after the Sir Charles Gairdner Hospital, commonly known as Charlies. The challenge with the practice is that it does not allow for easy comparison of course content, for the purpose of RPL. The practice has been recently introduced in the UK whereby the central National Health Service (NHS) prescribes a group of core mandated learning programs across the system, defines the learning outcomes to be achieved within each, and allocates a unique code to the program (NHS Leadership Academy, 2023), is to be commended, as are their suite of tools designed to

support continuous quality assurance and improvement of training programs delivered in the NHS system (NHS Digital, 2023). This process allows programs to be designed and delivered by multiple providers in potentially different ways, while also providing assurance that learning goals are consistent. It also provides a mechanism for RPL which builds confidence that like programs can be compared.

The extant literature and this study found that supervisors significantly influence worker's perceptions and preparedness to engage in training, and indeed in learning transfer (Baldwin et al., 2009; Grossman & Sala, 2011). Supervisors may influence learners positively by encouraging workers, providing support and mentoring in the workplace, and otherwise facilitating access to training and workplace skills practice. Conversely supervisors can have a negative influence by failing to provide the supports or by creating barriers to access (Baldwin & Magjuka, 1991; Govaerts & Dochy, 2014; Park & Eun-Jee, 2018). Bossett and Bourgeois (2015) identify a suite of 24 supervisor behaviours shown to positively impact workplace learning which should be considered for application in practice. To enable this, supervisors themselves need to be adequately resourced in terms of time and skills to enact these behaviours, and to have the workforce capacity to do so. For example, to allocate time to workers to engage in training, supervisors may need access to additional workforce to cover the duties of workers in training.

A final factor within the element of organisational support is the need for senior management, including executive staff, to be perceived to support and value MWT *beyond* its role as a compliance measure. According to respondents in this study, and other evidence (Tian et al., 2016; Chen et al., 2022) support
can be demonstrated through consistent, observable modelling of the skills and practices taught in MWT. For example, this study elicited comments from staff that indicated they had observed human resources practices and bullying that were contrary to the principles taught in MWT, and that was disengaging. Study participants indicated they preferred "*a carrot not a stick*" approach to MWT. The value of training in supporting safe workplace and practices should be emphasised rather than the risks of failing to meet compliance requirements.

#### 9.4.2 Framework Element 2: Resources

The implementation of this framework within any organisation will require appropriate resourcing. The human, accommodation and infrastructure resources required are described below. Organisations, including WA Health, are already investing millions of dollars into the delivery of MWT without necessarily reaping the intended benefits. It is proposed that by strategically realigning this expenditure to support the recommended resourcing, the return on investment will increase.

#### 9.4.2.1 Human resources

The design and delivery of effective learning program requires access to a workforce with skills and knowledge in adult and workplace learning theory, instructional design methods, adult learning facilitation skills and program evaluation. A profile of MWT trainers in WA Health is yet to be mapped. However, evidence from this study and the extant literature suggests workplace trainers are not always formally qualified and more likely to be technical experts delegated training responsibility. (Cranton & King, 2003; Ong

et al., 2022). This study clearly showed that respondents value trainers that they perceive to be skilled and knowledgeable in their technical or professional field and who utilise engaging teaching methods. While the study findings reflect respondents' subjective assessment of skills, organisations can ensure MWT trainers are appropriately qualified or credentialed. This would require defining the role requirements for trainers and ensuring people appointed to the role can achieve and maintain these requirements. This may include requirements for formal qualifications (e.g. post-graduate qualifications in health education or vocational qualifications in instructional design or workplace assessment & training). A process for ongoing performance monitoring should also be embedded to ensure trainer' skills and knowledge are contemporised and remain current. This may take the form of routine performance reviews by supervisors or peers, or a process of formal credentialing whereby performance capacity is regularly demonstrated and assessed by peers. This would increase workers' confidence that the learning experience in MWT has been designed and delivered by skilled educators. To improve participant confidence in trainers, the gualifications, or credentials of MWT trainers could be made explicit to training participants, for example, within MWT promotional material, in learning content of during in-training introductions.

The requirement for additional qualifications or credentialling for trainers may necessitate a review of workforce structures and renumeration. In WA Health, and other public sector employers, for example, the acquisition of postqualifications is not aligned to increased renumeration. To ensure there are incentives for staff to invest in education or training qualifications, carer

structures should reflect the additional expertise and renumerate it appropriately. This would also assist in the recruitment and retention of a skilled educator workforce.

Additionally, subject matter experts are required to analyse the applicability of the MWT topics and to contribute to the design and delivery of MWT program to the multitude of WA Health work settings and worker groups. Content experts can ensure learning content is technically current and accurate, and contextualised to the target learners. Different workforce models can support access to this expertise. One model is to allocate funding to contract subject matter experts or professional representatives (e.g. administrative workers, technical support workers, clinical professions) to assist in the co-design and delivery of MWT. These individuals can be engaged when a MWT program is proposed or under development. Alternately, joint staff appointments between education services and work units would allow workers to retain workplace practice expertise and currency while simultaneously applying their skills and knowledge in the design and delivery of MWT. Similarly, including teaching duties in the job descriptions of some technical experts is another model that could be considered.

Aligned with the engagement of health workers in the design and delivery of training programs is the need to include health consumers (patients and their carers) in the design of relevant programs. As current best-practice (Bryson, 2020; Davis et al., 2022; Cheung et al., 2023; Cole et al., 2022; St John & Akama, 2022), funds need to be available to support the involvement of consumer representatives in training design and delivery where their contribution can add to the quality and applicability of training delivered to staff.

An additional human resource is also required in the form of well-resourced supervision workforce structures and supervisors skilled in the multiple supervisory behaviours described by Bossett and Bourgeois (2015). Once again evidence from both this study and the extant literature demonstrate that staff want support from their supervisor to access training and to apply training in the workplace. Effective supervision requires time to engage in the process and specific skills. Organisations need to ensure this resource is available to support the development of a workplace learning culture, as described in the organisational support element of this framework.

Additional skill sets of value to an organisation developing best practice MWT include communications expertise (to allow for the development of effective promotional material on MWT in addition to learning content), and expertise in digital technology to enable full utilisation of digital systems in teaching programs, and other support tools. For example, learning management systems (LMS) expertise is required to ensure organisations can optimise the utility of the system to manage, promote and track attendance at MWT.

A final human resource to be considered in the MWT framework is that of staff available to cover the tasks of workers engaged in training. The costs associated with this may be prohibitive given the volume and time staff are required to allocate to training. However, staff in this study clearly communicated that a lack of uninterrupted time to access training was a disincentive to engage in MWT, compounded for some respondents by the additional work that resulted when they were away from their usual work tasks for a period. If it is not financially viable to provide cover for all workers,

organisations may look to selectively providing cover to workers who would otherwise opt not to attend MWT.

# 9.4.2.2 Accommodation

Access to a range of accommodation options in which to deliver training can expand the opportunities to offer training in different format and modalities. This study included reports from staff that limited access to training rooms was a concern at some WA Health sites. Access to simulation facilities, seminar rooms, lecture theatres, computer laboratories and tutorial rooms allows trainers to consider an extended repertoire of workplace learning opportunities when designing MWT programs. In the health context this may include access to simulated wards, theatres and other clinical spaces, a padded room in which to practice manual handling or practical aggression breakaway techniques, or spaces in which to practice the use of fire extinguishers. Access to a variety of facilities will support skilled and creative educators to create innovative learning opportunities to engage staff.

Respondents in this study communicated that access to quiet, private spaces in which to complete e-learning enabled engagement with MWT. At a minimum, organisations should look to ensuring staff have access to spaces that offer this.

9.4.2.3 Training equipment and resources

Effective training delivery requires access to appropriate equipment to support teaching, administration, and management of learning opportunities. Teaching resources in a health service context may include access to simulation equipment such as simulation mannikins, actors for use in simulation

scenarios, clinical equipment (e.g. defibrillators to practice life support, medical emergency trolleys, pharmacy carts etc), virtual learning environments, and other resources such simulated blood products to practice infusions (HETI, 2015). A budget for consumable teaching materials is also essential, for example, access to PPE, ensures educators have the option to create and deliver creative learning options for staff.

Access to computers for staff to access e-learning is essential for any contemporary teaching service. Where organisations require staff to access e-learning from outside the physical location of their workplace, as staff in this study indicated they would prefer, organisations should ensure firewalls and other access barriers are minimised to support ease of access.

Another valuable tool to support MWT delivery is a digital learning management system (LMS), ideally linked to human resources data system. An LMS can support MWT by providing a platform for promotion of MWT (including details the rational for MWT and program learning objectives), enrolment, attendance tracking and compliance reporting.

In summary, training services delivering MWT needs to be appropriately resourced to generate training program of a high quality. Evidence from this study indicates that some WA Health facilities do not have access to these resources and are therefore potentially limited in their capacity to generate optimal learning experiences for their staff.

# 9.4.3 Element 3: Mandatory workplace training planning

The evidence from this study showed unequivocally that to optimise uptake and engagement with MWT, organisations need to focus on the education or

learning value of the training product. Staff are happy to engage in training and will actively seek out learning when they believe it is relevant and impactful for their role in the workplace. It is therefore incumbent on organisations to deliver MWT that meets best practice design methodologies.

The planning guide component of the MWT Framework supports organisations to design and deliver effective learning products by guiding them through a step-by-step planning process from inception to post-delivery evaluation. The planning process can be applied in organisations in any industry, and can be utilised in small, independent business units, and organisations with multiple operational units, for example, a large health system involving multiple hospitals. In the latter, its proposed that the system-wide application of the planning process across all units of the organisation will provide the consistency, efficiency, relevance, ease of access, opportunities for RPL, and clarity of requirements that respondents in this study indicated was required to optimise MWT engagement. Such an approach would also align practices with the available best practice research evidence on workplace learning. Each component of the proposed planning system is presented in Figure 9.1. The planning process follows a temporal sequence designed to address each critical component efficiently. Each of the planning components in the sequence are described below.

# 9.4.3.1 Rationale for mandating

The first task in the planning process is to consider the request for MWT and critically review whether training needs to be mandated or made available for staff to access voluntarily. Proposals for MWT topics may be initiated by new legislation, new mandates, or policies (external) or by identifying a learning need within the organisation (internal). The organisation needs clear and consistent criteria to decide on whether the training should be mandatory or optional. The literature evidence on the impact of mandating training is inconclusive, with one body of evidence suggesting mandating programs signifies the value of learning to workers (Bahn & Barrett-Pugh, 2012a; Ricci et al., 2016; Robson, 2021), and another body of evidence that proposes mandating removes workers' sense of self-directedness or self-determination and therefore reduces engagement (Curado et al., 2025; Gegenfurtner et al., 2016). As such, it is recommended organisations mandate a program only if they are required by external bodies, or, where the rationale for mandating the program *and* the evidence that training is an effective means of addressing the issue under consideration can be clearly articulated.

Where a program *is* mandated, the organisation needs to communicate to workers the rationale for this, and where possible, draw a link between evidence of the impact of training, intended outcomes and workplace practices. Describing the rationale in terms of compliance alone could disenfranchise workers and result in a reluctance to engage and low knowledge transfer levels (Chen & Soltes, 2018).

# 9.4.3.2 Workplace or pre-employment training?

The second factor to consider in the planning process is whether the organisation is liable for the delivery of the mandated training or whether it can be required as a prerequisite for employment. This study and evidence from the literature (ADT, 2021) indicate that MWT is often required on commencing employment in an organisation. It is proposed that if the topic is deemed appropriate to mandate, organisations could review whether the essential

skills and knowledge must be delivered by the workplace or whether it can be made a prerequisite for employment. This potentially allows the transfer of the responsibility from the organisation to the employee, as occurs in some nonhealth sector industries. In the PHS extensive industrial negotiations with multiple health sector unions and employer groups would be required to embed this process.

The need for workplace training will not be eliminated altogether if preemployment training is required, as some content specific to the workplace may be required (e.g.: emergency evacuation procedures). Similarly, some training topics may require repetition, or require updating for staff during their period of employment and will therefore need to be delivered in the workplace.

#### 9.4.3.3 Target audience

Once a training topic is deemed necessary to mandate, the organisation should critically review which members of the workforce need to undertake the training. Anecdotal evidence (e.g. discussion with site MWT experts at WA Health sites consulted in this study) suggests that health organisations sometimes take a "sheep dip" or "herd immunity" approach whereby all workers undertake all mandated training programs. Rationales offered for this approach include efficiency (e.g. quicker and easier to deliver one orientation program for all workers than to curate targeted learning) and pragmatism (e.g. LMS capability may be limited or poorly integrated with human resources system so that it is difficult to identify different worker cohorts to match with MWT programs on the LMS). As this study's findings have shown, the risk of a "one size fits all" approach is that workers become disengaged and resentful about having to do training they view as irrelevant. It is therefore proposed that

organisations critically review, in consultation with different workforce groups, (and with reference to the rationale for mandating the program), which cohorts should be mandated to undertake the training, and which might be excluded. It is further proposed that when training is mandated for cohorts of a workforce, the training be made available to the entire workforce as an optional activity, as this study found several respondents cohorts wanted access to mandated programs from which their work group was excluded.

# 9.4.3.4 Program design

While it is beyond the scope of this discussion to critique the multiple models of workplace training design methods available, the inclusion of this component in the proposed MWT planning process is intended to prompt organisations to reflect deeply on the design of the learning opportunity mandated for the workforce, with specific reference to the content, delivery modality or format, and frequency of the training.

Before commencing a design process, the organisation should undertake a comprehensive environmental scan and literature review to identify whether there are existing MWT programs available on the mandated topic, and whether there is any evidence about their learning impact. This study found WA Health sites have created multiple MWT programs on the same learning topic, representing considerable investment costs and creating the need for RPL processes that this study found respondents find frustrating. Standardising learning content, or at minimum, learning objectives at each site would support RPL, while utilising the same learning program would reduce program production and maintenance costs.

#### 9.4.3.4.1 Pre-training Assessment

The option for pre-training assessment should be considered for all programs so that workers who can demonstrate the targeted skills and knowledge are not required to undertake the training. This study found respondents believe training should be focused on the workers who require upskilling and are frustrated when required to repeat training on subjects that they practice routinely as part of their daily work, or which they have been trained in as part of their technical or professional training. Pre-training assessment could potentially be via on-the-job assessment, for example, via routine practice audits (e.g.: hand hygiene) or through peer or supervisor observation and report. Online quizzes to assess knowledge could also be used. Utilising pretraining assessment has the potential to reduce the costs of delivering training to the whole workforce and ensures compliance needs are still addressed through worker demonstration that workers have the required skills and knowledge.

#### 9.4.3.4.2 Co-design

In designing mandated learning opportunities, this study has clearly shown, consistent with the literature, that there is value in co-designing learning products with the end user (Bryson, 2020; Davis et al., 2022; Cheung et al., 2023; Cole et al., 2022; St John & Akama, 2022). This study showed that at a minimum, the needs of respondents in different age cohorts, work roles, years of experience and work areas should be engaged in the design of MWT programs. As such, the next stages of the MWT planning process need to involve product consumers who can represent the target learners and advocate for design that meets their learning needs. Consumer

representatives can also serve as technical content matter experts on the subjects being proposed for training. Their participation will support the development of contemporary, evidence-based content with "real life" (As described by one of the survey respondents in this study) scenarios perceived as relevant by the learners.

#### 9.4.3.4.3 Learning objectives

Foremost in designing effective MWT is the need to describe the learning objectives of the program explicitly, that is, to specify precisely "what a learner is expected to know, understand and/ or be able to demonstrate after completion of a process of learning" (Gogus, 2012). These objectives provide the basis for the measuring the learning impact of the training. This research found that the learning objectives of MWT programs were not always apparent to respondents and that this impacted their engagement. The research literature also indicates that adult learners prefer to be self-directed, therefore understanding the purpose of a training program is critical in their decisions about whether to be engaged with it (Brockett & Hiemsta, 1991). Learning objectives may be impacted by the rationale driving the mandating of the topic, for example, an accreditation standard may specify exactly the learning outcome required, however learning objectives can also be refined to reflect the needs of the specific target learner cohort.

#### 9.4.3.4.4 Training delivery method

Both this research, and the literature (ADT, 2021), indicate a reliance on elearning and hands-on skills training within WA Health and the broader organisational learning literature. Further, they also demonstrate that organisations, including WA Health, preference a "one size fits all once"

approach to content by which a large proportion of MWT is delivered as programs in which all workers access the same single topic training program delivered independent of other training topics or other forms of learning support. This study also found that respondents disengage when presented with this type of MWT and instead want to engage with training that is targeted to different roles, work area or professions and which allows for interactions and inclusion of scenarios relevant to practices in their work area.

With appropriate resourcing, organisations can consider different and innovative ways to deliver mandated learning. The literature identifies multiple strategies to support workplace learning including on-the-job coaching, shadowing, on-the-job practice, informal learning, simulation learning, selfdirected learning, action learning, and reflection which might be considered as alternate methods to the current programs delivered. Multi-staged and blended learning strategies might also be explored. WA Health MWT programs are delivered in isolation, one topic at a time, with no formal follow-up postengagement. The literature describes the option of blended learning in which learners undertake e-learning theory training followed by face-to-face practical training (Celena Marques, 2022; Sana, et al., 2024;). Simulation training is also frequently discussed in health literature (Bowden et al., 2021; Zafošnik, 2024;). Evidence from the literature described previously speaks to the value of supervisors and peers reinforcing learning in the workplace to increase learning transfer. Therefore, there may be opportunities for workers to undertake self-directed learning followed by supervisor-supported learning on the floor. Content should be interactive, with face-to-face trainers using collaborative learning strategies relevant to adults (Knowles, 2011) and e-

learning programs using interactive elements in the design. The nascent literature on gamification of learning opportunities (predominantly online) may also inform this discussion. The literature suggests that building game tasks and competition into learning products may increase engagement and learning retention (Larson, 2020; Silva et al., 2020; Vardarlier, 2021).

A further finding of this research was that all MWT topics in WA Health are currently delivered in isolation. That is, no programs integrate the learning objectives of multiple MWT topics into one program. No reason for this practice was identified. Given the practical relationship of many MWT topics (e.g. Infection prevention and hand hygiene) program designers could consider integrating some learning objectives, for example, through simulation-based education programs.

In summary, with no evidence that the current default response to the need for MWT in which a generic, one size fits all e-learning program is designed for delivery across a whole organisation achieves learning or the application of that learning to the workplace, its incumbent on organisations to look critically at the myriad of learning strategies available to support workplace learning, and to "*be bold and innovative*" as one respondent in this study described it. With appropriate resourcing organisations can develop better targeted training that makes a difference to individual workers and to practice in the workplace.

#### 9.4.3.4.5 Frequency of training

This study showed that WA Health organisations arbitrarily designate requirements for training repetition, with no consistent rationale, nor evidence that repeated MWT meets learning needs or changes workplace practices.

Repeated training on the same subject, as shown in this study and the literature, has the potential to disengage staff. The frequency of training repetition should be evidence based, that is, required at a frequency that can be shown to have a meaningful impact on learning. This may necessitate an increase in frequency for training on some learning tasks (e.g. Motor skill-based training) however as respondents indicated they are happy to engage in training when there is evidence that doing so will lead to learning and practice impact, evidence can be used to mitigate any negative commentary about the need for increased training repetition.

Where the evidence, or compliance demands, requires training to be repeated, content should be regularly updated to reduce the risk of disengagement from repeating the same activity described by respondents in this study.

#### 9.4.3.4.6 Summary design consideration

The program design section of the MWT planning process is a critical element of the MWT Framework. The considered application of adult and workplace learning principles, and the judicious use of existing research evidence on program design and efficacy are critical to ensuring that the programs workers undertake focus on achieving learning outcomes and meaningful practice change, not just compliance. In so doing, workers will be more likely to engage in the training, and the organisation will achieve higher returns on their training investment as workers apply the skills more effectively in the workplace.

#### 9.4.3.5 Evaluation methodology

This study highlighted gaps and inconclusive findings in the research evidence regarding best practice for delivering mandated training. It also found that adult

learners want assurance that there is evidence backing the training they are required to undertake and are likely to disengage when it is not available. In this context, organisations have both an obligation and opportunity to embed evaluation into the MWT delivery process and contribute to our understanding of how to make MWT impactful. This should include actively integrating research data collection and analysis as part of any MWT program delivery.

This MWT planning process proposes that organisations use or adapt one of the multiple evaluation tools available to critically review the impact of any MWT delivered on the individual learner and the organisation. Kirkpatrick's evaluation levels are already utilised frequently in the health sector (Campbell et al., 2019), and may provide a suitable framework to support evaluation but should extend the currently common low-level measures of learner satisfaction to high levels of evaluation that consider the impact of the learning on practice and organisation metrices.

WA Health should consider routinely embedding measurements of the inputs and outcomes of each MWT program as part of every MWT program delivery. These could potentially be standardised across the organisation to allow for the comparison of performance at different sites. Measures of input may include time to design programs, costs associated with consultation with learners on co-design, program creation costs, trainer time, consumables used in training, resources used to administer MWT, and the costs associated with all of these. Outputs may include measures of individual learner satisfaction and learning transfer, measures of training impact (e.g. on work practices, safety incidents), or pre- and post-training knowledge and skill assessment. Routine collection and analysis of this data can inform the

organisation, funding bodies and the workforce about the relative value of different programs. Data analysis should be widely reported to support organisational learning across all WA Health sites.

The limited findings from interviews and consultation with volunteer respondents at each site during this study suggest that evaluation practices for MWT within WA health are currently rudimentary. Routine collection and analysis of MWT program evaluation data can inform the organisation, funding bodies and the workforce about the relative value of different programs and guide the future design of effective MWT programs. Data analysis should be widely reported to support organisational learning across all WA Health sites and would demonstrate a growing maturity of WA Health MWT processes.

#### 9.4.3.6 Naming and coding conventions

The study showed there was no consistency in the naming of MWT across sites. The impact of this, according to respondents, is that it causes confusion about what MWT individual staff are required to undertake and creates challenges when workers wish to claim RPL.

This MWT planning process proposes that larger organisations, including WA Health, take a consistent approach to naming programs for two reasons. Firstly, consistent naming of training programs allows for comparison of training should RPL be requested. Secondly, it allows promotion of a system-wide culture by demonstrating the value the whole organisation places on training on specific topics. Similarly, it is suggested that MWT program titles explicitly reflect the learning outcomes intended (e.g.: *Prevention and Management of Aggression in the Workplace* rather that *Aggression Training*),

to aid learners' understanding of the relevance of the training, to reinforce its intended outcome, and to provide messaging that this topic of training is important to the organisation.

Finally, this study found that within WA Health there is no consistent coding of MWT programs across sites meaning that comparisons of like programs for the purposes of evaluation, RPL, and compliance monitoring can be challenging. It is proposed that there be a consistent, WA Health organisation-wide coding system that ensures equivalent programs can be easily identified. The NHS in the UK offers a useful example of such a system (NHS Digital, 2023), whereby they have a set of ten core mandated programs with agreed learning outcomes required of all staff across the organisation. The programs are coded the same at any site or training institution thus allowing an efficient system for recognising RPL, and the opportunity to critically compare programs delivery the same content.

#### 9.4.3.7 Communication strategy

Two unequivocal findings of this study were that respondents need to see the relevance and value of MWT to engage with it, and that they need to understand the scope of the training they are required to do. That is, what programs they are required to complete in what timeframe. Similarly, the literature evidence shows that messaging to staff the value the organisation places on training, may increase their preparedness to engage with it (Bosset & Bourgeois, 2015; Grossman & Salas, 2011; Kyndt et al., 2014; Noe & Winkler, 2009). Organisations, including WA Health, can support staff by ensuring this information about the value, relevance, and requirement for MWT is readily available and regularly reinforced.

Within the MWT Framework, the MWT planning process proposes that a communication strategy be established for every MWT program required of staff. This strategy would ideally be co-designed by the training program design team (including end users of the program) and staff with communications expertise. Online and offline marketing strategies should be designed to communicate to the workforce the reasons why programs are valuable, their relevance to specific work groups and how workers can access the training. Communication strategies can be refined in response to feedback and evidence arising from the evaluation component of the planning process. Communication strategies should also consider the multitude of information delivery methods available in contemporary workplaces and the opportunities they offer to target information to workforce groups through specific communications tools and applications.

#### 9.4.3.8 Access strategy

Once again, this study and evidence from the literature (Brand, 2015; Doherty, 2010; Duggan et al., 2022) indicate that workers want to access training easily, efficiently and with minimal inconvenience. To that end, the MWT planning process proposes that organisations consider an access strategy for every MMT program required of staff. The strategy, as with all other components of the framework, would ideally be co-designed with target learners, with the view to removing or minimising barriers to access.

Barriers may be physical (e.g. training delivered in geographically distant locations that workers do not have time to access) or process related (e.g. workers with limited digital literacy required to search for and complete a program on a complex LMS). This study identified specific challenges for

respondents who work part-time and those who work infrequent shifts or shifts outside regular Monday-Friday office hours. Specific arrangements should be made to address their access barriers, in addition to those that might arise for staff with disabilities or other access barriers. Access to MWT via personal devices may be considered, as this has been reported to be appealing to many workers (Jeong, 2022). If implemented, access barriers such as IT system firewalls that prevent remote access to organisational information systems should be eliminated where possible, whilst maintaining cyber security for the organisation.

#### 9.4.3.9 Implementation Plan

The penultimate component of the MWT planning process relates to the need for implementation planning and is intended to address one of the themes arising from this study in which staff reported a lack of understanding about what MWT was required of them why, how to access and in what time frame. It is proposed that a co-designed implementation plan be established as part of the introduction of any new or changed MWT requirements.

There is ample evidence that organisational change has the best outcomes when strategically planned and when there is consideration of the organisation's readiness for change (Kotter & Cohen, 2002). Stakeholder engagement is essential to ensure all that all those impacted by the change are supported, as is the recognition of other contextual factors that might have an impact on how the change is adopted and maintained (Hiatt & Creasy, 2012). This planning process encourages the engagement of all relevant stakeholders in a formal process of change planning to ensure that all factors and potential impacts are identified and managed before MWT is imposed on

staff. By embedding sound change management practices in a formal implementation plan, and by incorporating the communications strategies previously prepared as part of the MWT planning process, MWT can be introduced to the workforce in a way that it is perceived as a positive event rather than another unwanted imposition on their time.

Application of change management practices will also ensure that the change is maintained over time, thereby potentially saving organisations additional costs that are often associated with poor change management (Hiatt & Creasy, 2012).

## 9.4.3.10 Review planning

Worker frustration with "outdated" or simply repetitious content was a key theme expressed by respondents in this study. The framework therefore includes proactive planning for regular review of every MWT program. In the program design phase, programs should be designed to allow for easy, costeffective updates. Minor updates may be cost-effectively offered on an annually, with more significant changes offered bi- or tri-annually.

In this study, respondents with extensive experience in the same workplace most frequently called for content to be "refreshed". There would be value in consulting with this cohort to identify how this might occur.

## 9.4.4 Conclusion MWT practice framework

The MWT Practice Framework described above, is designed to offer organisations, and WA Health in particular, a scaffold to optimise their MWT processes with the intent of increasing staff engagement, supporting the

learning of individual workers, and impacting positively on organisation practices. The framework aims to address the workforce concerns identified in this study, to perpetuate the positive MWT practices identified by staff in this study, and to incorporate the somewhat limited evidence on how to deliver impactful MWT into practice.

The Framework addresses the key finding of this study that the uptake of MWT and maintenance of compliance rates depends largely on the learning value training participants attribute to the programs. That is, to optimise uptake of MWT, workers need to see the relevance and value in the training.

By systematically addressing the three key elements - organisational culture, resources, and training planning - and their contributing components, organisations can ensure they have considered all aspects of MWT that this research and existing evidence shows contribute to effective workplace learning.

This proposed MWT Practice Framework has not been applied in practice nor evaluated, therefore, any organisation seeking to use the tool should also establish a process of evaluation to critically review the validity, reliability, and practice utility of the framework. The evaluation results can contribute to the existing evidence about MWT practices in the health and, potentially, other industry sectors.

# 9.5 Recommendations for future research

As previously discussed, there are significant gaps in the extant evidence on how to deliver engaging and impactful MWT. The evidence that does exist is distributed across multiple knowledge domains (e.g. psychology,

management, vocational education, education, and health) and practice groups (e.g. human resources, organisational development, health education) with the resultant risk that knowledge is siloed and practices in each domain fail to integrate with evidence from other domains. There are also knowledge domains operating adjacent to those with a primary interest in MWT, which might further inform MWT practices. A search for literature in the discipline of health economics, for example, yielded no specific evidence around MWT, however it could potentially offer knowledge that could be usefully applied in, for example, measuring the cost, cost benefit and opportunity costs associated with MWT. This current landscape offers the potential for greater integration of scholarship focused on MWT, and the opportunity for research from multiple domains to be utilised to better inform MWT practice.

Reflection on the implementation of this study may also inform future research in the area. The focus of this study was broad in that it considered the whole workforce across multiple business units (hospitals) in a large health service (WA Health). The study affirmed that the topic of MWT is worthy of research and that there are multiple opportunities to enhance the evidence base on which MWT practices are based. Future studies might focus on individual learning topics, for example, comparing existing MWT programs delivered on the same topic at different services. Similarly, research could focus on the impact of MWT on different worker cohorts based on age, years of experience, professional groups, or work roles. In progressing this research some questions arose that were not intended to be answered by the study. For example, the true cost of MWT to organisations could not be identified, nor

could the basis for worker's perceptions of the purpose of MWT be well explained. Both subjects would be worthy of further research.

A further learning from this study relates to research methods available to examine MWT. The mixed methodology used in the study allowed the triangulation of findings from the qualitative and quantitative data; however, the most valuable data from the perspective of immediate application to practice was the first-person, qualitative data from respondents about their perceptions of MWT. The depth and breadth of evidence arising from this qualitative data reinforces the value of engaging with the end users of learning products when evaluating the impact and efficacy of a service or product. It also demonstrated the value of qualitative methodologies used instead of, or in parallel with, quantitative studies in health training evaluation. As previously discussed, the literature arguably suggests a preference for quantitative study methods in health education research (Ajjawi, 2022). This study however reinforces the value of rich, thick data sourced through qualitative methods and how it can be applied to support practice-based problems. Future studies on this topic may use other qualitative methodologies (e.g. Delphi group, narrative analysis) to explore further explore the subject from the adult learners' (the workforce's) perspective.

The MWT Practice Framework described previously offers the opportunity to address existing gaps in the literature by embedded critical evaluation as one element of the MWT planning process. By embedding applied research into the routine practice of MWT in the WA Health system and potentially other health services, the evidence based for MWT can be built efficiently and with a focus on evidence to inform practice. Research methods such as

participatory action learning in which in which individual and organisations learn through doing may be useful (Wood, 2020). In the context of MWT this might take the form of designing and delivering a MWT programs while regularly reflecting on the lessons learned in the process. Narrative research methods may be useful in the exploration of individual learners' experiences with MWT (Brand, 2015).

Embedding routine data collection and analysis in the MWT delivery process in WA Health would be a departure from existing processes and would require an organisational commitment to do so. The process would require appropriate resourcing such as access to a workforce with evaluation and research skills and capacity to be involved. Research resources could be found from within the organisation, or accessed through a partnership with, for example a tertiary education provider.

While this study added to the understanding of how MWT is practiced in WA Health, there remain multiple unanswered questions about the organisation. These include gaps in our understanding about the MWT programs themselves, for example, the specific learning objectives and the learning content of the over one hundred MWT programs currently delivered across the system. The profile of the training workforce is also unclear: What are their qualifications? What requirements are specified in their job description forms? What are their skills? How is the training workforce structured and governed? A skills and qualification audit of workers in training roles, would help to address this knowledge gaps and support the establishment of processes to recruit and retain an appropriately skilled workforce in sufficient numbers to deliver excellent training equitably across the system.

Questions remain regarding the true costs of delivering MWT across the WA Health system though evidence from this study suggests it is significant. On a related theme, there is no current evidence about the relative value and costeffectiveness of the multiple MWT programs delivered across the system. A detailed benchmarking project to compare each of the MWT programs delivered on the same topic across multiple sites would be a useful starting point.

Further exploration of the impact of engaging workers in the co-design and delivery of MWT is also warranted. This might include research into different workforce resourcing models that support co-design. For example, it would be valuable to compare participant engagement and learning outcomes for co-designed training programs versus those designed by trainers only, programs co-designed by trainers and workers in the organisation and those co-designed by trainers and external stakeholders, programs designed by trainers who work exclusively as trainers and trainers who combine on work on-the-floor with training responsibilities. Similarly, designing, and contrasting training for specific worker cohorts would be valuable. This may include workers of different ages, years of experience, work roles or locations. Comparisons may inform how to target training more effectively for different worker cohorts.

More data is also needed to compare the efficacy of different learning modalities in delivering MWT. The reason for the current reliance on e-learning and face-to-face skills training has yet to be definitively described in the literature. However, it is surmised to be a combination of historical practice, perceptions of cost-effectiveness and practice pragmatism. Regardless of the

provenance, there is an opportunity to consider other methods of delivering learning, for example, simulation exercises combining multiple learning outcomes, on-the-job learning supported by coaches, innovative blended learning models and greater use of technological tools such as virtual reality learning environments. Research into strategies to increase training program interactivity would be valuable as a subset of this line of investigation. For example, deeper exploration of the behaviour trainers can apply to increase interactivity within face-to-face training sessions or gamification strategies within e-learning products, might prove valuable. Further research on the value of training repetition, including dosage (how much, how frequently), is also a critical gap in the extant literature.

Finally, with the rising costs of health care and increasing demand for public health services creating pressure on the system (Butler et al.,2024), a critical financial analysis of the actual costs and value of MWT to the system is required. This study has shown that considerable resources are allocated to MWT, yet the evidence for its value as a learning and behaviour change strategy is limited. Cost-benefit modelling would allow for a critical review of whether this allocation is justified.

In conclusion, this study has been a valuable first step in focused research into MWT in the public health sector. It has identified the size and scope of the phenomenon and has partially described it. It has highlighted the gaps in evidence about how best to deliver effective MWT and demonstrated the value of qualitative research methodologies and the engagement of workers in the research on the subject. In so doing it has revealed the multiple gaps in our knowledge and evidence base about MWT practices and has identified some

key unanswered questions about its practice that should be researched as a matter of priority. Finally, the study proposes a way forward by presenting a MWT Framework that embeds data collection and analysis into the daily practice of MWT, thus providing the basis for ongoing research that can guide practice improvements into the future.

# 9.6 Chapter conclusion

In conclusion, the findings of this research into workforce perceptions of MWT provide a challenge to health sector educators and trainers to critically review current MWT practices and use the extant literature and the findings of this study to deliver training that optimises workers' preparedness to engage in MWT that results in a positive impact for the workplace and individual workers. One of the key findings of the research was that workers *do* want to engage in MWT when it focuses on meaningful learning that they consider relevant to their roles and where the application of that learning in the workplace benefits patients, the workforce, and the organisation. Compliance alone was not considered by most respondents to be a valued rationale for MWT. Instead, respondents value MWT for its potential to offer them new learning and to improve workplace safety and quality.

The research and extant literature were used to develop a MWT Practice Framework that can be used to guide health organisations to develop MWT that is valued by the workforce and contributes to positive workplace behaviours. Coupled with ongoing research, the framework may assist in optimising the value of MWT to organisations, and the goal of MWT, as articulated by one of the participants of this study may be achieved:

"Mandatory training is essential; however, it must be current and to industry standard. If corners are cut, workers are not engaged, and it does not work. Invest in it properly, and you will save money in the long run...".

# References

 Ajjawi, R. (2022). Problematising voice in qualitative health professional education research. *Focus on Health Professional Education*, 23(2), 69-78.

https://search.informit.org/doi/10.3316/informit.537369223522806

- Allen, L., Palermo, C., Armstrong, E., & Hay, M. (2019) Categorising the broad impacts of continuing professional development: A scoping review. *Medical Education* 53:1087-1099 doi.10.1111/medi.13922
- Alhlfeldt, S., Mehta,S. & Sellnow. T. (2005). Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction were in use. *Higher Education and Research Development. 24(1),* 5-20.
- Alsalamah, A. & Callinan, C. (2022). The Kirkpatrick model for training evaluation, bibliometric analysis after 60 years (1959–2020). *Industrial and Commercial Training, 54(1),* 36-63.

Altman, B. A. (2008). The History of Workplace Learning in the United States and the Question of Control: A Selective Review of the Literature and the Implications of a Constructivist Paradigm. Paper presentation. The Academy of Human Resource Development International Research Conference, Americas Panama City, FL.

American Association of Talent Development. (December 2021). 2021 Status of the Industry Report. Retrieved from <u>http://en.atdchina.com.cn/state-</u> of-the-industry/2021-state-of-the-industry

Anderson, R., Sebaldt, A., Lin, Y. and Cheng, A. (2019). Optimal training frequency for acquisition and retention of high-quality CPR skills: A randomized trial. *Resuscitation*, 135, 153-161.
https://doi.org/10.1016/j.resuscitation.2018.10.033

Arbogast, A., Cummins, P., & McGrew, K. (2018). Older Workers and Digitalisation, Opportunities and Challenges for Lifelong Learning. *Innovation in Aging*, pp. 2, 398–399. Retrieved from https,//doi.org/10.1093/geroni/igy023.1486 Archibald, J. (2001). Sharing Aboriginal knowledge and Aboriginal ways of knowing. *Canadian Journal of Native Education, 25(1).* 

Arefin, M. S., & Islam, N. (2019). A Study on the Motivation to Transfer
Training in the Banking Industry of Bangladesh. *South Asian Journal of Human Resources Management*, 6(1), 45–72.
doi,10.1177/2322093718803210

Argyris, C. & Schon, D. (1978) Organisational Learning : A Theory of Action Perspective. Reading, Mass: Addison Wesley

Armstrong, S.J. & Sadler-Smith, E. (2008). Learning on Demand, at Your
Own Pace, in Rapid Bite Sized Chunks: The Future Shape of
Management Development? *Academy of Management Learning and Education*, 7(4), 571–586.

Austin, T. (2023). University Faculty Perceptions of Mandatory Online Training as Related to Training Self-Efficacy, Motivation, and Utility. (Ph.D. dissertation), Northern Illinois University, United States, https,//www.proquest.com/dissertations-theses/university-facultyperceptions-m&atory-online/docview/2827876044/se-2?accountid=10382 Australian Bureau of Statistics (2019). *Health care and social assistance - additional information for 2018-19.* https,//www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/8155.0Main

%20Features62018-

19?opendocument&tabname=Summary&prodno=8155.0&issue=2018-19&num=&view=.

Australian Bureau of Statistics. (2023, November 9). *Public sector employment and earnings rise in 2022-23*. ABS.
 https://www.abs.gov.au/media-centre/media-releases/public-sector employment-and-earnings-rise-2022-23.

Australian Council on Health Care Standards (2017). *What is accreditation?* https,//www.achs.org.au/media/131015/what\_is\_accreditation\_final\_we b.pdf.

Australian Commission on Safety and Quality in Health Care (2021) *National Safety and Quality Health Service Standards(Second Edition)* https://www.safetyandquality.gov.au/publications-andresources/resource-library/national-safety-and-quality-health-servicestandards-second-edition Australian Health Practitioner Registration Agency (AHPRA) (2023) *Registration* https,//www.ahpra.gov.au/

Australian Institute of Health and Welfare. (2022). *Health Workforce.* https,//www.aihw.gov.au/reports/workforce/health-workforce

Australian Medical Council. (2015). *AMA Calls for Expanded Specialist Training Program*. Media Release. <u>https://www.ama.com.au/media/ama-calls-expanded-specialist-training-program</u>

Australian Nursing & Midwifery Federation (2022)QNMU Survey Identifies Ways to Build a Sustainable Nursing and Midwifery Workforce. Media Release. https://www.anmf.org.au/media-campaigns/news/qnmusurvey-identifies-ways-to-build-a-sustainable-nursing-and-midwiferyworkforce/

Australian Resuscitation Council (2020). *Australian Resuscitation Guidelines*. https,//resus.org.au/.

Axelson, R. D. & Flick, A. (2010). Defining student engagement. *Change: The magazine of higher learning, 43(1),* 38-43.

- Baddeley, A. D., & Longman, D. J. A. (1978). The Influence of Length and
  Frequency of Training Session on the Rate of Learning to Type. *Ergonomics*, *21(8)*, 627–635. doi:10.1080/00140137808931764
- Baines, G. (2020). The Importance of Action Learning for a Newly Qualified
  Social Worker And The Impact This Has On Frontline Practice. *Action Learning: Research and Practice, 17*(2), 218-223.
  doi:https://doi.org/10.1080/14767333.2020.1761157
- Bahn, S. (2012). Construction Induction Training: Does mandatory training work? *Journal of Health, Safety and Environment, 28(3),* 17.
- Bahn, S. and Barratt-Pugh, L. (2012a). Emerging Issues of Health and Safety Training Delivery in Australia: Quality and Transferability. *Procedia - Social and Behavioural Sciences*, 62, 213-222. doi: 10.1016/j.sbspro.2012.09.035
- Bahn. S. & Barratt-Pugh, L. (2012b). Evaluation of the mandatory construction induction training program in Western Australia,
  Unanticipated consequences. *Evaluation and Program Planning*, 35, 337–343.

Bahn, S., & Barratt-Pugh, L. (2014). Safety training evaluation: The case of construction induction training and the impact on work-related injuries in the Western Australian construction sector. *International Journal of Training Research*, *12*(2), 148-157.
doi:10.1080/14480220.2014.11082037

- Baker, T. (2014). *Attracting and retaining talent, Becoming an employer of choice*. Springer.
- Baldwin, T. T. & Magjuka, R.J. (1991). Organizational training and signals of importance: Linking pretraining perceptions to intentions to transfer.
   *Human Resource Development Quarterly, 2(1), 25–36.*
- Baldwin, T. T., Ford, J.K. & Blume, B. (2009). Transfer of training 1988–2008,
  An updated review and agenda for future research. *International Review of Industrial and Organizational Psychology, 24(1), 41–70.*
- Bargagliotti, A. E., Martonosi, S. E., Orrison, M. E., Johnson, A. H., & Fefer, S. A. (2021). Using ranked survey data in education research: Methods and applications. *Journal of School Psychology*, 85, 17-36. <u>https://doi.org/10.1016/j.jsp.2020.12.005</u>
Barrash, J. (1994). Age-related decline in route learning ability. *Developmental Neuropsychology, 10(3),* 189–201.

- Barratt-Pugh, L., Bahn, S., & Scholz, A. (2011). Mandatory online training: transmissive learning, issues of abuse and hidden agendas. *Industry* and Higher Education, 25(3), 193-203.
- Bassi, L. J., & Van Buren, M. E. (1999). The 1999 ASTD state of the industry report. *Training and Development*, *53(1)*, S3-S3.
- Bates, R. (2004). A critical analysis of evaluation practice, the Kirkpatrick model & the principle of beneficence. *Evaluation and Program Planning*, *27(3)*, 341–348.

Baumgartner, L. (2003). Andragogy: A foundational theory/set of assumptions. In L.M. Baumgartner, M-Y. Lee S. Birden and D. Flowers (Eds), *Adult Learning Theory, A Primer* (pp. 6–10), Centre on Education and Training for Employment.
<a href="https://eric.ed.gov/?id=ED482337">https://eric.ed.gov/?id=ED482337</a>

Bazeley, P. (2018). *Integrating analyses in mixed methods research*. London: SAGE Publications Ltd.

Beck, A. J. & Boulton, M.L. (2015). Trends and Characteristics of the State and Local Public Health Workforce, 2010-2013. *American Journal of Public Health*, p. 105, S303-S310.

Beckett, H. (2020). Effect of e-learning on nurses' continuing professional development. *Nursing Management*, 30(4). doi: 10.7748/nm.2020.e1899

Beech, B. & Leather, P. (2006). Workplace violence in the health care sector,
A review of workers training and integration of training evaluation
models. *Aggression and Violent Behavior*, *11(1)*, 27–43.

Benbadis, S. R. (2013). "Just like EKGs!' Should EEGs undergo a confirmatory interpretation by a clinical neurophysiologist? *Neurology*, *80(1)*, 47-51.

- Bernardino, G. & Curado, C. (2020). Training evaluation, a configurational analysis of success and failure of trainers and trainees. *European Journal of Training and Development*, *44*(*4*/*5*), 531-546.
- Berry, L. (2014). MPs call for mandatory training to identify and help at-risk drinkers. *Cancer Nursing Practice*, *13*(7), 9–9.

Biggs, A. & Vines, E. (2022). Health Overview Budget Review 2022-23. https,//www.aph.gov.au/About\_Parliament/Parliamentary\_departments/ Parliamentary\_Library/pubs/rp/BudgetReviewOctober202223/HealthOv erview.

- Billett, S. (2008). Learning through work: exploring instances of relational interdependencies. *International Journal of Educational Research*, 47, 232–240.
- Billett, S., Henderson, A., Choy, S., Dymock, D., Beven, F., Kelley, A., James,
  I., Lewis, J. & Smith, R. (2012). *Change, Work and Learning: Aligning Continuing Education and Training*. National Centre for Vocational
  Education Research.
- Billett, S., & Choy, S. (2013). Learning through work, Emerging perspectives, and new challenges. *Journal of Workplace Learning, 25(4),* 264-276.
- Billett, S., Choy, S., Dymock, D., Smith, R., Kelly, S., Tyler, M., Henderson,
  A., Lewis, J. & Beven, F. (2014). *Refining Models and Approaches to Continuing Education and Training.* National Centre for Vocational
  Education Research.

- Billett, S., Troth, A. & Yan, H. (2024) Elaborating the Relations Amongst Worker's Learning, Innovations and Well-being. Vocations and Learning. 17:123-142. https://doi.org/10.1007/s12186-023-09336-9
- Biro, P. (2011). Difficult intubation in pregnancy. *Current Opinion in Anaesthesiology, 24(3),* 249-254
- Bjerregaard, K., Haslam, S.A. & Morton, T. (2016). How identification facilitates effective learning, the evaluation of generic versus localized professionalization training International *Journal of Training and Development, 20(1),* 17-37.
- Black, E., Maxwell, H. & Campbell, S. (2022). It's all in a name, Reenvisaging mandatory training to essential learning - enhancing compliance, engagement, and change. *Australian Nursing and Midwifery Journal, 27(6),* 47–47.
- Blair, E., & Seo, D.-C. (2007). Safety Training Making the Connection to High Performance. *Professional Safety, 52(10),* 42-48.

- Blanchard, P. N., Thacker, J.W. & Way, S.A.(2000). Training evaluation, perspectives and evidence from Canada. *International Journal of Training and Development, 4(4),* 295–304.
- Bloomfield, J. G., Fisher, M., Davies, C., Randall, S. & Gordon, C. J. (2023).
  Registered nurses' attitudes towards e-learning and technology in healthcare: A cross-sectional survey. *Nurse Education in Practice*, p. 69, 103597. https://doi.org/10.1016/j.nepr.2023.103597
- Blume, B. D., Ford, J.K., Baldwin, T.T., & Huang, J.L. (2010). Transfer of training, A meta-analytic review. *Journal of Management, 36(4),* 1065– 1105.
- Boad, D. & Garrick, J. (1999). Understandings of Workplace Learning. In D.
  Boad & J. Garrick (Eds) Understanding Learning at Work. (pp 1–12).
  London, Routledge.
- Boak, G. (2022). Action learning and healthcare 2011–2022. Action Learning:
   Research and Practice, 19(3), 251–268.
   https://doi.org/10.1080/14767333.2022.2133376

- Boniol, M., Kunjumen, T., Nair, T.S., Siyam, A., Campbell, J. and Diallo, K. (2022). The global health workforce stock and distribution in 2020 and 2030: a threat to equity and 'universal' health coverage? *BMJ Global Health*, *7*(6), e009316.
- Bosset, I. & Bourgeois, E. (2015). Motivation to transfer, linking perceived organizational support to training to personal goals. *Zeitschrift für Erziehungswissenschaft, 18(1),* 169-199.
- Botsman, P. (1975). *The learning needs and interests of adult blue collar factory workers.* Ithaca: New York State College of Human Ecology.
- Bowden, A., Hui-Chen, C., Wilson, V., & Traynor, V. (2021). The impact of ageing simulation education on healthcare professionals to promote person-centred care towards older people: A literature review. *Nurse Education in Practice, 53*, 103077.
  doi:https://doi.org/10.1016/j.nepr.2021.103077
- Boxall, A.-M. (2011). What are we doing to ensure the sustainability of the health system? (Research paper No 4; 2011-12). (4).
  https://www.aph.gov.au/About\_Parliament/Parliamentary\_Departments/
  Parliamentary\_Library/pubs/rp/rp1112/12rp04

Braithwaite, J., Clay-Williams, R., Vecellio, E., Marks, D., Hooper, T.,
Westbrook, M., Blakely, B., & Ludlow, K. (2016). The basis of clinical tribalism, hierarchy and stereotyping, a laboratory-controlled teamwork experiment. *BMJ Open, 6(7).*

https,//bmjopen.bmj.com/content/bmjopen/6/7/e012467.full.pdf

- Branch, R. M., & Kopcha, T. J. (2014). Instructional design models. In Handbook of research on educational communications and technology (pp. 77-87): Springer.
- Brand, D. (2015). Attendance at NHS mandatory training sessions. *Nursing Standard, 29(24),* 42-48
- Braun, V. and Clark, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. Retrieved from https://www.tandfonline.com/doi/abs/10.1191/1478088706QP063OA.
- Brimblecombe, N., Quist, H., & Nolan, F. (2019). A mixed-methods survey to explore views of workers and patients from mental health wards prior to introduction of a digital early warning system for physical deterioration. *Journal of Psychiatric and Mental Health Nursing, 26(3-4),* pp. 65–76.

- Brink, P. J., & Wood, M. J. (2012). *Advanced Design in Nursing Research.* Thousand Oaks, United States: SAGE Publications.
- Brockett, R.G. & Hiemstra R. (1991). Self-direction in Adult Learning, *Perspectives on Theory, Research, and Practice.* New York, NY, USA, Routledge.
- Brookfield, S. (1995). Adult learning, An overview. *International Encyclopedia of Education*, pp. 10, 375–380.
- Bryan, R. L. K., M.W. & Brownson, R. C. (2009). Integrating Adult Learning Principles into Training for Public Health Practice. *Health Promotion Practice*, *10(4)*, 557–563.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative Research*, 6(1), 97–113.
  doi:10.1177/1468794106058877
- Bryson, C. & Hand L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International*, 44(4), 349–362.

- Bryson, J. (2020). The role of trade union collective voice in the access to training for workers in New Zealand. *International Journal of Training and Development*, 24(3), 231–244.
- Burgel, B. J., Novak, D. A., Carpenter, H. E., Gruden, M., Lachat, A. M., & Taormina, D. (2014). Occupational health nurses' achievement of competence and comfort in respiratory protection and preferred learning methods, Results of a nationwide survey. *Workplace Health and Safety*, *62(2)*, 56-68.

Business and Strategy, Department of Health (2023). *Annual Report 2022-*2023. WA Health

Butler, M. (2023). Budget 2023-4: Building a stronger Medicare. https://www.health.gov.au/sites/default/files/2023-05/building-astronger-medicare-budget-2023-24\_0.pdf

Butler, S., Daddia, J. and Azizi, T. (2024). *The Time to Act is Now*. https://www.pwc.com.au/health/health-matters/the-future-of-health-inaustralia.html

- Cacciattolo, K. (2015). Defining Workplace Learning. *European Scientific Journal*, Special Edition, Vol 1, 243-250.
- Cameron, R. & Harrison, J.L. (2012). The interrelatedness of formal, nonformal and informal learning, Evidence from labour market program participants. *Australian Journal of Adult Learning*, *52(2)*, 277–309.
- Camilleri, M., Zhang, X., Norris, M., Monkhouse, A., Harvey, A., Wiseman, A., Sinha, P., Hemsley, A., Tang, S. & Menon, A. (2022). Covid-19 ICU remote-learning course (CIRLC), rapid ICU remote training for frontline health professionals during the COVID-19 pandemic in the UK. *Journal of the Intensive Care Society*, *23(2)*, 183–190.
- Campbell, K., Taylor, V., & Douglas, S. (2019). Effectiveness of online cancer education for nurses and allied health professionals; a systematic review using Kirkpatrick evaluation framework. *Journal of Cancer Education*, pp. 34, 339–356.
- Canady, V. A. (2022). Maternal MH project to identify and close clinician training gaps. *Mental Health Weekly, 32(16),* 3-4.

- Cancer Nursing Practice (2020). NHS workers uninformed about asbestosrelated risk at work. *Cancer Nursing Practice, 19(6),* 7.
- Carliner, S. & Bakir, I. (2010). Trends in spending on training, an analysis of the 1982 through 2008 Training Annual Industry Reports. *Performance Improvement Quarterly, 23(3),* 77–105.
- Carr, S. E., Br&, G., Wei, L., Wright, H. M., Nicol, P., Metcalfe, H. L., Saunders, J.A., Payne. J.A., Seubert, J.L & Foley, L. C. (2016). Helping someone with a skill sharpens it in your own mind: A mixed method study exploring health professions students' experiences of Peer Assisted Learning (PAL). *BMC Medical Education*, *16*(*48*), 1–10.
- Carroll B, Nicholson H (2014) Resistance and struggle in leadership development. *Human Relations* 67: 1413–1436.
- Castro, M. D. B., & Tumibay, G. M. (2021). A literature review: efficacy of online learning courses for higher education institution using metaanalysis. *Education and Information Technologies*, 26(2), 1367-1385.
- Chalofsky, N. F. (2014). *Handbook of Human Resource Development.* Somerset, United States, Center for Creative Leadership.

Charafeddine, L., Badran, M., Nakad, P., Ammar, W., & Yunis, K. (2016). Strategic assessment of implementation of neonatal resuscitation training at a national level. *Paediatrics International, 58(7),* 595–600.

Charungkaittikul, S. & Henschke, J. A. (2021). Applying Andragogical concepts in creating a sustainable lifelong learning society. *Research Anthology on Adult Education and the Development of Lifelong Learners*, IGI Global, 576-590.

Chen, H. & Soltes, E. (2018). Why compliance programs fail—and how to fix them. *Harvard Business Review, 96(2),* 116-125.

Chen, Z. H., Tsui, A.S. & Farh, J-L. (2002). Loyalty to supervisor vs. organizational commitment, Relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, 75(3), 339-356.

Child and Adolescent Health Service (2018). Mandatory and Core Requirements Training Framework. *Child and Adolescent Health Service, Government of Western Australia* https://www.health.wa.gov.au/~/media/Files/Corporate/general%20docu ments/CAHS/WorkforcePolicies/M&atory&CoreRequirementTrainingFra mework.pdf

- Chiu, T. K. F. (2021). Digital support for student engagement in blended learning based on self-determination theory. *Computers in Human Behavior*, 124, 106909. https://doi.org/10.1016/j.chb.2021.106909
- Clarke, S., Burke, R. J. & Cooper, C. L. (2011). *Occupational Health and Safety*. Abingdon, United Kingdom, Taylor and Francis Group.
- Clemes, S. A., Haslam, C. O., & Haslam, Roger A. (2010). What constitutes effective manual handling training? A systematic review. *Occupational Medicine*, pp. 60, 101–107.
- Cheung, J. C.-T., Lou, V. W.-Q., Hu, D.-Y., Pan, N. F. C., Woo, E. M. W., & Cheng, M. S. F. (2023). Eliminating Ageism in Higher Education: An Intergenerational Participatory Co-design Project. *Educational Gerontology, 49(11),* 966-978. doi:10.1080/03601277.2023.2187107
- Cole, A. C., Adapa, K., Khasawneh, A. Richardson, D.R. & Mazur, L. (2022).
  Co-design approaches involving older adults in the development of electronic healthcare tools, a systematic review. *BMJ Open, 12(7),* e058390.

Committee on Safety and Health at Work 1970-1972 (1972). *Committee on Safety and Health at Work (Robson Committee), Report and Papers.* LAB 96. The National Archives. https,//discovery.nationalarchives.gov.uk/details/r/C10211

Construction Training Group (2023). *A Guide to Construction Tickets.* https,//constructiontraininggroup.com.au/guide-to-construction-tickets/

Cook, D. A. & Artino, A. R.(2016). Motivation to learn, an overview of contemporary theories. *Medical Education, 50(10),* 997-1014.

- Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). Social Exchange Theory. In J. De Lamater & A. Ward (Eds. pp. 61–88), *Handbook of Social Psychology*. Dordrecht, Springer Netherlands.
- Coole, C., Nouri, F., Potgieter, I. & Drummond, A. (2015). Completion of fit notes by GPs, a mixed methods study. *Perspectives in Public Health*, *135(5)*, 233–242.
- Cranton, P. & King, K.P. (2003). Transformative learning as a professional development goal. *New Directions in Adult Continuing Education*, 98, 31-38.

- Creinin, M. D., Kaunitz, A.M., Darney, P. D., Schwartz, L., Hampton, T., Gordon, K. & Rekers, H. (2017). The US etonogestrel implant mandatory clinical training and active monitoring programs, 6-year experience. *Contraception*, *95*(*2*), 205-210.
- Creswell, J. W. & Plano-Clark, V.L. (2011). *Designing and Conducting Mixed Methods Research*. Los Angeles, Sage Publications.
- Creswell, J. W. (2014). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. (Custom Edition, 5th Edition.). Sydney, Australia: Pearson Australia.
- Cross, K. P. (1981). Adults as Learners. Increasing Participation and Facilitating Learning. San Francisco: Jossey-Bass.
- Cully, M.(2005) Employer-Provided Training: Findings From Recent Case Studies – At a Glance. National Centre for Vocation Education research.
- Cunningham, F. C., Murphy, M.G., Ward, G., Fagan, R., Arley, B., Hornby-Turner, Y.C. & d'Ábbs, P. H. (2022). Impact of an Aboriginal and Torres Strait Islander brief intervention training program on health workers

participants' own health behaviours, Smoking, nutrition and physical activity. *Health Promotion Journal of Australia*, https,//onlinelibrary.wiley.com/doi/10.1002/hpja.628

Cunningham, J., & Hillier, E. (2013). Informal learning in the workplace, key activities and processes. *Education* + *Training*, *55(1)*, 37–51. doi,10.1108/00400911311294960

Curado, C., Lopes Henriques, P. & Ribeiro, S. (2015). Voluntary or mandatory enrolment in training and the motivation to transfer training. *International Journal of Training and Development, 19(2),* 98 -109.

Dachner, A. M. & Polin, B. (2016). A systematic approach to educating the emerging adult learner in undergraduate management courses. *Journal of Management Education, 40(2),* 121-151.

Darling-Hammond, L., Wei, R.C., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the U.S. and abroad. Retrieved from https://edpolicy.stanford.edu/library/publications/187

- Darnon, C., Dompnier, B., & Marijn Poortvliet, P. (2012). Achievement goals in educational contexts: A social psychology perspective. *Social and Personality Psychology Compass*, *6(10)*, 760-771.
- Davies, A., Hooley, F., Eleftheriou, I., Abdulhussein, H., & Davies, A. C.
  (2022). Applying Co-Design Principles for the Development of Health
  Education and Workforce Development. *Studies in Health Technology and Informatics*, pp. 298, 39–45. https://doi.org/10.3233/SHTI220904
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, *2*(*2*), 25–36.
- Delahaye, B. (2004). *Human resource development: Adult learning and knowledge management.* John Wiley and Sons Australia.
- Delbridge, R., Garvey, L., Mackelprang, J. L., Cassar, N., Ward-Pahl, E., Egan, M., & Williams, A. (2022). Working at a cultural interface: Cocreating Aboriginal health curriculum for health professions. *Higher Education Research and Development, 41(5),* 1483-1498.

Desmarchelier, R., & Cary, L. J. (2022). Toward just and equitable microcredentials: an Australian perspective. *International Journal of Educational Technology in Higher Education, 19*(1), 25. doi:10.1186/s41239-022-00332-y

Department of Health and Aged Care (2023) *The Australian Health System.* https,//www.health.gov.au/about-us/the-australian-health-system.

Devine, P. G. & Ash, T. L. (2022). Diversity Training Goals, Limitations, and Promise, A Review of the Multidisciplinary Literature. *Annual Review of Psychology*, pp. 73, 403–429.

Doherty, L. (2010). Lack of support from employers means nurses miss out on CPD. *Nursing Standard, 24(30),* 6–6.

Duckett, S. J. (2005). Health workforce design for the 21st century. *Australian Health Review*, 29(2), 201–210.

Duffin, C. (2010). Budget cuts threaten nurses' mandatory training courses. Nursing Management - UK 17(2), 6–7.

- Duggan, I., Hablase, R., Beard, L., Odejinmi, F. & Mallick, R. (2022). The impact of COVID-19 on O&G trainees; where are we now? *Facts, Views and Vision in ObGyn, 14(1),* 69–75.
- Dunphy, L., Proctor, G., Bartlett, R., Haslam, M., & Wood, C. (2010).
  Reflections and learning from using action learning sets in a healthcare education setting. *Action Learning: Research and Practice*, 7(3), 303–314. https://doi.org/10.1080/14767333.2010.518378
- East Metropolitan Health Service. (2021). *Mandatory Training Policy, East Metropolitan Health Service*
- Eisenberger, R. (2022). Perceived organizational support, A review of the literature. *Journal of Applied Psychology, J87,* 698–714.
- Emmett, E. A. (1997). Occupational Health and Safety in National Development - the Case of Australia. *Scandinavian Journal of Work, Environment and Health,* 23, 325-333.
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology, 70(1),* 113–136.

- Evans.K. & Rainbird, H. (2022). The significance of workplace learning for a learning society. In K Evans, P Hodkinson & L. Unwin. *Working to Learn, Transforming Learning in the Workplace*. Routledge.
- Fabbris, L. (2013). Measurement Scales for Scoring or Rating Sets of Interrelated Data. In C. Davino and Fabbris,L. (Eds.), *Survey Data Collections and Integration*. Berlin, Hieldelberg: Springe Berlien Heildelberg: Imppront: Springer.
- Fahlman, D. (2013). Examining informal learning using mobile devices in the healthcare workplace. Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie, 39(4).
- Farh, J-L., Zhong, C-B. & Organ, D.W. (2004). Organizational citizenship behavior in the People's Republic of China. Organization Science, 15(2), 241–253.
- Farmer, M. (2014). *History of Occupational Health and Safety in Australia* (Masters thesis, Curtin University)

- Fejes, A. & Nicholl, K. (2008). *Foucault and Lifelong Learning, Governing the Subject.* Oxon UK, Routledge.
- Fenwick, T. & Tennant, M. (2020). Understanding adult learners. In G. Foley (Ed.), *Dimensions of adult learning*, pp. 55–73, Routledge.
- Fleenor, D. W., Atkinson, H.G., Karani, R., Lerner, S., Leisman, S. & Marin,
  D. (2022). An Innovative Approach for Integrating Mandatory,
  Longitudinal Spirituality Training Into the Medical School Curriculum. *Academic Medicine, Journal of the Association of American Medical Colleges, 97(2),* 215–221.
- Fleming, J., Becker, K., & Newton, C. (2017). Factors for successful elearning: does age matter? *Education & Training*, 59(1), 76-89. doi:https://doi.org/10.1108/ET- -2015-0057.
- Ford, J. K., Quiñones, M.A. Sego, D.J. & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on-the-job. *Personnel Psychology*, 45(3), 511-527.
- Fowler, F. J. (2009). *Survey research methods*. (Vol. 4th ed.). Los Angeles: Sage.

Fuchs, A. H. & Evans, R.B. (2012). Volume 1. History of Psychology:
Psychology as a Science. In I.B. Weiner (Ed.) *Handbook of Psychology*.
John Wiley and Sons
https,//do.iorg.dbgw.lis.curtin.edu.au/10.1002/9781118133880.hop2010
03

- Fuller, A., & Unwin, L. (2004). Expansive learning environments: integrating organisational and personal development. In H. Rainbird, A. Fuller & A. Munro (Eds.), *Workplace Learning in Context*. New York: Routledge.
- Gagne, R. M. (1965). *The Conditions of Learning.* (1st ed). New York: Holt, Rinehart and Winston.
- Gagnon S, Collinson D (2014) Rethinking global leadership development programmes: The interrelated significance of power, context and identity. *Organization Studies* 35: 645–670.
- Garganta, K. J. (1989). *The Question of Mandatory Continuing Education for Professionals.* (Education Doctorate). Harvard University, ERIC.
- Garmann-Johnsen, N. F., Helmersen, M. & Eikebrokk, T.R. (2020).
   Employee-driven digitalization in healthcare, co-designing services that deliver. *Health Policy and Technology*, 9(2), 247-254.

Garrick, J. (1998). Informal learning in corporate workplaces. *Human Resource Development Quarterly*, 9(2), 129–144.

- Gaskell, N., Hinton, R., Page, T., Elvins, T. & Malin, A. (2016). Putting an end to Black Wednesday, improving patient safety by achieving comprehensive trust induction and mandatory training by day 1. *Clinical Medicine*, *16(2)*, 124-128.
- Gayed, A., Bryan, B.T., LaMontagne, A.D., Milner, A., Deady, M., Calvo, R.A., MacKinnon, A., Christensen, H., Mykletun, A., Glozier, N. & Harvey, S.B. (2019). A Cluster Randomized Controlled Trial to Evaluate HeadCoach: An Online Mental Health Training Program for Workplace Managers. *Journal of Occupational and Environmental Medicine, 61(7),* 545.
- Geffen, L. (2014). A brief history of medical education and training in Australia. *Medical Journal of Australia, 201(S1), S19-S22*. https://doi.org/10.5694/mja14.00118

Gegenfurtner, A., Konings, K.D, Kosmajac, N. & Gebhardt, M. (2016).
Voluntary or mandatory training participation as a moderator in the relationship between goal orientations and transfer of training. *International Journal of Training and Development, 20(4),* 290-301.

- Geoffrion, S., Hills, D. J., Ross, H. M., Pich, J., Hill, A. T., Dalsbø, T. K., Riahi,
  S., Martínez-Jarreta, B. & Guay, S. (2020). Education and training for
  preventing and minimizing workplace aggression directed toward
  healthcare workers. *Cochrane Database Systematic Review*, 9(9),
  Cd011860.
- Gerada, C. (2019). Mandatory training needs a fundamental review. *BMJ 365*, I1406. https,//www.bmj.com/content/365/bmj.I1406
- Giangreco, A., Carugati, A. & Sebastiano, A. (2010). "Are we doing the right thing? Food for thought on training evaluation and its context. *Personnel Review, 39 (2),*162-177.

Gijbels, D. & Spaenhoven,R.(2011). On organizational learning: C. Argyris. In *F. Dochy, D. Gijbels, M. Segers & P. Van den Bossche (1st ed, Chapt*8) Theories of Learning in the Professions, Building Blocks for Training and Professional Development Programs. London, Routledge.

Glasper, A. (2019). Government plans mandatory training to improve care of those with a learning disability or autism. *British Journal of Healthcare Assistants, 13(4),* 178–181.

- Gogus, A. (2012). Learning Objectives. In N. M. Seel (Ed.), *Encyclopedia of the Sciences of Learning*. (pp. 1950-1954). Boston, MA, Springer US.
- Gordon, W. J., Wright, A., Glynn, R.J., Kadakia, J., Mazzone, C., Leinbach,
  E. and Landman, A. (2019). Evaluation of a mandatory phishing training program for high-risk employees at a US healthcare system. *Journal of the American Medical Informatics Association, 26(6),* 547-552.
  doi:10.1093/jamia/ocz005
- Govaerts, N., & Dochy, F. (2014). Disentangling the role of the supervisor in transfer of training. *Educational Research Review*, 12, 77-93.

Government of South Australia. (2023). *South Australia Local Health Network Education and Training.* Retrieved from https://www.saheducation.com/moodle/

Government of Western Australia (2023). *Health and Mental Health Western Australia State Budget 2023-34*. https://www.ourstatebudget.wa.gov.au/2023-24/health.html Government of Western Australia, Department of Health (2018). *The Public Health Policy Framework Department of Health F-AA-40155*. Perth, Australia.

Government of Western Australia, Department of Health. (2021). *Research Governance Policy MP* 0162/21.

https://www.health.wa.gov.au/~/media/Corp/Policy-

Frameworks/Research/Research-Governance-Policy/Research-

Governance-Policy.pdf

Government of Western Australia, Department of Health. (2024). About Ushttps://www.wahealth.wa.gov.au\About-us

Government of Western Australia, East Metropolitan Health Service. (2020). *East Metropolitan Health Service Annual Report 2019-20.* Retrieved from https://emhs.health.wa.gov.au/~/media/HSPs/EMHS/Documents/About-

Us/emhs-annual-report-2019-20.pdf

Government of Western Australia, North Metropolitan Health Services. (2020). *North Metropolitan Health Services Annual Report 2020*. Retrieved from https://www.nmhs.health.wa.gov.au/~/media/HSPs/NMHS/Documents/ Reports/NMHS\_AnnualReport2020.pdf Government of Western Australia, Patient Safety Surveillance Unit. (2011). *From Death We Learn 2011*. WA Health. Perth, Australia https://www.health.wa.gov.au/~/media/Files/Corporate/Reports-andpublications/PDF/deathwelearn2011.pdf

Government of Western Australia, South Metropolitan Health Service. (2020). *Annual Report 2019/20*. Retrieved from https://smhs.health.wa.gov.au/~/media/HSPs/SMHS/Corporate/Files/Str ategic/2019-20-SMHS-AR-Complete.pdf

Government of Western Australia. (2022). Cyber Security Unit: Supporting agencies to uplift their cyber security capabilities.
 https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/office-of-digital-government/cyber-security-unit

- Gozu, A., Beach, M.C., Price, E.G., Gary, T.L., Robinson, K., Palacio, A.,
  Smarth, C., Jenckes, M., Feuerstein, C., Bass, E.B., Powe, N.R. &
  Cooper, L.A.(2007). Self-Administered Instruments to Measure Cultural
  Competence of Health Professionals, A Systematic Review. *Teaching and Learning in Medicine*, *19(2)*, 180-190.
- Grayson, M. L., Stewardson, A. J., Russo, P. L., Ryan, K. E., Olsen, K. L., Havers, S. M., & Cruickshank, M. (2018). Effects of the Australian

National Hand Hygiene Initiative after 8 years on infection control practices, health-care worker education, and clinical outcomes: a longitudinal study. *The Lancet Infectious Diseases, 18(11),* 1269–1277. https://doi.org/10.1016/S1473-3099(18)30491-2

- Greene, H. E. & Marcham, C.L. (2019). Online vs. conventional Safety Training Approaches. *Professional Safety, 64(1),* 26–31.
- Greene, W. L., Kim, Y. M., & Korthagen, F. A. (2012). Teaching and Learning from Within: A Core Reflection Approach to Quality and Inspiration in Education. In F. A. J. Korthagen, Kim, Y.M., & Greene, W.L. (Ed.), Teaching and learning from within (1st ed., pp. 3-11): Routledge.
- Griffin, R. P. (2011). Workplace learning evaluation: A conceptual model and framework. *Industrial and Commercial Training*, 43(3), 172-178. doi:https://doi.org/10.1108/00197851111123631
- Grossman, R. and Salas, E. (2011). The transfer of training, what really matters. *International Journal of Training and Development, 15(2),* 103-120. DOI, 10.1111/j.1468-2419.2011.00373.x

- Grow, G. O. (1991). Teaching Learners to be Self-Directed. *Adult Education Quarterly*, 41 (Spring), pp. 125–149.
- Harper, M. G., Aucoin, J. & Warren, J.I. (2016). Nursing Professional
  Development Organizational Value Demonstration Project. *Journal for Nurses in Professional Development, 32(5), 242–247.*
- Harrison, R., She, E.N., Debono, D., Chauhan, A., Newman, B. (2022).Creating space for theory when co-designing healthcare interventions.*Journal of Evaluation in Clinical Practice, 29 (4),* 1-4
- Hartzb, H. & Groopman, J. (2020). Perspective: Physician Burnout, Interrupted. *New England Journal of Medicine, 382(26),* 2485-2487.
- Harvey, D., O'Brien, D. & Horner, D. (2019). Is it time to make regular cardiopulmonary resuscitation training mandatory for all New Zealand registered physiotherapists? *New Zealand Journal of Physiotherapy*, 47(3), 137–138.
- Haskell, E.H. (2001). *Transfer of Learning, Cognition, Instruction, and Reasoning*. New York, Academic Press.

Haslam, R. A., Hide, S.A., Gibb, A.G.F., Gyi, D.E., Pavitt, T., Atkinson, S. &
Duff, A.R. (2005). Contributing factors in construction accidents. *Applied Ergonomics*, pp. 36, 401–415.

Hays, R. B. (2007). Reforming medical education in the United Kingdom, lessons for Australia and New Zealand. *Medical Journal of Australia*, 187(7), 400–403.

Health Education and Training Institute (2022). *Mandatory Training.* https,//www.heti.nsw.gov.au/education-&-training/my-healthlearning/mandatory-training.

Health and Education Training Institution. (2015). The Sim Guide: Allied
Health Scenarios, Templates and Tips for Simulation Based Education.
NSW Government.

Henschke, J. A. (2011). Considerations Regarding the Future of Andragogy. *Adult Learning*, *22(1)*, 34-37.

Herberts, C. & Sykes. C. (2012). Midwives' Perceptions of Providing Stop-Smoking Advice and Pregnant Smokers' Perceptions of Stop-Smoking Services Within the Same Deprived Area of London. *Journal of Midwifery and Women's Health*, *57(1)*, 67–73.

- Hetherton, M., Garnham, J., & Newsum, L. (2021, May 2021). Using action learning to support newly qualified nurses in practice: NT. *Nursing Times, 117(5),* 24. https://www.proquest.com/magazines/using-actionlearning-support-newly-qualified/docview/2541387912/se-2?accountid=10382
- Hiatt, J. M. & Creasey, T. J. (2012). *Change Management, The People Side* of Change. Prosci Learning Centre Publications
- Hill, C. (2009). Affiliation Motivation. In Leary, M.R. and Doyle, R.H. (Ed.), Handbook of Individual Differences in Social Behaviour. New York: The Guildford Press.
- Hills, S. (2015). An interactive approach to mandatory training. *Nursing Times, 111(46), 22–*23.
- Hird, T. (2012). Leveraging social learning to improve the compliance culture. *Training and Development, 39(6),* 8–9.

Hoddes, J. (2022). 211 The importance of training theatre workers in recognition of Female Genital Mutilation. *Archives of Disease in Childhood*, 107(Suppl 2), A285. <u>https://doi.org/10.1136/archdischild-2022-rcpch.461</u>

Hodkinson, P. & Hodkinson, H. (2004). The complexities of workplace learning, problems and dangers in trying to measure attainment. In A.
Fuller, A. Munro and H. Rainbird.(Eds. pp 275-292). *Workplace Learning in Context*, Routledge.

Hollis, J. L., Seward, K., Kocanda, L., Collins, C.E., Tully, B., Brett, K.,
Hunter, M., Fournier, M., Schumacher, T., Lawrence, W. & MacDonald-Wicks, L. (2022). Evaluating a train-the-trainer model for scaling-up
Healthy Conversation Skills training, A pre-post survey using the
Theoretical Domains Framework. *Patient Education and Counselling* 105(10), 3078–3085.

Holton, E. F. III. (1996). The flawed four-level evaluation model. *Human Resource Development Quarterly,* 

7(1),21. https://doi.org/10.1002/hrdq.3920070103

Holton, E. F. (2005). Holton's Evaluation Model: New Evidence and
Construct Elaborations. *Advances in Developing Human Resources*,
7(1), 37-54. doi:10.1177/1523422304272080

- Holton, E. F., Bates, R.A. & Ruana, W.E.A. (2000). Development of generalized Learning Transfer System Inventory. *Human Resource Development Quarterly*, 11, 333–360.
- Holton, E. F., Wilson, L. S. & Bates, R. A. (2009). Toward development of a generalized instrument to measure andragogy. *Human Resource Development Quarterly*, pp. 20, 169–193. doi: 10.1002/hrdq.20014
- Houle, C. O. (1961). *The Inquiring Mind*. Madison: University of Wisconsin Press.
- House, J. (1981). *Work Stress and Social Support*. Reading, MA, Addison-Wesley.
- Hughes, A. M., Zajac, S., Woods, A. L. & Salas, E. (2020). The role of work environment in training sustainment, A meta-analysis. *Human Factors*, 62(1), 166–183.

- Hui, C., Lee, C. & Rousseau, D.M. (2004). Psychological contract and organizational citizenship behaviour in China, investigating generalizability and instrumentality. *Journal of Applied Psychology, 89(2),* 311.
- Hui, C., Lee, C. and Rousseau, D.M. (2004). Psychological contract and organizational citizenship behaviour in China: investigating generalizability and instrumentality. *Journal of Applied Psychology, 89(2),* 311.
- Hunt, L. (2014). Mandatory training needed for end of life discussions. *Cancer Nursing Practice*, *13(5)*, 8–9.
- Hunter, D. J. (2013). From tribalism to corporatism: The continuing managerial challenge to medical dominance. In D. Kelleher, J, Gabe & G. Williams. (Eds) *Challenging medicine* (pp. 35-57): Routledge.
- Illeris, K. (2011). The Fundamentals of Workplace Learning. *Understanding How People Learn in Working Life*. New York, Rutledge.

Independent Hospital Pricing Authority. (2020). *National Efficient Cost* Determination 2020–21.

https,//www.ihpa.gov.au/sites/default/files/Documents/national\_efficient \_cost\_determination\_2020-21.pdf.

International Standards Organization. (2018). ISO 22000:2018, Food safety management systems – Requirements for any organization in the food chain.

https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100430.pdf

International Standards Organization. (2024). Standards.

https://www.iso.org/standards.html

Jack, R. R. &Chandrasekaran, K. (2019). Letter, Should Mindfulness be Incorporated as a Mandatory Component of Neurosurgical Training? *Neurosurgery, 84(3),* E239-E240.

Jacobs, R. L. & Park, Y. (2009). A Proposed Conceptual Framework of Workplace Learning, Implications for Theory Development and Research in Resource Development. *Human Resources Development Review, 8(2),* 133-150.

- Jacobsen, C. B., Andersen, L. B., Bøllingtoft, A. & Eriksen, T.L.M. (2022).
  Can leadership training improve organizational effectiveness? Evidence from a randomized field experiment on transformational and transactional leadership. *Public Administration Review, 82(1),* 117-131.
- Jang, C. S., Lim, D. H., You, J., & Cho, S. (2022). Brain-based learning research for adult education and human resource development. *European Journal of Training and Development, 46(5/6),* 627–651.
- Janssens, L., Smet, K., Onghena, P. & Kyndt, E. (2017). The relationship between learning conditions in the workplace and informal learning outcomes, a study among police inspectors. *International Journal of Training and Development, 21(2),* 92-112.
- Jarvis, P. (1987). *Adult Education in the Social Context.* London: Croom Helm.
- Jarvis, P. (2012). *Towards a comprehensive theory of human learning*. Routledge.
- Jeong, K-O. (2022). Facilitating sustainable self-directed learning experience with the use of mobile-assisted language learning. *Sustainability, 14(5),* 2894. https://doi.org/10.3390/su14052894
- Jevon, P., Davis. D. & Hartley, S. (2012). Using OSCE for mandatory training. *Nursing Times*, *108(8)*, 18–19.
- Jin, T., Jiang, Y., Gu, M. M., & Chen, J. (2022). "Their encouragement makes me feel more confident": Exploring peer effects on learner engagement in collaborative reading of academic texts. *Journal of English for Academic Purposes*, 60, 101177. doi:https://doi.org/10.1016/j.jeap.2022.101177
- John, V. (2015). A search for learning transfer: does non-mandatory training make a difference? *British Journal of Healthcare Assistants*, 9(1), 41–47.
- Johnston, S., Coyer, F.M. & Nash, R. (2018). Kirkpatrick's Evaluation of Simulation and Debriefing in Health Care Education, A Systematic Review. *Journal of Nursing Education*, *57(7)*, 393–398.

- Jung, Y., & Lee, J. (2018). Learning engagement and persistence in massive open online courses (MOOCS). *Computers and Education*, 122, 9-22.
- Jungmann, F., Wegge, J., Liebermann, S.C., Ries, B.C. & Schmidt, K-H.
  (2020). Improving team functioning and performance in age-diverse teams, Evaluation of a leadership training. *Work, Aging and Retirement,* 6(3), 175-194.
- Karakas, F., & Manisaligil, A. (2012). Reorienting self-directed learning for the creative digital era. *European Journal of Training and Development*, 36(7), 712-731. doi:10.1108/03090591211255557
- Katoh, S. (1989). Mechanics' Institutes in Great Britain to the 1850s. *Journal* of Educational Administration and History, 21(2), 1–7.
- Kaufman, R. & Keller, J.M. (1994). Levels of evaluation, Beyond Kirkpatrick. *Human Resource Development Quarterly, 5(4),* 371-380.
- Kelly, P. (2003). Student engagement in humanities classes. Paper presented to the British Educational Research Association Annual Conference. Heriot-Watt University, Edinburgh

- Keuhn, B. M. (2010). Safety Plan for Opioids Meets Resistance. *JAMA*, *303(6)*, 495-497. doi:10.1001/jama.2010.71
- Kim, B-J. & Chung. J-B. (2023). Is safety education in the E-learning environment effective? Factors affecting the learning outcomes of online laboratory safety education. *Safety Science*, *168 (1)*, 106306.
- Kim, S. (2006). The future of e-learning in medical education, current trend and future opportunity. *Journal of Education Evaluation in the Health Professions, 3(3).* doi: 10.3352/jeehp.2006.3.3
- Kimiloglu, H., Ozturan, M. and Kutlu, B. (2017). Perceptions about and attitude toward the usage of e-learning in corporate training. *Computers in Human Behavior*, 72, 339-349.
- Kirkpatrick, D. (1996). Great ideas revisited. *Training and Development, 50(1),* 54.
- Kitto, S. C., Chesters, J., & Grbich, C. (2008). Quality in qualitative research. *Medical Journal of Australia, 188(4),* 243-246.

- Kjellström, S., Stålne, K., & Törnblom, O. (2020). Six ways of understanding leadership development: An exploration of increasing complexity.
  Leadership, 16(4), 434-460. https://doi.org/10.1177/1742715020926731
- Knowles, M. (1973). *The Adult Learner: A Neglected Species*. (1st ed.), Gulf Publishing Company.
- Knowles, M. (1990). *The Adult Learner: A Neglected Species.* (4th Edition ed.), Gulf Publishing Company Co.
- Knowles, M. S. (1984). *The Adult Learner, A Neglected Species*. Houston, Gulf.
- Knowles, M. S., Holton Iii, E. F., Swanson, R. A., Swanson, R., & Robinson,
  P. A. (2020). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. Milton, UNITED
  KINGDOM: Taylor & Francis Group.

Korshid, A. (2021). *Public Hospitals Under Pressure.* <u>https://www.ama.com.au/ama-rounds/21-may-2021/articles/public-hospitals-under-pressure</u>

- Kotter, J. P., & Cohen, D. S. (2002). The heart of change real-life stories of how people change their organizations. Boston, Massachusetts:
   Harvard Business Review Press.
- Krugman, M. & Warren, J. (2011). Professional development research
   literature from 1996 to 2006, an integrative review. *Journal for Nurses in Workers Development 27(3),* 104-115.
- Kuh, G. D., Kinzie, J., Schuh, J.H. & Whitt, E.J. (2011). Fostering student success in hard times. Change, *The Magazine of Higher Learning,* 43(4), 13-19.
- Kyndt, E., Raes, E., Dochy,F. & Janssens, E. (2012). Approaches to Learning at Work, Investigating Work Motivations, Perceived Workload and Choice Independence. *Journal of Career Development, 40(4),* 271-291.
- Lamont, S. & Brunero. S. (2018). The effect of a workplace violence training program for generalist nurses in the acute hospital setting, A quasi-experimental study. *Nurse Education Today*, 68, 45-52.
- Larson, K. (2020). Serious games and gamification in the corporate training environment, A literature review. *Technology Trends, 64(2),* 319–328.

- Ie Clus, M. (2011). Informal learning in the workplace: A review of the literature. Australian Journal of Adult Learning, 51(2), 355-373. https://search.informit.org/doi/10.3316/ielapa.436696242802320
- Leach, L., & Zepke, N. (2011). Engaging students in learning: a review of a conceptual organiser. *Higher Education Research and Development*, *30(2)*, 193-204. doi:10.1080/07294360.2010.509761
- Leal, I., Engebretson, J., Cohen, L., Fernandez-Esquer, M. E., Lopez, G.,
  Wangyal, T., & Chaoul, A. (2018). An Exploration of the Effects of
  Tibetan Yoga on Patients' Psychological Well-Being and Experience of
  Lymphoma: An Experimental Embedded Mixed Methods Study. *Journal of Mixed Methods Research*, *12(1)*, 31-54.
  doi:10.1177/1558689816645005
- Learning Disability Practice (2019). Mandatory learning disability training for all NHS nurses, Government announces £1.4 million scheme in England. *Learning Disability Practice*, 22(6), 6.
- Leberman, S., McDonald, L. & Doyle, S. (2006). *The Transfer of Learning, Participants' Perspectives of Adult Education and Training.* Gower, Gower Publishing Limited. https,//www.ashgate.com/pdf.

- Lee, M. (2003). Andragogy and foreign-born learners. In LM Baumgartner, M-Y. Lee, S. Birden and D. Flowers (Eds.) *Adult learning theory, A primer.* (pp 11–16) Centre on Education and Training for Employment
- Lee, S. (2013). A relationship between course-level implementation of first principles of instruction and cognitive engagement: A multilevel analysis. Doctoral Dissertation. Syracuse University,
- Legare, F., Freitas, A., Thompson-Leduc, P., Borduas, F., Luconi, F., Boucher.
  A., Witteman, H. O. & Jacques, A. (2015). The majority of accredited continuing professional development activities do not target clinical behaviour change. *Academic Medicine*, *90(2)*, 197-202.
- Leicher, V. & Mulder, R.H. (2018). Development of vignettes for learning and professional development. *Gerontology and Geriatrics Education,* 39(4), 464-480.
- Leider, J., Bharthapudi, K., Pineau, V., Liu, L. and Harper, E. (2015). The methods behind PH WINS. *Journal of Public Health Management and Practice, 21,* S28-S35. doi:10.1097/PHH.000000000000285
- Leite, H., Williams, S., Radnor, Z., & Bateman, N. (2024). Emergent barriers to the lean healthcare journey: Baronies, tribalism and scepticism. *Production Planning and Control*, *35(2)*, 115-132.

- Lewis, S. K. & Thompson, P. (2017). Application of Adult Learning Theory to Physician Assistant Education. *Journal Physician Assistant Education*, *28(4)*, 196–200.
- Li, L. C., Grimshaw, J. M., Nielsen, C., Judd, M., Coyte, P. C., & Graham, I.
  D. (2009). Use of communities of practice in business and health care sectors: A systematic review. *Implementation Science*, *4*(1), 27. doi:10.1186/1748-5908-4-27
- Lincoln, Y. S. & Guba, E. G. (2003). Paradigmatic controversies, contradictions, and emerging confluences. In *N. K. Denzin & Y.S. Lincoln (Eds.), The landscape of qualitative research: Theories and issues.* (2nd ed., pp. 253–291). London, UK: Sage.

Livingston, C. (1999). What do I do now? Nursing Standard, 13(27), 54.

- Leong, S. (2017). Alexander Kapp the first known user of the andragogy concept. *International Journal of Lifelong Education, 36(6),* 629–643.
- Long, H. B. (2009). Trends in self-directed research paradigms. In *Derrick, M.K. & Ponton, M.K (Eds, pp. 19–36) Emerging directions in self- directed learning*. Chicago, II, Discovery Association Publishing House.

Ma, L., Xu, L., Chen, Z., & Zhang, X. (2022). Factors of web-based learning competence among urban Chinese older adults: age differences. *Educational Gerontology, 48(5),* 210-223.:https://doi.org/10.1080/03601277.2022.2031577

MacDonald, B. K. (2019). Costs of mandatory training must also be considered. *BMJ*, p. 365, I1975.

- Maguire, H., Harper, J.M., Gardner, R.M. & Luiselli, J.M. (2022). Behavioral training and performance management of human services organization care providers during the COVID-19 pandemic. *Advances in Neurodevelopmental Disorders, 6(3),* 340–348.
- Malcolm, J., Hodkinson, P. & Colley, H. (2003). The interrelationships between informal and formal learning. *Journal of Workplace Learning*, *15(7/8)*, 313–318.
- Mandy, A., & Louw, G. (2018). Communication and the health professional.
  In F. Jones & F. Jenkins (Eds. pp. 82-97). *Key Topics in Healthcare Management Understanding the Big Picture*. CRC Press.

Mann, S. (2001). Alternative perspectives on the student experience, Alienation and engagement. *Studies in Higher Education*, *26(1)*, 7–19.

Manuti, A., Pastore, S., Scardigno, A.F., Giancaspro, M. L & Morciano, D.
(2015). Formal and informal learning in the workplace: a research review. *International Journal of Training and Development, 19(1),* 1 -17.

Marsick, V. J. & Watkins, K. E. (1990). *Informal and incidental learning in the workplace*. London, Routledge.

- Martin, R., Hughes, D., Epitropaki, O. & Thomas, G. (2021). In pursuit of causality in leadership training research, A review and pragmatic recommendations. *The Leadership Quarterly*, *32(5)*, 101375.
- Martinez, A.J.S. (2017). Implementing a Workplace Violence Simulation for Undergraduate Nursing Students, A Pilot Study. *Journal of Psychosocial Nursing and Mental Health Services, 55(10),* 39-44.
- Martini, M., & Cavenago, D. (2017). The role of perceived workplace development opportunities in enhancing individual employability. *International Journal of Training and Development*, *21(1)*, 18-34.

- Marton F., Hounsell, D. & Entwistle, N. (1997). *The experience of learning*. Edinburgh, Scottish Academic Press.
- Marques, C.T., Charbonneau, L. Chabal, L., Guex, C., & Probst, S. (2022).
  E-Learning and Blended-Learning Program in Wound Care for
  Undergraduate Nursing Students. *Journal of Nursing Education,*61(1), 53-57. doi:https://doi.org/10.3928/01484834-20211203-03
- Maurer, T. J. & Tarulli, B.A. (1994). Investigation of Perceived Environment,
  Perceived Outcome, and Person Variables in Relationship to Voluntary
  Development Activity by Employees. *Journal of Applied Psychology,*79(1), 3-14.
- Maurer, T. J., Weiss, E.M. & Berbeite, F.G. A model of involvement in work-related learning and development activity, The effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology, 88(4),* 707–747. doi: 10.1037/0021-9010.88.4.707
- McAuliffe, M. J., & Gledhill, S. E. (2022). Enablers and barriers for mandatory training including Basic Life Support in an interprofessional environment: An integrative literature review. *Nurse Education Today*, p. 119, 105539. <u>https://doi.org/10.1016/j.nedt.2022.105539</u>

McCauley, K. D., Hammer, E. & Hinojosa, A.S. (2017). An andragogical approach to teaching leadership. *Management Teaching Review, 2(4),* 312-324.

McColl, E., Jacoby, A., Thomas, L., Soutter, J., Bamford, C., Steen, N., Thomas, R., Harvey, E., Garratt, A. and Bond, J. (2002). Design and use of questionnaires: A review of best practice applicable to surveys of Health Service workers and patients. *British Journal of Clinical Governance, 7(3),* 206–208. Retrieved from https://www.proquest.com/scholarly-journals/design-usequestionnaires-review-best-practice/docview/208439156/se-2?accountid=10382

McGowan, P. (2022). Why learning disability and autism training should be mandatory: My son's death exposed gaps in clinicians' knowledge, which is why I have campaigned for compulsory autism training. *Learning Disability Practice, 25(3),* 11.

McNeill, A., Amos, A., McEwen, A., Ferguson, J. & Croghan, E. (2012).Developing the evidence base for addressing inequalities and smoking in the United Kingdom. *Addiction*, pp. 107, 1–7.

- Merriam S. B., Caffarella, R. S. & Baumgartner L. M. (2007). *Learning in adulthood, A comprehensive guide* (3rd ed.). Jossey-Bass.
- Merriam, S. B. & Bierama, L.L.(2014). *Adult learning, linking theory and practice*. San Francisco Jossey-Bass.
- Merriam, S. B. (2008). Adult learning theory for the twenty-first century. *New Directions for Adult and Continuing Education*, 119, 93-98.
- Mertens, D. M. (2012). Transformative mixed methods: Addressing inequities. *American Behavioral Scientist*, *56*(*6*), 802–813.
- Milem, J.F., Dey, E.L. & Casey, C.B. (2004). Diversity Considerations in Health Professions Education. in Smedley, B. D., Butler, A. S., & Bristow, L. R. Diversity considerations in health professions education. *In the Nation's Compelling Interest: Ensuring Diversity in the Health-Care Workforce*. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK216014/
- Mockler, N.& Groundwater-Smith, S. (2009). *Teacher Professional Learning in an Age of Compliance: Mind the Gap*. Dordrecht: Springer Netherlands.

- Moll, S. E., VandenBussche, J., Brooks, K., Kirsh, B., Stuart, H., Patten, S. & MacDermid, J.C. (2018). Workplace Mental Health Training in Health Care, Key Ingredients of Implementation. *Canadian Journal of Psychiatry*, 63(12), 834-841.
- Mulvale, G., Moll, S., Miatello, A., Robert, G., Larkin, M., Palmer, V.J., Powell,
  A., Gable, C. & Girling, M. (2019). Co-designing health and other public services with vulnerable and disadvantaged populations, Insights from an international collaboration. *Health Expectations, 22(3), 284–297*.
- Murphy, D. (2010). Care of the dying must be part of mandatory training. *Nursing Times*, *106(21)*, 23–23.
- Mythen, L. & Gidman, J. (2011). Mandatory training, evaluating its effectiveness. *British Journal of Healthcare Management*, *17(11)*, 522-526.
- Naciri, A., Radid, M., Kharbach, A., Chemsi, G. (2021). E-learning in health professions education during the COVID-19 pandemic: a systematic review. *Journal of Educational Evaluation for Health Professions, 18(27).* https://dx.doi.org/10.3352/jeehp.2021.18.27

Nankervis, A. B., M., Coffey, J. & Shields, J. (2016). *Human Resource Management*. Melbourne, Australia, Cengage Learning Australia.

National Health and Medical Research Council (2022). *Consumer Involvement*. https,//www.nhmrc.gov.au/guidelinesforguidelines/plan/consumerinvolvement.

National Health and Medical Research Council. (2019). *National Guidelines for the Prevention and Control of Infection in Healthcare*. Retrieved from https://www.safetyandquality.gov.au/our-work/infection-prevention-andcontrol/australian-guidelines-prevention-and-control-infectionhealthcare

National Health and Medical Research Council. (2024). *Who We Are*. Retrieved from https://www.nhmrc.gov.au/about-us/who-we-are

National Health Funding Body. (2019). *Annual Report 2018-2019*. Retrieved from https://www.publichospitalfunding.gov.au/sites/default/files/publication\_d ocuments/2018-19\_annual\_report\_nhfb\_web.pdf National Health Service Greater Glasgow and Clyde (2023). *Statutory and Mandatory Training*. https,//www.nhsggc.scot/workersrecruitment/hrconnect/learning-education-&-training/statutory-&m&atory-training/

Nehyba, K., Davey, K. & Alexander, S. (2009). Developing and Sustaining an Allied Health Service in a New and Changing Organisation. Paper presented at the National Allied Health Conference, Perth, Western Australia.

New South Wales Health. (2024). *My Health Learning (MHL)*. Retrieved from https://www.ehealth.nsw.gov.au/solutions/workforcebusiness/workforce/mhl

NHS Digital (2024). *Education and Training Standards and self-assessment*. Retrieved from https,//digital.nhs.uk/services/training-qualityimprovement/education-&-training-standards-and-benchmarking.

NHS Greater Glasgow & Clyde. (2023). *Statutory and Mandatory Training*. Retrieved from https://www.nhsggc.scot/workersrecruitment/hrconnect/learning-education-and-training/statutory-andmandatory-training/ Niles, D. E., Nishisaki, A., Sutton, R.M., Elci, O. U., Meaney, P.A., O'Connor, K. A., Leffelman, J., Kramer-Johansen, J., Berg, R. A. & Nadkarni, V. (2017). Improved Retention of Chest Compression Psychomotor Skills With Brief "Rolling Refresher" Training. *Simulation in Healthcare, 12(4),* 213–219. doi: 10.1097/SIH.0000000000228

- Nishiyama, C., Iwami, T., Murakami, Y., Kitamura, T., Okamoto, Y., Marukawa, S., Sakamoto, T. and Kawamura, T. (2015). Effectiveness of simplified 15-min refresher BLS training program: a randomized controlled trial. *Resuscitation*, 90, 56-60.
- Noe, R. A. & Ellingson, J.E. (2017). Autonomous learning in the workplace, An introduction. In R. Noe and J.E. Winkler (Eds), *Autonomous Learning in the Workplace*. (pp.1-11) Routledge.
- Noe, R. A. & Winkler, C. (2012). *Training and Development, Learning for Sustainable Management.* North Ryde, N.S.W., McGraw-Hill Australia.
- Noe, R. A. (2016). *Employee Training and Development*. (7th Ed.), McGraw-Hill Education.

- Noe, R., Tews, M.J & Dachner, A. M. (2010). Learner engagement: A new perspective for enhancing our understanding of learner motivation and workplace learning. *The Academy of Management Annals, 4 (1),* 279– 315.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company*. Oxford University Press.

North Metropolitan Health Services. (2023). *Learning and Development*, NMHS. https://nmhs.elearn.net.au/course/index.php?categoryid=5

Nursing and Midwifery Registration Board (2020). *Registered Nurse Standards for Practice.* https,//www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/registered-nurse-st&ards-forpractice.aspx.

Occupational Safety and Health Administration (2015). *Training Requirements in OSHA Standards*. OSHA 2254-09R 2015.

O'Dwyer, L. (2021). *Review of Employment- based Training Models*. National Centre for Vocational Education Research.

- Ong, C. C. P., Foo, Y.Y., Chui, F.Y & Nestel, D. (2022). 'It's going to change the way we train', Qualitative evaluation of a transformative faculty development workshop. *Perspectives on Medical Education*, *11(2)*, 86-92.
- Onyeador, I. N., Hudson, S-K. T.J. & Lewis, N.A. (2021). Moving Beyond
  Implicit Bias Training, Policy Insights for Increasing Organizational
  Diversity. *Policy Insights from the Behavioral and Brain Sciences, 8(1),*19–26.
- Opperman, C., Liebig, D. & Bowling, J. (2018). Measuring Return on
   Investment for Professional Development Activities, 2018 Updates.
   *Journal for Nurses in Professional Development*, 34, 303-321.
- Opperman, C., Liebig, D., Bowling, J., Johnson, C.S. & Harper, M. (2016a).
   Measuring Return on Investment for Professional Development
   Activities, A Review of the Evidence. *Journal for Nurses in Professional Development, 32(3),* 122-129.
- O'Reilly, P. (1982). Continuing Medical Education: 1960s to the Present. Journal of Medical Education, 52(11), 819–826.

Paldanius, S. (2002). The rationality of reluctance and indifference toward adult education: difficulties in recruiting unemployed adults to adult education. Doctoral Thesis, Linkoping University. <u>https://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-32599</div</u>>

Papapanou, M., Routsi, E., Tsamakis,K., Fotis, L., Marinos, M., Lidoriki, I., Karamanou, M., Papaioannou,T.G., Tsiptsios, D., Smyrnis, N., Rizos,
E., Schizas, D. Medical education challenges and innovations during COVID-19 pandemic, *Postgraduate Medical Journal*, Volume 98, Issue 1159, May 2022, Pages 321–327, <u>https://doi.org/10.1136/postgradmedj-2021-140032</u>

- Papps, E., & Ramsden, I. (1996). Cultural safety in nursing: The New
  Zealand experience. *International Journal for Quality in Health Care*, 8(5), 491-497.
- Paradis, E. & Sutkin, G. (2017). Beyond a good story, from Hawthorne Effect to reactivity in health professions education research. *Medical Education*, *51(1)*, 31-39.

- Park, S., Kang, H.-S., & Kim, E.-J. (2018). The role of supervisor support on employees' training and job performance, an empirical study. *European Journal of Training and Development*, 42(1/2), 57-74. doi,10.1108/EJTD-06-2017-0054
- Parker, S. K. (2017). Work design growth model: How work characteristics promote learning and development. In *J.E. Ellingson and R. A. Noe* (*Ed.*), Autonomous Learning in the Workplace. (pp. 137-161). New York and London Routledge, Taylor Francis Group.
- Parmenter, J. & Trigger, D. (2018). Aboriginal cultural awareness training for mine employees. Good intentions, complicated outcomes. *The Extractive Industries and Society, 5(2),* 363–370.
- Parsons, J. & Taylor, L. (2011). Improving student engagement. *Current Issues in Education*, *14(1).* http://cie.aasu.edu
- Passmore, J. & Velez, M. J. (2014). Training evaluation. In K. Kraiger, J.
  Passmore, N Rebelo dos Santos & S. Malvezzi. (pp. 136-153). The
  Wiley Blackwell Handbook of the Psychology of Training, Development,
  and Performance Improvement. John Wiley and Sons, Ltd.

- Patocka, C., Khan, F., Dubrovsky, A.S., Brody, D., Bank, I. & Bhanji, F.
  (2015). Paediatric resuscitation training—Instruction all at once or spaced over time? *Resuscitation*, pp. 88, 6–11.
- Perales, F. (2022). Improving the wellbeing of LGBTQ+ employees: Do workplace diversity training and ally networks make a difference? *Preventive Medicine*, p. 161, 107113.
- Pérez-Álvarez, R., Maldonado-Mahauad, J. & Pérez-Sanagustín, M. (2018).
  Design of a tool to support self-regulated learning strategies in MOOCs. *Journal of Universal Computer Science, 24(8),* 1090-1109.
- Persaud, E., Afable, A., Geer, L.A. & Landsbergis ,P. (2021). Opioids and the Workplace Prevention and Response Awareness Training, Mixed Methods Follow-Up Evaluation. *New Solutions, A Journal of Environmental and Occupational Health Policy, 31(3),* 271-285.
- Peters, M. (2000). Does Constructivist Epistemology Have a Place in Nurse Education? *Journal of Nursing Education*, *39(4)*, 166–172.

Peterson K, M. & McCleery, E. (2014). Evidence Brief, The Effectiveness Of Mandatory Computer-Based Trainings On Government Ethics, Workplace Harassment, Or Privacy and Information Security-Related Topics [Internet], Washington (DC), Department of Veterans Affairs (US).https://www.ncbi.nlm.nih.gov/books/NBK384612/

- Phillips, J. J. (2011). Return on Investment in Training and Performance Improvement Programs. (2nd Edition). Burlington, United States. Taylor and Francis Group.
- Portney, L. G. & Watkins, M.P. (1993). *Foundations of Clinical Research; Applications to Practice*. East Norwalk, Connecticut: Appleton and Lange.
- Pownall, H. (2013). Neoliberalism, Austerity and the Health and Social Care Act 2012, The Coalition Government's Programme for the NHS and its Implications for the Public Sector Workforce. *Industrial Law Journal*, 42(4), 422–433.
- Price, O., Baker, J., Bee, P., & Lovell, K. (2015). Learning and performance outcomes of mental health workers training in de-escalation techniques for the management of violence and aggression. *The British Journal of Psychiatry, 206 (6),* 447-455.

Prochner, L. (2010). A history of early childhood education in Canada, Australia, and New Zealand: UBC Press.

Queensland Health (2021). *Mandatory training, Human Resource Policy*. Queensland Government. https,//www.health.qld.gov.au/\_\_data/assets/pdf\_file/0034/395845/qhpol-183.pdf

Quonoey, J., Coombe, L. & Willis, J. (2022). Mandatory versus nonmandatory training in culturally safe practices for education workers at universities. *AlterNative*, *18(1)*, 19–25.

Raemdonck, I., Gijbels, D. & van Groen, W. (2014). The influence of job characteristics and self-directed learning orientation on workplace learning. *International Journal of Training and Development, 18(3),* 149-170. doi: 10.1111/ijtd.12034

Ranmuthugala, G., Plumb, J. J., Cunningham, F. C., Georgiou, A.,
Westbrook, J. I., & Braithwaite, J. (2011). How and why are
communities of practice established in the healthcare sector? A
systematic review of the literature. *BMC Health Services Research*, *11*(1), 273. doi:10.1186/1472-6963-11-273

Reeve, J., & Tseng, M. (2011). Agency as a fourth aspect of student engagement during learning activities. *Contemporary Educational Psychology*, pp. 36, 257–267.

- Regmi, K., & Jones, L. (2020). A systematic review of the enablers and barriers affecting e-learning in health sciences education. *BMC Medical Education*, 20(1), 91–91. doi:10.1186/s12909-020-02007-6
- Reid, D. H., Parsons, M.B. & Green, C.W. (2021). The supervisor's guidebook, Evidence-based strategies for promoting work quality and enjoyment among human service workers. Charles C Thomas Publisher.
- Reiniger, A., Robison, E. & McHugh, M. (1995). Mandated training of professionals, A means for improving reporting of suspected child abuse. *Child Abuse and Neglect*, *19(1)*, 63-69.
- Reljić, N. M., Dolinar, M. D., Štiglic, G., Kmetec, S., Fekonja, Z. and Donik,
  B. (2023). E-Learning in Nursing and Midwifery during the COVID-19
  Pandemic. *Healthcare*, *11(23)*, 3094.
  https://doi.org/10.3390/healthcare11233094

- Ren, F., & Quan, C. (2012). Linguistic-based emotion analysis and recognition for measuring consumer satisfaction: an application of affective computing. *Information Technology and Management, 13(4),* 321-332.
- Ricci, F., Chiesi, A., Bisio, C., Panari, C. & Pelosi, A. (2016). Effectiveness of occupational health and safety training, A systematic review with metaanalysis. *Journal of Workplace Learning*, 28(6), 338-354.
- Ripullone, K. & K. Womersley (2019). Is resilience a trainable skill? *British Medical Journal*, p. 365, 12162.
- Rissel, C., Wilson, A., Richards, B., Ryder, C. & Bower, M. (2022). Process evaluation of a central Australian Aboriginal cultural awareness training program (2015-2020) for health professionals and students. *Focus on Health Professional Education, 23(2),* 51–59.

Robson, L. S., Stephenson, C.M., Schulte, P.A., Amick, B., Irvin, E.L.,

Eggerth, D., Chan, S., Bielecky, A., Wang, A., Heidotting, T., Peters, R., Clarke, J., Cullen, K., Rotunda, C. & Grubb, P. (2012). A systematic review of the effectiveness of occupational health and safety training. *Scandinavian Journal of Work, Environment and Health, 38(3),* 193– 208.

- Robson, I., Stephenson, C., Schulte, P., Amick, B., Chan, S., Bielecky, A.
  Wang A., Heidotting, T., Irvin, E., Eggerth, D., Peters, R., Clarke, J.,
  Cullen, K., Boldt, L., Rotunda, C. & Grubb, P. (2010). A systematic
  review of the effectiveness of training and education for the protection
  of workers. Toronto, Institute of Work and Health.
- Rolfe, G., & Freshwater, D. (2020). *Critical reflection in practice: generating knowledge for care*. Bloomsbury Publishing.
- Rohrbasser A, Harris J, Mickan S, Tal K, Wong G (2018) Quality circles for quality improvement in primary health care: Their origins, spread, effectiveness and lacunae– A scoping review. PLoS ONE 13(12): e0202616. <u>https://doi.org/10.1371/journal.pone.0202616</u>
- Rogers, J., Branchaw, J., Weber-Main, A. M., Spencer, K. and Pfund, C. (2020). How much is enough? The impact of training dosage and previous mentoring experience on the effectiveness of a research

mentor training intervention. *Understanding Interventions*, 11(1: The Use and Impact of NIH-fuelled Resources for Mentoring—Reports from the Field).

- Rogers, W. A., Hertzog, C., & Fisk, A. D. (2000). An individual differences analysis of ability and strategy influences: Age-related differences in associative learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 26(2),* 359–394. doi:10.1037/0278-7393.26.2.359
- Rothwell, W. J. & Kazanas, H. (2003). *The strategic development of talent*. Human Resource Development.
- Rotter, J.B.(1990). Internal Versus External Control of Reinforcement, A Case History of a Variable. *American Psychologist, 45 (4),* 490-493.
- Rouiller, J. Z. & Goldstein, I.L. (1993). The relationship between organizational transfer climate and positive transfer of training. *Human Resource Development Quarterly, 4(4),* 377-390.

Rowold, J., Hochholdinger, S., & Schilling, J. (2008). Effects of career-related continuous learning: a case study. *The Learning Organization*, *15(1)*, 45-57. doi:10.1108/09696470810842484

Royal College of Nursing, UK. (2018) *Training Statutory and Mandatory Advice Guide*. Retrieved from:

file:///C:/Users/sue/Downloads/Training\_%20statutory%20and%20mandatory

Royal College of Nursing, UK. (2023). *Training: Statutory and mandatory*. Retrieved from <u>https://www.rcn.org.uk/Get-Help/RCN-advice/training-</u> <u>statutory-and-mandatory</u>

Ryan, C. & Sinning, M. (2009). *Job Requirements and Lifelong Learning for Older Workers*. National Centre for Vocational Education Research.

Rynes, S. & Rosen, B. (1995). A Field Survey of Factors Affecting the Adoption and Perceived Success of Diversity Training. *Personnel Psychology.* 54, 247 – 269. Safe Work Australia. (2024). Penalties under the WHS Laws. https://www.safeworkaustralia.gov.au/law-andregulation/legislation/penalties-under-whs-laws

Salamon, J., Blume, B.D., Orosz, G., & Nagy, T. (2021). The interplay between the level of voluntary participation and supervisor support on trainee motivation and transfer. *Human Resource Development Quarterly, 32(4),* 459-482.

Sambrook, S. (2005). Factors influencing the context and process of workrelated learning, Synthesizing findings from two research projects. *Human Resource Development International, 8(1),* 101–119.

Sanders, J. (2021). Cost-effective e-learning in medical education. In K. Walsh. (pp 40–47). *Cost-effectiveness in medical education*, CRC Press.

Sandars J, Correia R, Dankbaar M, de Jong P, Goh PS, Hege I, Masters K, Oh SY, Patel R, Premkumar K, Webb A, Pusic M. Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish* (2016). 2020 Apr 29;9:82. doi: 10.15694/mep.2020.000082.1. PMID: 38058947; PMCID: PMC10697562.

425

Sandlin, J. A. (2005). Andragogy and its discontents, An analysis of andragogy from three critical perspectives. *PAACE Journal of Lifelong Learning*, *14*(*1*), 25-42.

- Sankey, K. S. & Machin, M. A. (2014). Employee participation in nonmandatory professional development - the role of core proactive motivation processes. *International Journal of Training and Development, 18(4),* 241-255.
- Sansone, C., Harackiewicz, J.M. & Sansone, C. (2000). Intrinsic and Extrinsic Motivation, The Search for Optimal Motivation and Performance. San Diego, United States, Elsevier Science and Technology.
- Santos, A. & Stuart, M. (2006). Employee perceptions and their influence on training effectiveness. *Human Resource Management Journal*, 13(1), 27-45.
- Sato, T., Haegele, J.A. & Foot, R. (2017). In-service physical educators' experiences of online adapted physical education endorsement courses. *Adapted Physical Activity Quarterly, 34(2),* 162-178.

Schein, E. H. (2004). Organizational Culture and Leadership. (4th ed.). Wiley.

Schön, D. A. (1987). Educating the reflective practitioner: Toward a new design for teaching and learning in the professions: Jossey-Bass.

Schürmann, E., & Beausaert, S. (2016). What are drivers for informal learning? *European Journal of Training and Development, 40(3),* 130-154. doi:10.1108/EJTD-06-2015-0044

Schwartz, G. J. (2019). An Examination of Key Factors that Influence Employee Learning in the Workplace. In V.H. Kenon and S. V. Palsole (Eds. Pp. 477-500) The Wiley Handbook of Global Workplace Learning. Wiley Blackwell.

Sebrant, U. (2008). The impact of emotion and power relations on workplace learning. *Studies in the Education of Adults*, *40*(2), 192–206. https://doi.org/10.1080/02660830.2008.11661565 Seefeldt, T., Perumal, O. & Tummala, H. (2022). Reshaping Pharmacy and Allied Health Education for a Post-Pandemic World Using Kotter's Change Model. In C. R. Ford & K. B. Garza.(Eds, pp. 96-117).
Handbook of Research on Updating and Innovating Health Professions Education, Post-Pandemic Perspectives. IGI Global.

- Seisser, M. A. & Epstein, A.L. (1998). Placing the cornerstone for healthcare professionals' risk management education, An educational needs assessment. *Journal of Healthcare Risk Management, 18(3),* 15-27.
- Sellers, K., Leider, J. P., Harper, E., Castrucci, B.C., Bharthapudi, K., Liss-Levinson, R., Jarris, P.E. and Hunter, E. L. (2015). The public health workforce interests and needs survey. *Journal of Public Health Management and Practice*, 21, S13-S27.
- Sellu, G. S. & Ching, C.C. (2019). The effectiveness of learning communities in increasing employee learning. In H.W. Kenon & S.V. Palsole (Eds, pp 501–519) The Wiley Handbook of Global Workplace Learning. Wiley Blackwell.

Seymour-Walsh, A. E., Bell, A., Weber, A., & Smith, T. (2020). Adapting to a new reality: COVID-19 coronavirus and online education in the health professions. *Rural and Remote Health*, 20(2), 97–102. <u>https://search.informit.org/doi/10.3316/informit.304369604129149</u>

Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York, Doubleday.

Sepsis Australia (2020). *What is Sepsis? Australian Sepsis Network*, https,//www.australiansepsisnetwork.net.au/?s=what+is+sepsis.Access ed 28/06/2023

Shah, S., Mahboob, U., Syed Muhammad, J., Siddiqui, S., Brekhna, J., &
Rehman, S. (2024). Challenges faced by teachers of postgraduate
health professions blended learning programs: a qualitative analysis. *BMC medical education, 24*, 1-12. doi:https://doi.org/10.1186/s12909024-05213-8

Sharifi, M., Soleimani, H. & Jafarigohar, M.( 2017). "E-portfolio evaluation and vocabulary learning, Moving from pedagogy to andragogy. *British Journal of Educational Technology*, *48(6)*, 1441–1450.

Shay, A. (2023). Micro-credentialing: An Option for Clinical Nurse Specialists? *Clinical Nurse Specialist*, 37(6). Retrieved from https://journals.lww.com/cnsjournal/fulltext/2023/11000/micro\_credentialing\_an\_option\_for\_clinic al\_nurse.10.aspx

- Siebert, H. (1985). Research on motivation for further education in the
  Federal Republic of Germany. In J.H. Knoll and M. Saur (Eds, pp. 35–40), *Motivations for Adult Education*, K.G. Saur Verlag.
- Siemens, G. (2013). Learning analytics: The emergence of a discipline. *American Behavioral Scientist, 57(10),* 1380–1400.
- Siemens, G. (2013). *Massive open online courses, Innovation in education?* Athabasca University Press.
- Silva, R., Rodrigues, R., & Leal, C. (2020). Gamification in Management Education: A Literature Mapping. *Education and Information Technologies*, 25, 1803-1835.

- Simpson, E. H., & Balsam, P. D. (2016). The Behavioural Neuroscience of Motivation: An Overview of Concepts, Measures, and Translational Applications. *Current Topics in Behavioural Neuroscience*, pp. 27, 1– 12. doi:10.1007/7854\_2015\_402
- Sims, M. & Waniganayake, M. (2015). The performance of compliance in early childhood, Neoliberalism, and nice ladies. *Global Studies of Childhood*, 5(3), 333-345.
- Sinclair, S., Kondejewski, J., Jaggi, P., Roze des Ordons, A. L., Kassam, A., Hayden, K. A., Harris, D. &. Hack, T. F. (2021). What works for whom in compassion training programs offered to practicing healthcare providers: a realist review. *BMC medical education, 21*(1), 455. doi:10.1186/s12909-021-02863-w
- Skills for Health. (2024). *Core Skills Training Program UK*. Retrieved from https://www.skillsforhealth.org.uk/core-skills-training-framework/

Smith, C. (2008). Design-focused evaluation, Assessment, and evaluation. *Higher Education and Research Development.* 33(6), 631–645.
doi:10.1080/02602930701772762
- Smith, D. R. and Leggat, P.A. (2005). The Historical Development of Occupational Health in Australia Part 2: 1970-2000. *The Journal of* UOEH, 27, 137-150. DOI: 10.7888/juoeh.27.137
- Smyth, L. (2022). Orlaith Quinn: Independent review into tragic suicide of mum uncovers shocking lapses in hospital workers training. *Belfast Telegraph.* https://www.belfasttelegraph.co.uk/news/health/orlaithquinn-independent-review-into-tragic-suicide-of-mum-uncoversshocking-lapses-in-hospital-workers-training/41714910.html
- Snidvongs, S. & Mehta, V. (2012). Recent advances in opioid prescription for chronic non-cancer pain. *Postgraduate Medical Journal,* 88(1036), 66-72 67p.
- Sørensen, P. (2017). What research on learning transfer can teach about improving the impact of leadership-development initiatives. *Consulting Psychology Journal, Practice and Research, 69(1), 47*.
- South Metropolitan Area Health Service (2017). *Safety Skills Training Framework*. South Metropolitan Area Health Service, WA Health.

South Metropolitan Area Health Service (2024). *Safety Skills Training Framework*. South Metropolitan Area Health Service, WA Health.

Speech Pathology Australia (2024). Join Us.

https,//www.speechpathologyaustralia.org.au/Public/Public/Become/join .aspx.

Srimannarayana, M. (2010). Status of HR measurement in India. *Vision, 14(4),* 295-307.

Srivastava, R. H. (2008). *Influence of organizational factors on clinical cultural competence. Doctoral Thesis,* University of Toronto.

https://www.collectionscanada.gc.ca/obj/thesescanada/vol2/002/NR44793.P DF?is\_thesis=1&oclc\_number=691738116

St John, N. & Akama, Y. (2022). Reimagining co-design on Country as a relational and transformational practice. *Co-design, 18(1),* 16-31.

State of New South Wales eHealth (2024). *My Health Learning* (MHL).https,//www.ehealth.nsw.gov.au/solutions/workforce-business/workforce/mhl.

- Sukhera, J., Watling, C. J., & Gonzalez, C. M. (2020). Implicit bias in health professions: from recognition to transformation. *Academic Medicine*, 95(5), 717–723.
- Susan, J., Tyler, J., Guthrie, T. & New, K. (2018). Supporting healthy weight gain and management in pregnancy. Does a mandatory training education session improve the knowledge and confidence of midwives? *Midwifery*, pp. 65, 1–7.
- Sutton, B. & Stephenson, J.(2005). A review of 'return on investment' in training in the corporate sector and possible implications for college-based programmes. *Journal of Vocational Education and Training, 57(3),* 355-373.
- Tabatabaeichehr, M., Babaei, S., Dartomi, M., Alesheikh, P., Tabatabaee, A., Mortazavi, H., Khoshgoftar, Z. (2022). Medical students' satisfaction level with e-learning during the COVID-19 pandemic and its related factors: a systematic review. *Journal of Educational Evaluation for Health Professions, 19*(37). <u>https://dx.doi.org/10.3352/jeehp.2022.19.37</u>
- Talaulikar, V. S. & S. Arulkumaran (2014). Medico-Legal Issues with CTG Interpretation. *Current Women's Health Reviews, 9(3),* 145-157.

- Tannenbaum, S. I., & Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology, 43(1),* 399-441.
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The New Era of Mixed
  Methods. *Journal of Mixed Methods Research*, *1(1)*, 3-7.
  doi:10.1177/2345678906293042
- Taylor, E. & Sheehan, T. (2010). *Perspectives on the future of learning*. Ashridge Business School.
- Taylor, E. L. (2015). Safety Benefits of OSHA 10 hr Training. *Safety Science*, pp. 77, 66–71.
- Taylor-Ford, R. L., & Abell, D. (2015). The Leadership Practice Circle Program: An Evidence-Based Approach to Leadership Development in Healthcare. *Nurse Leader*, *13*(2), 63-68. doi:https://doi.org/10.1016/j.mnl.2014.07.014
- Teigland, C. L., Blasiak, R. C., Wilson, L. A., Hines, R. E., Meyerhoff, K. L., & Viera, A. J. (2013). Patient safety and quality improvement education: a cross-sectional study of medical students' preferences and attitudes. *BMC Medical Education, 13(1),* 16. doi:10.1186/1472-6920-13-16

Tennant, M. (2019). *Psychology and adult learning: The role of theory in informing practice*. Routledge.

The Alliance for Self-Directed Education (2022). *What is Self-Directed Learning?* https,//www.self-directed.org/sde/.

The National Health and Medical Research Council and Universities Australia. (2018) *National Statement on Ethical Conduct in Human Research 2007, (Updated 2018).* Commonwealth of Australia, Canberra

- Thorndike, E. L., Bregman, E. O., Tilton, J. W., & Woodyard, E. (1928). *Adult learning*. Macmillan.
- Thorne, K., & Pellant, A. (2007). The essential guide to managing talent: How top companies recruit, train, and retain the best employees. Kogan Page Publishers.

Tian, A. W., Cordery, J. & Gamble, J. (2016). Returning the favor, positive employee responses to supervisor and peer support for training transfer. *International Journal of Training and Development, 20(1),* 78–91. doi: 10.1111/ijtd.12070

- Tobin, C., Murphy-Lawless, J. & Tatano Beck, C. (2014). Childbirth in exile, Asylum seeking women's experience of childbirth in Ireland. *Midwifery, 30(7),* 831-838 838p.
- Tölli, S., Partanen, P., Kontio, R., & Häggman-Laitila, A. (2017). A quantitative systematic review of the effects of training interventions on enhancing the competence of nursing workers in managing challenging patient behaviour. *Journal of Advanced Nursing*, *73(12)*, 2817-2831.
- Tong, A., Sainsbury, P. & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care, 19(6),* 349–357.
- Toth, J., Rosenthal, M. & Pate, K. (2021). Use of Adaptive Learning
  Technology to Promote Self-Directed Learning in a Pharmacists' Patient
  Care Process Course. *American Journal of Pharmaceutical Education,* 85(1), 28-33.
- Tough, A. (1978). Major Learning Efforts: Recent Research and Future Directions. *Adult Education, XXVII(4),* 250- 263.

- Tracey, J. Tannenbaum, S. & Kavanagh, M. (1995). Applying Trained Skills on-the-job, The Importance of the Work Environment. *Journal of Applied Psychology*, 80, 239-252.
- Traynor, K. (2010). Manufacturers argue against mandatory training for opioid prescribers. *American Journal of Health Systems Pharmacy.* 67(Jan), 96. https://doi.org/10.2146/news100007
- Tucker, B. A., & Huerta, C. G. (1984). *Continuing Professional Education*. Retrieved from https://files.eric.ed.gov/fulltext/ED252674.pdf
- Turner, S. (2009). Safeguarding children training in adult mental health care. *Mental Health Practice, 12(9),* 28–32.
- Vardarlier, P. (2021). Gamification in human resources management, An agenda suggestion for gamification in HRM. *Research Journal of Business and Management, 8(2),* 129-139.
- Vaughan, H., & Jolliffe, T. (2021). Action learning as a catalyst for change: the wicked problem of employment with a chronic health condition. *Action Learning, 18*(3), 259-266. doi:https://doi.org/10.1080/14767333.2021.1986898

Vasconcellos-Silva, P. R., Carvalho, D. and Lucena, C. (2013). Word frequency and content analysis approach to identify demand patterns in a virtual community of carriers of hepatitis C. *Interactive Journal of Medical Research*, 2(2), e12. doi:10.2196/ijmr.2384

- Vermeulen, R. C. (2002). "Narrowing the transfer gap, the advantages of "as if" situations in training." *Journal of European Industrial Training. 26(8),* 366-364.
- Verzini, F., De Rango, P., Parlani, G., Panuccio, G. & Cao, P. (2008). Carotid artery stenting, technical issues, and role of operators' experience. *Perspectives in Vascular Surgery and Endovascular Therapy, 20(3),* 247-257.

Vines, E. and Storen. S. (2024). *Health Workforce*. https://www.aph.gov.au/About\_Parliament/Parliamentary\_Departments/ Parliamentary\_Library/pubs/BriefingBook47p/HealthWorkforce

Vitolins, M. Z., Crandall, S., Miller, D., Eddie, I., Marion, G, and Spangler, J.
G. (2012). Obesity Educational Interventions in U.S. Medical Schools, A
Systematic Review and Identified Gaps. *Teaching and Learning in Medicine*, 24(3), 267-272.

Vygotsky, L. (1978) *Mind in Society: The Development of Higher Psychological Processes.* Cambridge, MA. Harvard University Press

WA Health (2022). *Graduate Development Program, About the Program.* https,//ww2.health.wa.gov.au/Careers/Graduate-programs/Graduate-Development-Program/About-the-program.

WA Industrial Relations Commission,(2020). WA HEALTH SYSTEM -HSUWA - PACTS INDUSTRIAL AGREEMENT 2020. C 00150, WA Government

- Wagner, P., Schober, B., & Spiel, C. (2008). Time students spend working at home for school. *Learning and Instruction*, 18, 309-320.
- Waring, M., Ed. (2012). Finding your theoretical position. *Research Methods* and *Methodologies in Education*. Sage Publications.
- Warner, M. & Zaranko, B. (2023). *Implications of The NHS workforce plan*.
   R271 IFS Green Budget 2023- Chapter 8, Institute for Fiscal Studies.
   https://ifs.org.uk/publications/implications-nhs-workforce-plan

- Washburn, B. (2022). *Pulling Some Trends from ATD's 2021 State of the Industry Report*. https,//trainlikeachampion.blog/trends-atd-2021-stateof-the-industry/.
- Webber, T. (2004). Orientations to learning in mid-career management students. *Studies in Higher Education, 29(2), 259–277.*
- Webster, E., Hall, A., Hill, Y., See, C., Simons, E., Havrlant, R., & Osten, R. (2022). Building cultural responsiveness in a mainstream health organisation with '8 Aboriginal Ways of Learning': a participatory action research study. *Australian and New Zealand Journal of Public Health, 46*(4), 517-523. doi:https://doi.org/10.1111/1753-6405.13245
- Weller, J., Boyd, M., & Cumin, D. (2014). Teams, tribes and patient safety, overcoming barriers to effective teamwork in healthcare. *Postgraduate Medical Journal*, 90(1061), 149–154.
- Wessels, S. B. (2007). Accountants' Perceptions of the Effectiveness of Mandatory Continuing Professional Education. *Accounting Education, An International Journal, 16(4),* 365-378.
- White, I., De Silva, N. & Rittie, T. (2023) Unaccredited training: Why Emploters Use it and Does It Meet Their Needs? National Centre for Vocational Education Research.

- Whitton, N. & Moseley, A. (2014). Deconstructing Engagement, Rethinking Involvement in Learning. *Simulation and Gaming*, *45(4-5)*, pp. 433–449.
- Wilkins, J. R. (2011). Construction workers' perceptions of health and safety training programs. *Construction Management and Economics*, 29(10), 1017–1026.
- Wilkinson, I. A. G., & Staley, B. (2019). On the pitfalls and promises of using mixed methods in literacy research: Perceptions of reviewers. *Research Papers in Education, 34(1),* 61–83. Retrieved from https://doi.org/10.1080/02671522.2017.1402081
- Wise, J. (2022). Women's health, specific assessments to become mandatory in medical training. *British Medical Journal* (Online) 378.
- Wong, Z. Y., & Liem, G. A. D. (2022). Student Engagement: Current State of the Construct, Conceptual Refinement, and Future Research Directions. *Educational Psychology Review, 34(1),* 107-138. doi:10.1007/s10648-021-09628-3
- Workforce Development Trust (2023). Core Training Skills. *NHS Health Education England*. https,//www.wdtrust.org.uk/

World Health Organisation. (2012). *Global Master Plan (GMP) 2012-2017*. Retrieved from Geneva: https://www.who.int/docs/defaultsource/occupational-health/oh-gmp-2012-2017.pdf?sfvrsn=c0e704b6\_4

World Health Organisation. (2013). WHO Global Plan of Action on Workers' Health (2008 - 2017): Baseline for Implementation. Global Country Survey 2008/9 Executive Summary and Survey Findings.https://iris.who.int/bitstream/handle/10665/341021/WHO-FWC-PHE-2013.01-eng.pdf?sequence=3

- Wright, D. A. (2018). Mandatory Education, Why Do We Do it? *AusMed.* https,//www.ausmed.com.au/cpd/lecture/m&atory-education-why-dowe-do-it
- Yadapadithaya, P.S. (2001). Evaluating corporate training and development, an Indian experience. *International Journal of Training and Development*, 5(4), 261-274.
- Yap, G. & Medler, A. (2018). Nurse education models and framework. Scoping Review, Monash Health, 1- 17.https://monashhealth.org/wpcontent/uploads/2019/01/Rapid-Review\_NAMES-model-ofeduation\_final-07112018.pdf

Yap, G. and Medler, A. (2018). Nurse education models and framework. Retrieved from https://monashhealth.org/wpcontent/uploads/2019/01/Rapid-Review\_NAMES-model-ofeduation final-07112018.pdf

- You, J. W. (2016). Identifying significant indicators using LMS data to predict course achievement in online learning. *The Internet and Higher Education*, 29, 23-30.
- You, J. W. (2016). The relationship among college students' psychological capital, learning empowerment, and engagement. *Learning and Individual Differences*, 49, 17-24.
- Young, M. E., & Ryan, A. (2020). Post-positivism in health professions education scholarship. *Academic Medicine*, *95(5)*, 695-699.
- Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface*. James Cook University.
- Yunkaporta, T., & McGinty, S. (2009). Reclaiming Aboriginal knowledge at the cultural interface. *The Australian Educational Researcher, 36(2),* 55-72.

- Zafošnik, U., Cerovečki, V., Stojnić, N., Belec, A. P., & Klemenc-Ketiš, Z.
  (2024). Developing a competency framework for training with simulations in healthcare: a qualitative study. *BMC medical education,* 24, 1-9. doi:https://doi.org/10.1186/s12909-024-05139-1
- Zemmel, D. J., Kulik, P.K.G., Leider, J.P. & Power, L. E. (2022). Public Health
   Workforce Development During and Beyond the COVID-19 Pandemic,
   Findings From a Qualitative Training Needs Assessment. *Journal of Public Health Management and Practice, 28(5 Suppl 5), S263-S270.*
- Zhu, M. & Bonk, C.J. (2019). Designing MOOCs to Facilitate Participant Self-Monitoring for Self-Directed Learning. *Online Learning*, *23(4)*, 106-134.
- Zhu, M., Bonk, C.J. & Berri, S. (2022). Fostering Self-Directed Learning in MOOCs, Motivation, Learning Strategies, and Instruction. *Online Learning*, 26(1), 153–173.
- Zingg, D. (2002). The Effects of Mandatory Continuing Education on Insurance Producers. *Journal of Insurance Regulation, 21(2),* 79–97.
- Zuboff, S. (1988). In the age of the smart machine, The future of work and power. Basic Books, Inc.

Zummo, K. & Kearney, G. (2009). Workers Development Story Journal for

Nurses in Workers Development, 25(2),95-97

## Appendix A: Mandated Training Workplace Survey

#### Items

| ltem   | tem Questions Response Options   |   |  |  |
|--|--|---|--|--|
| Section 1  |  |   |  |  |
| Thanks for t   | taking part in this survey which   | n should take less than 7 minutes   |  |  |
| to complete.   |  |   |  |  |
| There are four short sections of questions.                      |  |   |  |  |
| This section   | asks you to tell us about you  | rself.  |  |  |
| 1  | How do you identify?   | Multiple choice: Female, Male,<br>Other   |  |  |
| 2  | What age group are you in?   | Multiple choice: < 21 yrs, 21-<br>30yrs, 31-40 yrs, 41-50 yrs, 51-<br>60 yrs,> 60 yrs   |  |  |
| 3  | What WA Area Health<br>Service do you primarily<br>work in?  | Multiple choice: SMHS, EMHS, NMHS, KEMH   |  |  |
| 4  | What professional group do you work in?  | Multiple choice: Nursing &<br>Midwifery, Allied health & Health<br>sciences, Medical, Other clinical<br>services, Administrative &<br>Clerical, management &<br>Executive, Business, finance &<br>IT, Other non-clinical services |  |  |
| 5  | How many years have you<br>worked in the health<br>industry?   | Multiple choice: < 5yrs, 5-10<br>yrs,11-20yrs,1-30,>30yrs   |  |  |
| 6  | How many years in total<br>have you worked in WA<br>Health   | Multiple choice: < 5yrs, 5-10<br>yrs,11-20yrs,1-30,>30yrs   |  |  |
| Section 2<br>This section<br>mandated v<br>questions a<br>sites. | n asks you to tell us what you t<br>vorkplace training and whethe<br>Il relate to the training that is n         | hink about the purpose of<br>r it achieves this purpose. These<br>nandated across all WA Health   |  |  |
| 7  | Tell us is your own words<br>what you think is the<br>purpose of mandated<br>workplace training in WA<br>Health. | Open ended text   |  |  |
| 8  | What do you think is the<br>purpose of each of the<br>following mandated training<br>courses?                    | Matrix response<br>Axis 1: 10 x Training Programs<br>Record Keeping Awareness<br>Accountable & Ethical Decision<br>Making<br>Aboriginal Cultural Awareness  |  |  |

|                           |   | Prevention of Bullying<br>Manual Handling<br>Prevention & Management of<br>Aggression<br>Hand Hygiene<br>Life support<br>Infection, Prevention &<br>Management<br>Emergency Procedures<br>All Mandated Training<br><i>Axis 2:</i><br>To maintain & improve safety.<br>To meet accreditation<br>standards.<br>To comply with the law.<br>To promote values, beliefs, or<br>culture.<br>Other.<br>Don't know.                      |
|---------------------------|---|--|
| 9                         | Overall - do you think<br>mandated workplace<br>training achieves its<br>purpose?   | Matrix responseAxis 1: 10 x Training ProgramsRecord Keeping AwarenessAccountable & Ethical DecisionMakingAboriginal Cultural AwarenessPrevention of BullyingManual HandlingPrevention & Management ofAggressionHand HygieneLife supportInfection, Prevention &ManagementEmergency ProceduresAll Mandated TrainingAxis 2Intended purpose if fully met.Intended purpose is partiallymet.Intended purpose is not met.Cannot comment |
| Section 3<br>This section | n asks you to tell us how you th  | nink mandated workplace training   |
| impacts on                | work done in the workplace.   |  |
| 10                        | How much do you think<br>mandated workplace<br>training impacts on the<br>quality of the work you do<br>in your organisation? | Ratings response<br>Scale 0 – 100<br>10 x Training Programs<br>Record Keeping Awareness<br>Accountable & Ethical Decision<br>Making  |

|              |                                 | Aboriginal Cultural Awareness     |
|--------------|---------------------------------|-----------------------------------|
|              |                                 | Prevention of Bullying            |
|              |                                 | Manual Handling                   |
|              |                                 | Prevention & Management of        |
|              |                                 | Aggression                        |
|              |                                 | Hand Hygiene                      |
|              |                                 | Life support                      |
|              |                                 | Infection, Prevention &           |
|              |                                 | Management                        |
|              |                                 | Emergency Procedures              |
| 11           | How useful is mandated          | Ratings response                  |
|              | workplace training to you       | Scale $0 - 100$                   |
|              | personally?                     | 10 x Training Programs            |
|              |                                 | Record Keeping Awareness          |
|              |                                 | Accountable & Ethical Decision    |
|              |                                 | Making                            |
|              |                                 | Abonginal Cultural Awareness      |
|              |                                 | Manual Handling                   |
|              |                                 | Prevention & Management of        |
|              |                                 |                                   |
|              |                                 | Hand Hygiene                      |
|              |                                 | Life support                      |
|              |                                 | Infection Prevention &            |
|              |                                 | Management                        |
|              |                                 | Emergency Procedures              |
| 12           | Overall - how do you rate       | Rating response                   |
|              | the impact of mandated          | 0 = No impact to 10 = significant |
|              | workplace training on the       | impact                            |
|              | delivery of safe, quality       | •                                 |
|              | care across the WA              |                                   |
|              | Health?                         |                                   |
| 13           | Tell us how mandated            | Open ended text response          |
|              | workplace training can be       |                                   |
|              | designed to have a positive     |                                   |
|              | impact on your behaviour        |                                   |
|              | and that of your                |                                   |
|              | colleagues.                     |                                   |
| Section 3    |                                 |                                   |
| This second  | l last section asks how engage  | ed you feel when you complete     |
| mandated v   | vorkplace training. " Engageme  | ent" is a word used to describe   |
| now actively | y involved and interested a per | rson is in the training process.  |
| 14           | Flease complete the             | Open ended text response          |
|              | own worde: I feel angeged       |                                   |
|              | with mandated workslass         |                                   |
|              | training when                   |                                   |
| 15           | How engaged do you feel         | Rating response                   |
| 15           | when you access these           | Nating response                   |
|              | specific mandated               | 100-Highly engaged                |
|              |                                 | roo-inging engaged                |

|                                       | workplace training  | 10 x Training Programs   |
|---------------------------------------|---|--|
|                                       | programs?   | Record Keeping Awareness   |
|                                       |   | Accountable & Ethical Decision   |
|                                       |   | Making   |
|                                       |   | Aboriginal Cultural Awareness  |
|                                       |   | Prevention of Bullying   |
|                                       |   | Manual Handling  |
|                                       |   | Prevention & Management of   |
|                                       |   | Aggression   |
|                                       |   | Hand Hygiene   |
|                                       |   | Life support   |
|                                       |   | Infection, Prevention &  |
|                                       |   | Management   |
| 10                                    | A   | Emergency Procedures   |
| 16                                    | As a general comment -  | Rating response  |
|                                       | now engaged do you feel in  | 0=Highly disengaged,   |
|                                       | mandaled workplace  | IU=Highly engaged  |
| 17                                    |   | Open anded text response   |
| 17                                    | following septence in your  | Open ended text response   |
|                                       | own words: I feel   |  |
|                                       | disengaged from mandated  |  |
|                                       | workplace training  |  |
| Section 4                             |   |  |
| Finally - as                          | an educated, experienced, ad  | ult learner we want to hear your   |
| opinions an                           | d ideas about mandated work   | place training in the public health  |
|                                       |   |  |
| system.                               |   |  |
| system.<br>18                         | List the subjects/ topics that  | Open ended text response   |
| system.<br>18                         | List the subjects/ topics that you believe should require   | Open ended text response   |
| system.<br>18                         | List the subjects/ topics that<br>you believe should require<br>mandated training in your   | Open ended text response   |
| system.<br>18                         | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.   | Open ended text response   |
| system.<br>18<br>19                   | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent   | Open ended text response Open ended text response  |
| system.<br>18<br>19                   | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has  | Open ended text response<br>Open ended text response   |
| system.<br>18<br>19                   | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,  | Open ended text response Open ended text response  |
| system.<br>18<br>19                   | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about   | Open ended text response   |
| system.<br>18<br>19                   | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?  | Open ended text response   |
| system.<br>18<br>19<br>20             | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?  | Open ended text response   |
| system.<br>18<br>19<br>20             | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words   | Open ended text response Open ended text response Open ended text response   |
| system.<br>18<br>19<br>20             | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace   | Open ended text response Open ended text response Open ended text response   |
| system.<br>18<br>19<br>20             | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"  | Open ended text response Open ended text response Open ended text response   |
| system.<br>18<br>19<br>20<br>21       | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"  | Open ended text response   |
| system.<br>18<br>19<br>20<br>21       | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or   | Open ended text response   |
| system.<br>18<br>19<br>20<br>21       | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the   | Open ended text response  |
| system.<br>18<br>19<br>20<br>21       | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the<br>subject that would inform  | Open ended text response  |
| system.<br>18<br>19<br>20<br>21       | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the<br>subject that would inform<br>this study.   | Open ended text response   |
| system.<br>18<br>19<br>20<br>21<br>22 | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the<br>subject that would inform<br>this study.<br>Thank you for taking the                                     | Open ended text response                                  |
| system.<br>18<br>19<br>20<br>21<br>22 | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the<br>subject that would inform<br>this study.<br>Thank you for taking the<br>time to complete this            | Open ended text response         Open ended text response |
| system.<br>18<br>19<br>20<br>21<br>22 | List the subjects/ topics that<br>you believe should require<br>mandated training in your<br>workplace.<br>Tell us how the recent<br>COVID-19 Pandemic has<br>impacted on your thoughts,<br>beliefs and ideas about<br>mandated workplace<br>training?<br>Complete this sentence in<br>your own words.<br>"Mandated workplace<br>training in WA Health is"<br>Please add any other<br>comments, reflections, or<br>thoughts you have on the<br>subject that would inform<br>this study.<br>Thank you for taking the<br>time to complete this<br>survey. | Open ended text response                                  |

|    | be interviewed for 30<br>minutes for the next phase<br>of the study?  |                          |
|----|---|--------------------------|
| 23 | Please provide your<br>preferred contact details<br>(Phone/ email or address) if<br>you wish to be interviewed<br>or if you wish to receive a<br>personal copy of the study<br>results. | Open ended text response |

# Appendix B: Workforce Interview Protocol

| Interview Questions   |
|---|
| Date  |
| Method/Location   |
| Interviewer   |
| Participant name  |
| Age   |
| Profession  |
| Primary employee  |
| Time as a health professional   |
| Time in WA Health   |
| Prompt guestions  |
| Tell me about your time working in the health sector (Your career path to date) |
| Prompts – public/ private sector; breaks- reason why; other professions/ sector |
| work experience   |
| Tell me about your time in the Public Health Sector                             |
| Tell me about your time in the WA Public Health Sector                          |
| Tell me about your experiences with MWT over your career in health              |
| Describe when you have seen MWT working to good effect in your health career    |
| Describe when you have seen MWT working poorly in your health career            |
| Can you comment on MWT in any other professions/ sector – where you may have    |
| worked or have heard about?   |
| What – if anything – do you think works well in the current MWT System in WA    |
| Health?   |
| Prompts:  |
| - Subjects  |
| - Frequency   |
| - Teaching methods  |
| - Recording / tracking systems  |
| What – if anything – do you think does NOT work well in the current MWT System  |
| in WA Health?   |
| Prompts:  |
| - Subjects  |
| - Frequency   |
| - Teaching methods  |
| - Recording / tracking systems  |
| If we could change any aspect of the current system of mandated workplace       |
| training, what would you like see happen?                                       |
| Recording transferred to K drive (date)   |
| Recording backed up (date)  |
| I ranscription (Start & End date)   |

## Appendix C: Unique Mandated Training Programs-All

#### **Participating Sites**

|    | Торіс   |  |  |
|----|---|--|--|
| 1  | Activity Based Funding  |  |  |
| 2  | Aboriginal Cultural Awareness                                     |  |  |
| 3  | Advanced Foetal Assessment  |  |  |
| 4  | Adult Life support practical                                      |  |  |
| 5  | Adult life support theory - AH version                            |  |  |
| 6  | Adult life support theory   |  |  |
| 7  | Accountable & Ethical Decision Making                             |  |  |
| 8  | ALSO (Specialist midwifery training)                              |  |  |
| 9  | Allergen Training   |  |  |
| 10 | Advanced Life Support   |  |  |
| 11 | Aseptic Non-Touch Technique - eLearning                           |  |  |
| 12 | Aseptic Non-Touch Technique - competency                          |  |  |
| 13 | Aggression Prevention & Intervention                              |  |  |
| 14 | Aggression Prevention & Intervention 1- de escalation             |  |  |
| 15 | Aggression Prevention & Intervention 2- breakaway                 |  |  |
| 16 | Aggression Prevention & Intervention 3 - restraint and seclusion  |  |  |
| 17 | Aggression Prevention & Intervention for non-risk                 |  |  |
| 18 | Basic Life Support & Defibrillation                               |  |  |
| 19 | Basic Life Support  |  |  |
| 22 | Breastfeeding policy  |  |  |
| 23 | Aggression Risk Management  |  |  |
| 24 | Cleaning Disinfecting and sterilising                             |  |  |
| 25 | Clinical Cleaning   |  |  |
| 26 | Code Blue Drill   |  |  |
| 29 | Corp Induction & Site Orientation                                 |  |  |
| 30 | Cytotoxic   |  |  |
| 31 | Department Orientation  |  |  |
| 32 | Defibrillation  |  |  |
| 33 | Emergency Evacuation- code orange                                 |  |  |
| 34 | Emergency preparedness (Code orange; fire extinguisher & general) |  |  |
| 35 | Emergency procedures Principles                                   |  |  |
| 36 | Emergency procedure theories                                      |  |  |
| 37 | Emergency procedures practical                                    |  |  |
| 38 | Evacuation training   |  |  |
| 39 | Evacuation- drill   |  |  |
| 40 | Epidural/spinal analgesia   |  |  |
| 41 | Fire extinguisher   |  |  |
| 42 | Food safety   |  |  |
| 43 | Fire Warden Training  |  |  |
| 44 | HACCP   |  |  |

| 45 | Hand Hygiene   |  |
|----|--|--|
| 46 | Hand Hygiene - nursing   |  |
| 47 | Hand Hygiene - medical   |  |
| 48 | Hand Hygiene   |  |
| 49 | Harassment and discrimination at work                          |  |
| 50 | Hospital Basic Life Support                                    |  |
| 51 | Hospital Advanced Life Support                                 |  |
| 52 | Hospital Life Support theory                                   |  |
| 53 | Hospital Life Support with defibrillation                      |  |
| 54 | Hospital Life Support Competency                               |  |
|    |  |  |
| 55 | Induction (OSH & Orientation); bullying; Hospital Life Support |  |
| 56 | Invasive devices   |  |
| 57 | Intime   |  |
| 58 | Intection Prevention & Management                              |  |
| 59 | K2- Chapter Assessment   |  |
| 60 | K2 - In partum CTG Module                                      |  |
| 61 | K2- Acid Base & Foetal Physiology                              |  |
| 62 | K2- Assessment Tools   |  |
| 63 | K2- Maternity Crisis   |  |
| 64 | K2 Training Simulator  |  |
| 65 | Management of Aggression WAVE (1&2)                            |  |
| 66 | Managing Claims of Workplace bullying                          |  |
| 67 | Mandatory Reporting of Child Sexual Abuse                      |  |
| 68 | Manual Tasks - general loads                                   |  |
| 69 | Manual tasks - practical                                       |  |
| 70 | Manual tasks - theory  |  |
| 71 | Manual tasks - Patient loads                                   |  |
| 72 | Manual tasks - general loads and seating                       |  |
| 73 | Medication calculations  |  |
| 74 | Mental Health Act  |  |
| 75 | Manual Handling  |  |
| 76 | Management of Aggression                                       |  |
| 77 | MRI Safety   |  |
| 78 | MS-2 Step  |  |
| 79 | My Health Record   |  |
| 80 | Notifications & Clinical Summaries (NaCS) My Health Record     |  |
| 81 | National Inpatient Medication Chart Training                   |  |
| 83 | National Standards Medication Course                           |  |
| 84 | Neonate resuscitation Practical                                |  |
| 86 | Neonate resuscitation theory                                   |  |
| 87 | Patient Centred Care   |  |
| 88 | Patient Safety & Quality Orientation Passport                  |  |
| 89 | Pharmaceutical Benefit Scheme                                  |  |
| 90 | Paediatric Life Support  |  |
| 91 | NPS Medication Safety  |  |
| 92 | Neonatal resus programs  |  |
|    |  |  |

| 93  | Obstetric emergencies                            |
|-----|--|
| 94  | Open Disclosure                                  |
| 95  | Occupational Safety & Health                     |
| 96  | Occupational Safety & Health & Injury Management |
| 97  | Occupational Safety & Health for Managers        |
| 98  | Patient Handling                                 |
| 99  | Patient Safety & Quality Orientation             |
| 100 | Patient Centred Care                             |
| 101 | Prevention of Bullying                           |
| 102 | Radiation Safety                                 |
| 103 | Record Keeping Awareness                         |
| 104 | Recognising & responding to Acute Deterioration  |
| 105 | Respect in the workplace                         |
| 106 | Safe Handling                                    |
| 107 | Safe Infant Sleeping                             |
| 108 | Speak up for Safety                              |
| 109 | Triage   |
| 110 | Water immersion for labour and birth             |
| 111 | Workplace Bullying (Code of Conduct)             |
| 112 | Work Health and Safety for Managers              |

## Appendix D: Unique Mandated Workplace Training

## **Topics Delivered**

|    | Core topic name                          | Included Programs  |
|----|--|--|
| 1  | Activity Based Funding                   |  |
| 2  | Aboriginal Cultural Awareness            |  |
| 3  | Advanced Foetal Assessment               |  |
| 4  |  | N=16: Advanced Life Support;<br>Adult life support practical; Adult<br>life support theory - AH version;<br>Adult life support theory; Basic<br>Life Support; Basic Life support +<br>Defibrillation; Defibrillation;<br>Hospital Basic Life Support;<br>Hospital Advanced Life Support;<br>Hospital Ife Support Theory;<br>Hospital Life Support with<br>defibrillation; Hospital Life<br>Support Competency; Neonate<br>Resuscitation Practical; Neonate<br>Resuscitation theory; Paediatric<br>Life Support; Neonatal |
|    | Life Support                             | Resuscitation Programs   |
| 5  | Accountable & Ethical Decision<br>Making |  |
| 6  | ALSO (Specialist midwifery<br>training)  |  |
| 7  | Allergen Training                        |  |
| 8  |  | N=3: Theory. Practical,  |
|    | Aseptic Non-Touch Technique              | Competency   |
| 9  | Aggression Prevention &<br>Intervention  | N=9: De-escalation; Breakaway;<br>Restraint & Seclusion, WAVE 1;<br>WAVE 2; For Non High-Risk<br>Workers; Aggression risk<br>management; Management of<br>Aggression; CARM   |
| 10 | Breastfeeding policy                     |  |
| 11 | Cleaning Disinfecting and sterilising    |  |
| 12 | Clinical Cleaning                        |  |
| 13 | Code Blue Drill                          |  |
| 14 | Induction & Orientation                  | N=4: Induction (OSH &<br>Orientation); bullying ;<br>Harassment and discrimination at<br>work; Department Orientation;<br>Corporate Induction & Site<br>Orientation  |

| 15 | Cytotoxic Safety                 |                                   |
|----|----------------------------------|-----------------------------------|
| 16 |                                  | N = 8: Emergency preparedness     |
|    |                                  | (Code orange; fire extinguisher   |
|    |                                  | and general); Code Orange; Fire   |
|    |                                  | Extinguisher; Emergency           |
|    |                                  | procedures theory; Emergency      |
|    |                                  | procedures practical; Evacuation  |
|    |                                  | training; Evacuation drill; Fire  |
| 44 | Emergency Procedures             | Warden Training                   |
| 11 | Enidural/aninal analgania        |                                   |
| 10 | Epidural/spinal analgesia        |                                   |
| 10 | Food safety                      | N=2: Food safety; HACCP           |
| 19 |                                  | N = 5: Hand Hygiene; For          |
|    | Hand Hygiono                     | Modical: for pop-clinical workers |
| 20 |                                  |                                   |
| 20 | Intimo                           |                                   |
| 21 | Infection Prevention &           |                                   |
|    | Management                       |                                   |
| 23 | K2- Chanter ax                   |                                   |
| 24 | K2 - Inpartum CTG Module         |                                   |
| 25 | K2- Acid Base & Fetal Physiology |                                   |
| 26 | K2-Assessment Tools              |                                   |
| 27 | K2- Maternity Crisis             |                                   |
| 28 | K2 Training Simulator            |                                   |
| 29 | Managing Claims of Workplace     |                                   |
|    | Bullying                         |                                   |
| 30 | Mandatory Reporting of Child     |                                   |
|    | Sexual Abuse                     |                                   |
| 31 |                                  | N = 8: Manual Tasks - general     |
|    |                                  | loads; Manual Tasks - practical;  |
|    |                                  | Manual Tasks- theory; Manual      |
|    |                                  | Tasks -patient loads; Manual      |
|    |                                  | tasks- General loads and          |
|    | Manual Taaka                     | Seating; Manual Handling;         |
| 22 | Madiaatian Calculations          | Patient Handling, Sale handling   |
| 32 | Montal Health Act                |                                   |
| 27 |                                  |                                   |
| 25 |                                  | N-2: My Health Record:            |
| 55 |                                  | Notifications & Clinical          |
|    |                                  | Summaries (NaCS) My Health        |
|    | My Health Record                 | Record                            |
| 36 | National Inpatient Medication    |                                   |
|    | Chart Training                   |                                   |
| 37 | National Standards Medication    |                                   |
|    | Course                           |                                   |
| 38 | Patient Centred Care             |                                   |

| 39 | Patient Safety & Quality      |  |
|----|-------------------------------|--|
|    | Orientation Passport          |  |
| 40 | Pharmaceutical Benefit Scheme |  |
| 41 | National Prescribing Scheme   |  |
|    | (NPS) Medication Safety       |  |
| 42 | Obstetric emergencies         |  |
| 43 | Open Disclosure               |  |

## Appendix E: Suggested New Mandated Training

## Topics by Workforce Groups

| Non-Clinical Topics                         | Clinical Topics                     |  |  |
|---|-------------------------------------|--|--|
| Medical Workforce                           |                                     |  |  |
| Building safety cultures                    | Delirium                            |  |  |
| Changes to polices & procedures             | Recognizing & responding to         |  |  |
| Implicit bias                               | deterioration                       |  |  |
| Graded assertiveness                        | Bloods                              |  |  |
| Professional behaviour                      | First aid                           |  |  |
| Fitness to practice                         | Coaching patients about smoking &   |  |  |
| Disciplinary action                         | exercise                            |  |  |
| Recognising narcissists                     |                                     |  |  |
| Nursing & Midw                              | ifery Workforce                     |  |  |
| Mindfulness                                 | Disaster preparedness               |  |  |
| Mutua respect & Customer service            | Maternal sepsis                     |  |  |
| Respectful & purposeful                     | Mental Health First/ Mental status/ |  |  |
| communication                               | Management of Self Harm &           |  |  |
| Workplace attitudes                         | suicidal ideation/ Mental health    |  |  |
| Emotional dysregulation                     | crisis                              |  |  |
| Interpersonal skills                        | Falls risk                          |  |  |
| Safety & Quality                            | Language Services                   |  |  |
| Changes to the organisation                 | Management of drug & alcohol        |  |  |
| Conflict management                         | misuse                              |  |  |
| Risk Management                             | Management of cognitive             |  |  |
| motional intelligence impairment            |                                     |  |  |
| Values based care                           | Information security                |  |  |
| My health record                            | Person centred care                 |  |  |
| ABF & ABM Clinical coding                   | Open Disclosure                     |  |  |
|   | Respirator Use                      |  |  |
|   | Blood transfusion                   |  |  |
|   | Recognizing & responding to         |  |  |
|   | deterioration                       |  |  |
|   | Care planning                       |  |  |
|   | Recognizing & responding to         |  |  |
|   | deterioration                       |  |  |
|   | Diabetic Crisis                     |  |  |
|   | Asthma management                   |  |  |
|   | Laser safety                        |  |  |
|   | Radiation safety                    |  |  |
|   | Latex allergy                       |  |  |
| Aseptic technique                           |                                     |  |  |
| Allied Health & Health Scientists Workforce |                                     |  |  |

| Ethical decision                       | Delirium                             |  |
|--|--------------------------------------|--|
| Documentation standards                | Dementia                             |  |
| Cultural awareness/ diversity (Race,   | Falls prevention                     |  |
| religion, gender, sexuality, politics) | Care coordination/ care planning     |  |
| Risk assessment & management           | Risk assessment                      |  |
| Effective communication/ Difficult     | Alcohol & Other Drugs                |  |
| conversations                          | Psychosis                            |  |
| Self-care/ Workers 'mental health      | Youth                                |  |
| Understanding the role of others/      | Services & referral pathways         |  |
| Team culture                           | Child protections                    |  |
| Promoting positive work culture        | Mental Health First Aid/ Awareness   |  |
| Conflict resolution                    | Trauma Informed care                 |  |
| Performance management                 | Pandemic training/ COVID 19          |  |
|  | First aid                            |  |
|  | Family & Domestic Violence           |  |
| Other Clinica                          | al Workforce                         |  |
| Wellness                               | Falls                                |  |
| Administrative & C                     | Clerical Workforce                   |  |
| Cultural diversity                     | Person centred care/ Empathy &       |  |
| Trans & gender Diversity               | Compassions                          |  |
| Management of aggression               | Coping strategies                    |  |
| Code of Conduct                        | Working with patients with Mental    |  |
| Conflict management                    | Health                               |  |
| Equal opportunity                      | Family & Domestic Violence           |  |
| Emotional intelligence at Work         | Dealing with patient with mental     |  |
| Conflict of interest                   | health problems (face-to-face and    |  |
| Interpersonal; relationships at Work   | phone)                               |  |
| CHOIR (Incident reporting)             | Quick observations for sick patients |  |
| Administrative tasks: Excel,           | COVID 19 training                    |  |
| Powerpoint, word, Adobe Pro, using     | Issues related to clinical care and  |  |
| room dividers                          | patient safety                       |  |
| Resilience                             | Personal Protective Equipment        |  |
| Passive bullying/ Unethical            |                                      |  |
| Work delegations                       |                                      |  |
| Assertive communication                |                                      |  |
| Time management                        |                                      |  |
| Managing conflict of interest          |                                      |  |
| Management & Ex                        | ecutive Workforce                    |  |
| Equal Employment Opportunity           |                                      |  |
| Family and domestic Violence           |                                      |  |
| Mutual respect and customer focus      |                                      |  |
| Business & Finance Workforce           |                                      |  |
| Cybersecurity                          |                                      |  |
| New digital technology basics          |                                      |  |
| Video conferencing etiquette           |                                      |  |
| Other Non-Clinical Workforce           |                                      |  |

| Occupational Health & Safety<br>Understanding delegations | Patient centred care |
|---|----------------------|
| Communicating effectively                                 |                      |
| Assertive thinking (sic)                                  |                      |
| Resilience  |                      |
| HR Processes – grievances                                 |                      |
| Working at heights & confined                             |                      |
| spaces  |                      |
| Hearing protection training                               |                      |
| Teamwork  |                      |
| Competence & accountability                               |                      |
| Management skills   |                      |
| New technology  |                      |

## Appendix F: Suggested New Mandated Training

## Topics by Employer

| Area<br>Health<br>Service<br>(AHS) | Suggest New MWT Topics<br>(Suggested once unless indicated)  |  |
|------------------------------------|--|--|
| AHS 1                              | Interpersonal relationship topics                            |  |
| N=27                               | Difficult conversations with relatives/ workers (2)          |  |
| (31%)                              | Speak up for safety for patients & workers                   |  |
| respondents                        | aents Assertiveness (2)                                      |  |
|                                    | Customer service   |  |
|                                    | Conflict resolution (2)                                      |  |
|                                    | Resilience   |  |
|                                    | Emotional intelligence at work                               |  |
|                                    | How to recognise a parcissist                                |  |
|                                    | Recognition of implicit bias                                 |  |
|                                    | Clinical management tonics                                   |  |
|                                    | Mental state examination                                     |  |
|                                    | Diabetes management (2)                                      |  |
|                                    | Asthma Management  |  |
|                                    | Patient blood management                                     |  |
|                                    | Coaching patients about smoking cessation & healthy exercise |  |
|                                    | Meal support and eating disorders                            |  |
|                                    | Management of self-harm and suicidal ideation                |  |
|                                    | COVID 19   |  |
|                                    | Managing delirium  |  |
|                                    | Strategies to reduce falls risk                              |  |
|                                    | Organisational systems topics                                |  |
|                                    | Finding online policies                                      |  |
|                                    | HR processes   |  |
|                                    | Administrative skills (excel, word, power point and adobe    |  |
|                                    | pro)<br>Ethical amployment practices                         |  |
|                                    |  |  |
|                                    | CHOIR Usage (CHOIR = WA Health's Occupational Health         |  |
|                                    | Hazard & Incident reporting system)                          |  |
|                                    | Workers disciplinary matter                                  |  |
|                                    | Assessing and managing conflict of interest                  |  |
|                                    | Other safety issues  |  |
|                                    | Safe movement & storage of furniture and room dividers (2)   |  |
|                                    | Risk assessment (2)  |  |
|                                    | Management of drug & alcohol related aggression              |  |

|                       | OSH (3) including: hearing protection, hazardous                               |  |  |
|-----------------------|--|--|--|
|                       | substances & spill management; working at heights.                             |  |  |
|                       | Fitness to practice.   |  |  |
|                       | Personal Protective Equipment (PPE) use  |  |  |
| AHS 2                 | Clinical management topics   |  |  |
| N = 17                | Family & Domestic Violence (3 – including for cierical                         |  |  |
| (JJ%                  | workers)   |  |  |
| Γεορυπαεπιο           | CUVID 19/ Pandemic training (2)  |  |  |
|                       | Working with trans & gender diverse nationts                                   |  |  |
|                       | Maternal sensis  |  |  |
|                       | Obstetric emergencies  |  |  |
|                       | Midwifery specialities: Breastfeeding, foetal surveillance.                    |  |  |
|                       | safe infant sleeping   |  |  |
|                       | Dealing with patient with drug & alcohol misuse                                |  |  |
|                       | Managing obese patients  |  |  |
|                       | Organisational systems topics  |  |  |
|                       | Managing substandard performance   |  |  |
|                       | Cybersecurity  |  |  |
|                       | Basic Video conferencing etiquette   |  |  |
|                       | New digital technology   |  |  |
|                       | Upen disclosure  |  |  |
|                       | I annuare services   |  |  |
|                       | Language Services  |  |  |
|                       | Mindfulness  |  |  |
|                       | Presenting bad news to patients  |  |  |
|                       | Emotional intelligence   |  |  |
|                       | Conflict resolution  |  |  |
|                       | Values based care  |  |  |
|                       | Communication/ Interpersonal Skills (3)  |  |  |
|                       | Building positive team culture   |  |  |
|                       | conflict (3)   |  |  |
| AHS 3                 | Clinical management topics   |  |  |
| N=23                  | Mental health First aid  |  |  |
| (38%)<br>rocpondente) | Trauma informed care   |  |  |
| Γεορυπαεπιο           | Child protection<br>Managing patients with alcohol and drug related behaviours |  |  |
|                       | Manaying patients with alconor and drug related behaviours<br>Peychoeie        |  |  |
|                       | Clozapine awareness  |  |  |
|                       | Delirium   |  |  |
|                       | Dementia   |  |  |
|                       | Falls prevention   |  |  |
|                       | Person centred care  |  |  |
|                       | Organisational systems topics  |  |  |
|                       | Referral pathways e.g., Youth services   |  |  |
|                       | Risk assessment  |  |  |
|                       | Care planning  |  |  |
|                       | Care Coordination  |  |  |

| Management skills                                      |
|--|
| New technology   |
| Documentation  |
| Fair work delegation                                   |
| Documentation standards                                |
| Interpersonal relationship topics                      |
| Empathy and compassion                                 |
| Fair work delegation                                   |
| Self-care/ coping mechanisms (2)                       |
| Resilience   |
| Assertiveness  |
| Time management  |
| Building a positive workplace culture                  |
| Emotional intelligence (2)                             |
| Customer service                                       |
| Effective communications with colleagues (3) including |
| "Teach Back" techniques                                |
| Other  |
| Workshop specific safety training                      |
| Legal topics e.g.: State Administrative Tribunal       |
| Understanding roles of other professions               |
| Training for administrative workers on handling phone  |
| conflict (3)   |

## Appendix G: Mandated Workplace Training Workforce

#### **Survey Response Rates**

#### Table 1

Response rates for MWT Workforce Survey Qualitative Items.

| ltem<br>No. | Survey Item   | No<br>respondents | Percentage<br>of total   |
|-------------|---|-------------------|--------------------------|
|             |   | responding        | respondents<br>(N = 365) |
| 7           | Tell us in your own words what<br>you think is the purpose of MWT<br>in WA Health                                     | 191               | 52%                      |
| 13          | Tell us how MWT can be designed to have a positive impact on your behaviour and that or your colleagues.              | 197               | 53%                      |
| 14          | Please complete the following sentence in your own words: I feel engaged with MWT when                                | 207               | 57%                      |
| 17          | Please complete the following<br>sentence in your own words: I<br>feel disengaged with MWT<br>when                    | 216               | 59%                      |
| 18          | List the subject/ topics you believe should require mandated training in your workplace                               | 203               | 56%                      |
| 19          | Tell us how the recent COVID<br>pandemic has impacted on your<br>thoughts, beliefs, and ideas<br>about MWT            | 205               | 59%                      |
| 20          | Complete this sentence in your<br>own words: Mandatory<br>workplace training in WA Health<br>is                       | 229               | 63%                      |
| 21          | Please add any other comments,<br>reflections, or thoughts you have<br>on the subject that would inform<br>this study | 94                | 26%                      |

#### Table 2

| Item<br>No. | Survey Item  | No<br>respondents<br>responding | Percentage of<br>total<br>respondents<br>(N = 365) |
|-------------|--|---------------------------------|--|
| 1           | How do you identify?   | 365                             | 100%   |
| 2           | What age group are you in?   | 364                             | 99.7%  |
| 3           | What WA Area Health Service do you primarily work in?  | 364                             | 99.7%  |
| 4           | Which professional group do you work in?   | 364                             | 99.7%  |
| 5           | How many years have you worked in the health industry  | 357                             | 97.8%  |
| 6           | How many years in total have you worked in WA health   | 364                             | 99.7%  |
| 8           | What do you think is the purpose<br>of each of the following mandated<br>training courses  | Range 301-<br>304               | 82% - 83%  |
| 9           | Overall- do you think mandatory training achieves its purpose?   | Range 290 -<br>302              | 79% - 82.7%  |
| 10          | How much do you think mandated<br>workplace training impacts on the<br>work you do in your organisation?                             | _<br>301                        | 82.4%  |
| 11          | How useful is mandatory workplace training to you personally?  | Range 250-<br>267               | 68%- 73%   |
| 12          | Overall, how do you rate the<br>impact of mandatory workplace<br>training on the delivery of safe,<br>quality care across WA Health? | 251                             | 68.7%  |
| 15          | How engaged do you feel when<br>you access these specific<br>mandated training programs?   | Range 260 -<br>277              | 71% - 75.8%  |
| 16          | As a general comment – how<br>engaged do you feel in mandated<br>workplace training overall?   | 237                             | 65%  |
| 22          | Would you be prepared to be interviewed for 30 minutes for the next phase of the study?  | 253                             | 69%  |