

School of Nursing and Midwifery

**The formative evaluation of a practice framework for nurses
working in secondary schools**

Alison Rosemarie McCluskey

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DECLARATION

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

"This thesis contains no material that has been accepted for the award of any other degree of diploma at any other university."

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ABSTRACT

The formative evaluation of a practice framework for nurses working in secondary schools

Background

Adolescence is a period of growth and development characterised by physical, cognitive, emotional, and social changes. Mental health problems are common during adolescence and they are increasingly coming to public attention because of their potential impact on health and wellbeing across the life course. School nurses now report that they spend much of their time addressing student mental health problems, working with teachers and parents as well as the students themselves. Despite this, the role of the school nurse has not been clearly defined and there is little uniformity or consistency in practice.

Aim and objectives

The aim of this research was to undertake a formative evaluation explore students, parents, teachers, and nurses understanding of the role of the school nurse in the assessment and management of mental health issues to inform the development of a mental health promotion framework for the practice of secondary school nurses. The specific objectives of the study were: 1. To identify if the proposed framework was seen to be of benefit to various stakeholders, young people, parents and the school community; 2. To identify if the framework needs to be modified and made appropriate for the needs of the school and whole community; and 3. To assess the support to the school health nurse in the implementation of the framework. Using a formative evaluation and mixed methods approach, short self-report surveys were administered to students and parents, and interviews and focus group discussions were held with students, parents, teachers, school nurses and allied health professionals. The Principals of three independent co-educational secondary schools in metropolitan Perth, Western Australia that were representative of low, medium, and high levels of advantage agreed to participate.

Methodology

The study is set within the context of a health promotion intervention and formative evaluation research. Formative evaluation is widely accepted in health promotion research and practice as the “gold standard” method for ensuring a proposed intervention meets the needs of the community for which it is developed, and is most

likely to have the impact that is intended. The formative evaluation was undertaken using a mixed methods data collection strategy.

Survey data were collected from a convenience sample of 363 parents and 747 students across randomly chosen classes in year groups seven to 12. The parent questionnaire consisted of two pages and four sections. It contained a validated instrument that has been used to identify perceptions of the school nurse role in a large population-based study in Israel. The student questionnaire was developed by the research team and was piloted with 10 students and their parents known to academic child health staff. The two sections of the questionnaire asked about the importance of the nurse's level of compassionate care, communication skills, and their perception of the clinic experience if they were to go to see the nurse.

Nine focus groups and 18 interviews were conducted with a purposive sample of parents, students, teachers, nurses and allied health staff within the school community. The purpose of the interview and focus groups was to further explore the role of the school nurse, corroborate the key survey findings, and develop a framework for nurse's practice. Interview and focus group questions were developed in collaboration with a panel of experts from child health nursing, school nursing, and health promotion after a review of national and international literature. The guide was piloted with 10 students and their families.

Binary, categorical and continuous variables were derived from raw data prior to statistical analysis. Contingency tables and Chi-square were used to investigate possible difference for parents and students with regard to a range of outcomes. Analysis of Variance (ANOVA) with Bonferoni correction was used to compare mean scores for parent's perception of the school nurse role. With regard to student's perception of the importance of compassionate care in the school nurse's role non-parametric analysis (Mann-Whitney U; Kruskal-Wallis) was performed to examine relationships between schools, gender and year at school as independent variables and the compassion score as the dependent variable. Constant comparison analysis originating from grounded theory was used to analyse interview and focus group data. The qualitative analysis began with the researcher looking for salient words and themes within the transcripts to organise the data. The researcher then looked for meaningful sections naming and coding them to find the implicit meanings within the text. Analysis was completed by coding apparent themes from the transcripts of

taped interviews and then categorising these themes. Subsequent interviews were scrutinized for statements that fit with previously developed themes. Significant statements from each stakeholder group were organised into headings from the developed and emergent themes. Data were then organised into each stakeholder group and analysed within that group. The emergent themes were reviewed by the research team with the original data for comparison and critique. Data saturation was achieved in this study after all of the focus groups and fourteen interviews had been conducted, and were confirmed through review by supervisors who both held expertise in the phenomena studied and grounded theory methods. Ethical approval was obtained from Curtin University's Human Ethics Committee (HR 12/2012) and the School Principal determined the level of ethics required at each independent school.

Results

Eight themes and four sub themes emerged from the qualitative data and a model was developed identifying a framework for school nurse practice. The eight themes included: resources for the school nurse; mental health literacy, information and support; therapeutic communication; assessment; 'triage'; mental health care; general health care; and collaboration and referral. Within the key theme resources for the school nurse, four subthemes emerged: time, professional development, clinic and support. Survey data revealed that almost 90 per cent of parents reported that their child had been to see the school nurse at some time and of those, 77 per cent reported that the visit met their expectations. The greater majority of these parents (98%) said that they would be happy for their child to see the school nurse in the future. Eighty-three per cent of students reported that they thought it was important for the nurse to be approachable, 89 per cent that she should be caring, 85 per cent that she should be able to listen, 89 per cent that they should feel comfortable, and 86 per cent that the nurse should give helpful advice. With regard the composite measure of student's perception of the overall role of the school nurse, the median score of 18 indicated that there was strong agreement that the nurse should be compassionate.

Discussion

While previous empirical studies focus almost exclusively on school nurses, themselves, as participants, there are seven studies conducted in a number of countries that have asked the views of stakeholders in school communities other than nurses. This is the first study to identify that students, parents, and teachers believe

that the nurse has a role to provide mental health information and support for the whole school community. The finding that students expect to be treated as equal partners in their relationship with the nurse is consistent with literature that identifies when adolescents seek access to information and support from nurses, without parental permission, they need to feel comfortable to discuss sensitive issues and be assured that confidentiality is respected.

Following this formative evaluation, the next step in the development of an effective mental health promotion intervention involving secondary school nurses will be the implementation of the framework in selected schools in Australia and thorough process and impact evaluation. Before this can happen it will be necessary to share the findings of this research project with colleagues in a broad range of disciplines whose work focuses on adolescent mental health promotion. The invisibility of the nurse in the school context must be discussed and addressed with reference to a whole of school approach. With support, a case can be made to Australian Government and non-government organisations to fund the further development and implementation of the framework. The framework may potentially be adopted by State Governments within Australia and the Governments of countries within which these findings resonate.

Conclusion

The findings of the current study confirm this view held by nurses, but they also highlight some reservations held by parents and teachers regarding nurse's capacity to undertake mental health assessment. This view reflects a general lack of understanding about the scope of nursing practice. It is not surprising given that nurses, themselves, appear to be unable to clearly articulate their role. This issue underscores the need for a universally agreed, clearly defined, comprehensive practice framework for school nurses that is focused on the promotion of health and well-being in the whole school community.

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LIST OF TABLES AND FIGURES

Table 3.1	Major Assumptions of the Positivist and Constructivist Paradigms.....	74
Figure 3.1	Local Government Area SEIFA INDEXES for schools A, B, C.....	79
Figure 3.2	Local Government Area SEIFA INDEXES for schools A, B, C.....	80
Figure 3.3	Country of origin suburb X school A.....	81
Figure 3.4	Country of origin suburb Y school B.....	81
Figure 3.5	Country of origin suburb Z school C.....	82
Figure 3.6	Employment levels suburb X, Y, Z.....	83
Figure 3.7	Occupations held by population in Suburb X, Y, and Z schools A, B, C	83
Figure 3.8	Recruitment model.....	85
Table 4.1	Parent and Student Response rates in schools.....	108
Table 4.2	Parent characteristics, experience, and perception of school nurse role	110
Table 4.3	Parent’s perception of aspects of the role of the school nurse by school	113
Table 4.4	Parent’s perception of aspects of the role of the school nurse/seen nurse	116
Table 4.5	Parent’s perception of aspects of the role of the school nurse/meet expectations.....	120
Figure 4.1	Parent’s overall perception of the school nurse role.....	123
Table 4.6	Bivariate analyses of parent’s perception of the overall role of the school nurse by school, been to see the school nurse, and meet expectations.....	124
Table 4.7	Students experience and view of school nurse.....	125
Table 4.8	Students experience and view of school nurse.....	127
Table 4.9	Student’s awareness of service, frequency of visits, access to, and reasons for visiting the nurse.....	129
Table 4.10	Student’s experience, view of service, and outcome following visit to the school nurse.....	132
Table 4.11	Bivariate analysis of the role of the School Health Nurse	134
Table 4.12	Bivariate analysis of the role of the School Health Nurse	136
Table 4.13	Bivariate analysis of the role of the School Health Nurse.....	138

Figure 4.2	Student’s perception of compassion of the school nurse role.....	140
Table 4.14	Relationship between schools/gender / year (junior /senior) Clinic experience (students).....	141
Figure 4.3	Framework for School Nurse Practice.....	144
Figure 5.1	Framework for School Nurse Practice.....	222

LIST OF ABBREVIATIONS

Term	Description
APRHA	Australian Health Practitioner Regulation Agency
EN	Enrolled Nurse
FCRF	Family and Community Resource Framework
HEADDS	Home Education Activities Drugs Sexuality Suicide Depression
HPS	Health Promoting Schools
MHFA	Mental Health First Aid
MOU	Memorandum of Understanding
RN	Registered Nurse
SEIFA	Socioeconomic Index for Areas
SN	School Nurse
WHO	World Health Organisation

Contents

TITLE	i
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	vii
LIST OF TABLES AND FIGURES	viii
LIST OF ABBREVIATIONS	x
1 INTRODUCTION	1
1.1 Introduction and background to the study	1
1.2 Statement of the problem	1
1.3 Aim	5
1.4 Objectives	5
1.5 Thesis outline	6
2 LITERATURE REVIEW	8
2.1 Introduction and chapter review	8
2.2 Child development	9
2.2.1 Bioecological theory	10
2.2.2 Biological embedding	13
2.2.3 Stress response	14
2.2.4 Summary	16
2.3 Adolescent development	17
2.3.1 Adolescent normative development	20
2.3.1.1 Peer relationships and bullying	20
2.3.1.2 Body image and self esteem	21
2.3.1.3 Risk taking	22
2.3.2 Neurophysiology related to behaviour during adolescence	23
2.3.3 Reward seeking behaviour and the dopaminergic system	25
2.4 Adolescent psychopathology	27
2.4.1 Description and prevalence of adolescent mental health problems	28
2.4.1.1 Disorders of mood	28
2.4.1.2 Panic attack and psychosis	29
2.4.1.3 Self-harm and eating disorders	29
2.5 Impact and cost of adolescent mental health problems	30
2.5.1 Adolescents not seeking help	31

2.5.2	Families and community support	32
2.6	Adolescent help seeking behaviour.....	33
2.6.1	Definition and theory of help seeking.....	34
2.6.2	Help seeking seminal literature reviews	34
2.6.3	Individual and exogenous factors associated with help seeking.....	34
2.6.3.1	Personal beliefs about help seeking and internalised gender norms	34
2.6.3.2	Perceptions of others as helpful	35
2.6.3.3	Personal coping skills.....	36
2.6.3.4	Previous experiences with seeking help, mental health literacy and self- efficacy	37
2.6.3.5	Perceived stigma with the need for help.....	38
2.6.4	Programme efforts and policy initiatives to promote adolescent help seeking 38	
2.6.4.1	Relocating services to reach adolescents	38
2.6.4.2	Parents and peers inclusion in programs and information for adolescent mental health care	41
2.6.4.3	Services to be adolescent friendly	42
2.6.5	Summary.....	43
2.7	Working in schools: Health promoting schools.....	63
2.7.1	Mental health in the secondary school setting: Interventions.....	63
2.7.1.1	Spectrum of Interventions.....	63
2.7.1.2	Health promoting schools.....	64
2.7.1.3	HPS and MindMatters	65
2.7.1.4	Evaluation of HPS and MindMatters	66
2.7.1.5	Mental Health First Aid.....	67
2.7.2	Summary.....	69
2.8	The role of the nurse in secondary school mental health.....	43
2.8.1	Introduction	43
2.8.1.1	Lack of Understanding of the School Nurse’s Role	44
2.8.1.2	Definition of school nursing.....	47
2.8.1.3	Traditional school nurse’s role general health care	47
2.8.1.4	Contemporary school nurses includes mental health care	48
2.8.1.5	Adolescent mental health care provided by school nurses.....	48
2.8.1.6	Somatisation, stress and the need to see the school nurse	49
2.8.1.7	Lack of a framework for school nurses to provide mental health care.....	50

2.8.1.8	Qualifications	51
2.8.1.9	Suggested Qualifications and Education	53
2.8.2	Elements of the nurse’s role	53
2.8.2.1	Mental health literacy	53
2.8.2.2	Assessment for general and mental health care, confidentiality and triage 54	
2.8.2.3	Information and support (reactive and proactive)	56
2.8.2.4	Therapeutic communication.....	57
2.8.2.5	Collaboration	58
2.8.3	Resources for school nurse practice	59
2.8.3.1	Teams	59
2.8.3.2	Time and ratio.....	59
2.8.3.3	Support.....	60
2.8.3.4	Clinic.....	61
2.8.4	Summary.....	61
3	METHODS	63
3.1	Introduction.....	70
3.2	Study design	70
3.2.1	Introduction	70
3.2.2	Health promotion.....	70
3.2.3	Program evaluation.....	71
3.2.4	Formative evaluation	71
3.2.5	Use of mixed methods	73
3.2.6	Concurrent design.....	75
3.3	Literature review strategy.....	75
3.4	Participants and setting	77
3.4.1	Demographics of each school’s suburb and local government area	78
3.4.1.1	School A	80
3.4.1.2	School B	81
3.4.1.3	School C	82
3.4.1.4	Employment.....	82
3.4.1.5	Occupations	83
3.4.2	Relevance of SEIFA data	83
3.5	Procedure.....	84

3.5.1	School recruitment.....	84
3.5.2	Organisation of data collection at each school.....	85
3.6	The quantitative component of the study	86
3.6.1	Parent questionnaire.....	87
3.6.2	Student questionnaire.....	88
3.6.3	Statistical power	90
3.6.4	Data entry and cleaning	90
3.6.5	Derivation of variables	90
3.6.5.1	Parent questionnaire.....	91
3.6.5.2	Student questionnaire.....	91
3.6.6	Analysis.....	93
3.7	The qualitative component of the study.....	95
3.7.1	Focus group sample selection.....	95
3.7.1.1	School A	95
3.7.1.2	School B	95
3.7.1.3	School C	96
3.7.2	One-on-one interviews sample selection.....	96
3.7.3	Consent.....	97
3.7.4	Instrumentation	98
3.7.5	Method of data collection and management.....	100
3.7.6	Presenting the data.....	101
3.7.7	Constant comparison analysis originating from grounded theory	101
3.7.8	Data integrity and validity	102
3.8	Ethical Considerations.....	103
3.8.1	De-identification, confidentiality and data storage	104
3.9	Summary	105
4	RESULTS.....	108
4.1	Introduction.....	108
	QUANTITATIVE RESULTS.....	108
4.2	Response rates	108
4.3	Prevalence rates for parent characteristics, experience, and perception of the school nurse role.....	109
4.4	Bivariate analyses - parents	113
4.4.1	Parent's perception of aspects of the role of the school nurse according to the school that their child attended.....	113

4.4.2	Parent’s perception of aspects the role of the school nurse according to whether or not their child had been to see the school nurse	115
4.4.3	Parent’s perception of aspects the role of the school nurse according to whether or not their expectations had been met.....	119
4.4.4	Parent’s perception of the overall role of the school nurse by school, been to see the school nurse, and meet expectations	123
4.5	Prevalence rates for students.....	124
4.5.1	Student characteristics, experience, and perception of the school nurse role	124
4.5.2	Student characteristics, experience, and perception of the school nurse role for students who had not seen the school nurse.....	126
4.5.3	Student awareness of the service, frequency of visits, access to the nurse and reasons for visiting the school nurse	128
4.5.4	Student’s experience, view of the school nurse role, and action following the visit to the nurse.....	131
4.6	Bivariate analyses - students.....	134
4.6.1	Student’s perception of aspects the role of the school nurse according to the school that they attended	134
4.6.2	Student’s perception of aspects the role of the school nurse according to student’s gender	135
4.6.3	Student’s perception of aspects the role of the school nurse according to year level at school: junior or senior secondary school	137
4.6.4	Student’s perception of the overall role of the school nurse by school, gender and year	140
	QUALITATIVE RESULTS	142
4.7	Introduction.....	142
4.8	Resources for the school nurse	145
4.8.1	Introduction	145
4.8.2	Time.....	145
4.8.3	The clinic.....	147
4.8.4	Professional development and qualifications	148
4.8.4.1	Nurses’ qualifications	148
4.8.4.2	Initial qualifications	149
4.8.4.3	Postgraduate qualifications and study	150
4.8.4.4	Ongoing Professional Development.....	151
4.8.5	Nurses Support/Supervision.....	152
4.8.6	Summary.....	154

4.9	Mental health literacy: proactive information and support	154
4.9.1	Introduction	154
4.9.2	Participants' perceptions of the nurse's role facilitating mental health literacy 155	
4.9.2.1	Parents.....	155
4.9.2.2	Students.....	157
4.9.2.3	Teachers.....	157
4.9.2.4	Nurses.....	160
4.9.3	Individual general health information and support	162
4.9.4	General health information and support in the class room	163
4.9.5	Moving beyond general education to mental health education	164
4.9.6	Mental health education in the class room: positive perspectives	165
4.9.6.1	Nurses.....	166
4.9.6.2	Students.....	167
4.9.6.3	Teachers and Parents	168
4.9.7	Mental health education in the class room: maintaining trust	169
4.9.8	Mental health education in the class room: concerns.....	170
4.9.8.1	Nurse's presentation skills and subject matter knowledge.....	172
4.9.8.2	Individual mental health information and support: positive perspectives 173	
4.9.9	Individual mental health information and support: concerns.....	175
4.9.10	Summary.....	178
4.10	Assessment physical and mental health	179
4.10.1	Introduction	179
4.10.2	Initial physical assessment	180
4.10.3	Comprehensive/ Mental health assessment	180
4.10.4	Mental health assessment reservations.....	181
4.10.5	Recognition of the nurse's role in mental health assessment.....	181
4.10.5.1	Teachers.....	181
4.10.5.2	Nurses	182
4.10.5.3	Pastoral care staff.....	183
4.10.5.4	Parents.....	184
4.10.5.5	Students.....	185
4.10.6	Summary.....	185
4.11	Therapeutic communication	186

4.11.1	Introduction.....	186
4.11.2	Interpersonal skills.....	187
4.11.2.1	Nurses.....	187
4.11.2.2	Teachers.....	188
4.11.2.3	Parents.....	190
4.11.2.4	Pastoral Care workers.....	191
4.11.2.5	Students.....	191
4.11.3	Concern about the nurse’s role providing counselling.....	192
4.11.4	Summary.....	193
4.12	Triage/general and mental health care.....	193
4.12.1	Introduction.....	193
4.12.2	General health care.....	193
4.12.3	Triage.....	194
4.12.4	Mental health care.....	195
4.12.4.1	Nurses.....	195
4.12.4.2	Teachers.....	196
4.12.4.3	Students.....	198
4.12.5	Summary.....	199
4.13	Mental health literacy: reactive information and support.....	199
4.13.1	Introduction.....	199
4.13.2	Participant’s views and examples.....	200
4.13.2.1	Nurses.....	200
4.13.2.2	Teachers.....	203
4.13.2.3	Students.....	204
4.13.2.4	Parents.....	205
4.13.3	Lack of understanding about the nurse’s role: Concerns.....	206
4.13.4	Difficulties and barriers in the nurse’s role to provide information and support	208
4.13.5	Summary.....	209
4.14	Referral and collaboration.....	210
4.14.1	Introduction.....	210
4.14.2	Referral.....	210
4.14.2.1	Parents.....	210
4.14.2.2	Nurses.....	211

4.14.3	Collaboration	213
4.14.4	Challenges with collaboration	213
4.14.5	Collaboration: student services meetings	215
4.14.6	Summary.....	217
4.15	Suggestions made by participants to heighten awareness of the nurse’s role in the school community	217
4.15.1	Introduction	217
4.15.2	Suggestions to heighten awareness.....	218
4.15.3	Summary.....	220
5	DISCUSSION.....	221
5.1	Introduction.....	221
5.2	Summary of key findings.....	223
5.2.1	Survey results not related to framework	223
5.2.2	Key integrated findings.....	223
5.3	Integrated findings with relationship to extant literature	225
5.3.1	Israel Study	225
5.3.2	KPMG Study	225
5.3.3	New Zealand Schools Study	226
5.3.4	US Study	227
5.3.5	US Study	227
5.3.6	UK Study	227
5.3.7	Finland Study	228
5.3.8	Resources for school nurse.....	228
5.3.8.1	Time.....	228
5.3.8.2	Professional development.....	229
5.3.8.3	Clinic	231
5.3.8.4	Support	231
5.3.9	Mental health literacy	232
5.3.10	Information and support: proactive general	232
5.3.11	Information and support: proactive mental health	233
5.3.12	Therapeutic communication.....	234
5.3.13	Assessment	236
5.3.14	Triage.....	236
5.3.15	General health care.....	237

5.3.16	Mental health care	237
5.3.17	Information and support: reactive.....	238
5.3.18	Collaboration and referral	240
5.3.19	Suggestions made by participants to heighten awareness of the nurse’s role in the school community	241
5.4	Framework for School nurse Practice	242
5.4.1	Introduction	242
5.4.2	Evolution of the Practice Framework.....	243
5.4.3	Implementing the Framework for School nurse Practice.....	244
5.5	Strengths and limitations of the study.....	244
5.6	Specific recommendations.....	246
5.7	Conclusion	247
REFERENCES		249
APPENDICES		
APPENDIX A	Program Logic Model.....	278
APPENDIX B	Pre Proposal.....	279
APPENDIX C	Meeting Guide.....	283
APPENDIX D	Parent Questionnaire.....	286
APPENDIX E	Student Questionnaire.....	288
APPENDIX F	Moderators Guide.....	292
APPENDIX G	Parent Information Sheet.....	295
APPENDIX H	Invitation to Participate.....	296
APPENDIX I	Parent/Teacher/Allied health Information Sheet.....	297
APPENDIX J	Student Information Sheet.....	298
APPENDIX K	Parent/Teacher/Allied health Consent.....	299
APPENDIX L	Student Consent.....	300

1 INTRODUCTION

1.1 Introduction and background to the study

The aim of this study is to undertake a formative evaluation to investigate and explore the school community's understanding of the role of the school nurse in the assessment and management of adolescent mental health issues to inform the development of a school nurse mental health promotion practice framework for nurses working in secondary schools to promote adolescent mental health care. A program logic model (Taylor-Powell & Henert, 2008) (Appendix A) was used to identify the key components of the proposed framework. The program logic model assisted with diagrammatic structure to represent planning including inputs and outputs in this formative evaluation phase. The initial components were developed after a review of literature and collaboration with key stakeholders. Short self-report surveys were then administered to students and parents, and one-on-one interviews and focus group discussions were held with students, parents, teachers, school nurses and allied health professionals to identify perspectives of the school nurse's role. The quantitative and qualitative findings were used to review the themes proposed in the logic model and develop of the final nurse's practice framework.

This chapter begins with a description of the significance of adolescent mental health issues and their need for appropriate mental health care. The nurse's role in mental health promotion in secondary schools is then discussed followed by identification of the significance of the research. The aims and objectives of the study are identified, and finally, a brief discussion of the organisation of the thesis is provided.

1.2 Statement of the problem

It is well known that the role of the secondary school nurse is complex and challenging (Downie, Chapman, Orb, & Juliff, 2002; Guzys, Kenny, & Bish, 2013; Sendall, Fleming, & Lidstone, 2011). While there is significant international research into the role, there are gaps and inconsistencies in the current body of knowledge about the understanding of the school nurses role. The findings of studies about the nurse's role in secondary schools vary considerably and reasons for the nurse's role being poorly understood are numerous and complex including: different practice models, (Keller & Ryberg, 2004), differences in school nurse ratios and dissimilarity

in roles which is associated with budget and time constraints (Seigart, Dietsch, & Parent, 2013), a lack of clarity in the job title and expectations causing confusion around the scope of practice (Guzys et al., 2013; Merrell, Carnwell, Williams, Allen, & Griffiths, 2007; Smith & Firmin, 2009), a lack of understanding around professional responsibilities and legal requirements in the role (Newell, Schoenike, & Lisko, 2003; Sendall et al., 2011; Smith & Firmin, 2009).

Research findings consistently show that nurses are spending increasing amounts of time addressing adolescent mental health issues working with teachers and parents as well as the students themselves (Downie et al., 2002; Ghaddar, Valerio, Garcia, & Hansen, 2012; Smith & Firmin, 2009). The majority of the school nurse's practice is helping and supporting students with psychosocial issues (Barnes, Walsh, Courtney, & Dowd, 2004; Merrell et al., 2007; Prymachuk, Graham, Haddad, & Tylee, 2011; Seigart et al., 2013). Furthermore, adolescent somatisation is a prevalent issue which manifests school children presenting to the nurse with complaints of headaches and stomach aches, both of which are associated with psychosocial variables of anxiety and depression, childhood adversity and school stress (Shannon, Bergren, & Matthews, 2010). However, it is evident in the literature nationally and internationally that the role of the secondary school nurse in addressing adolescent mental health issues needs to be defined more clearly.

This study provides evidence based information that identifies the developmental period of adolescence as a critical, sensitive, period of development with psychological changes accompanied with social and emotional maturation. Cognitive development includes: abstract and advanced reasoning, greater impulse control, effective assessment of risk versus reward, improved working memory and language, and increased ability to regulate emotions (Blakemore, 2012; Giedd, 2012; Sisk & Foster, 2004). It is well recognised that adolescence is a very stressful period because of the complexity of the developmental tasks associated with this major life transition. Adolescence is accompanied with stressful life events caused by biological changes during puberty which effects body and self-image, and changes in social contexts including: moving to secondary school, change in peer groups and possible change in family structure such as divorce or separation (Bennett, Towns, & Elliott, 2009; Ellis, 2002). These major life events influence brain structural and functional alteration can be stressful, resulting in a negative impact on psychological

wellbeing. The extent of difficult changes predicts psychopathology (Barnes & Rowe, 2013; Evans, Gerlach, & France, 2007; Petersen et al., 1993) Furthermore, mental health problems are common during adolescence, with reports of one in five adolescents experiencing some form of emotional disorder (Chipman and Gooch, 2003; Patton et al, 2000). If adolescents are unsupported during this time it may lead to altered psychopathology (Evans et al., 2007; McEwen, 2007).

Extensive research demonstrates that globally up to three quarters of adolescents suffer with psychological distress and are reluctant to seek help for mental health care (Day, 2008; Slade, Johnston, Oakley Browne, Andrews, & Whiteford, 2009; Wilson & Deane, 2010). The impact of adolescent mental health problems on adolescent developmental outcomes over the life course is significant. It is critical to identify and effectively treat problems in early childhood and adolescence as prevention and early intervention strategies can delay or prevent primary disorders and development of secondary comorbid disorder as well as impact on social and vocational function (Boulter & Rickford, 2013; Kessler et al., 2007). Adolescents require assistance during *normal* stressors of adolescence, and globally *most* adolescents require help, support and orientation during the transition from childhood to adolescence (Barker, 2007). Additionally, it is identified that help seeking and having access to and using social supports are protective factors for many adolescent health and developmental outcomes (Barnes & Rowe, 2013; Oberle, Schonert-Reichl, Guhn, Zumbo, & Hertzman, 2014). However, no study has been undertaken in the area of adolescent's perspectives about the importance of mental health care provided by the school nurse in their role. A rich body of information has emerged from this study about adolescent help seeking behaviour which makes a significant contribution by providing unique insights into adolescent's perceptions of the role of the school nurse.

The capacity for adolescents to navigate through this period of development is dependent on a range of personal, social and cultural characteristics. Major contexts during adolescence include: school, family, and peer groups. It is well established that the ecological contexts of families, school and community provide risk and protective factors which influence child and adolescent development (McEwen, 2007; Oberle et al., 2014). Second to home, the context of the school environment is very important as a potential source of support and connectedness for adolescents

and provides an opportunistic setting for mental health promotion (Barker, 2007; Oberle et al., 2014; Paulus & Rowling, 2009). It is evident that school connectedness is a protective factor which promotes positive adolescent health outcomes (Barnes & Rowe, 2013; Paulus & Rowling, 2009; Resnick et al., 1997). Adolescents have a tendency to avoid help for mental health problems and may turn to parents and friends for help in the first instance, therefore, education programmes and support for parents and friends is critical to assist young people to seek early intervention (Australian Infant, 2008; Boulter & Rickford, 2013; Howe, Batchelor, & Bochynska, 2011; Rickwood, Deane, Wilson, & Ciarrochi, 2005; Wilson, 2010). The Health Promoting Schools Framework (HPS) framework has been used as a framework for a wide range of school based programs targeting many health issues, including mental health (Burns, Crawford, Cross, & Comfort, 2014; Rowling & Mason, 2005; Weare & Nind, 2011). The literature identifies that the HPS Framework incorporates a whole school approach to promote mental health promotion programs (Burns et al., 2014; Rowling & Mason, 2005; Weare & Nind, 2011), however, there is a gap in the literature regarding the nurse's role in school mental health promotion.

Considerable research identifies that nurses are ideally placed to provide mental health care for adolescents in secondary schools and that they have the skill, knowledge and expertise to fulfil this role effectively (Baisch, Lundeen, & Murphy, 2011; Haddad, Butler, & Tylee, 2010; Merrell et al., 2007). It is evident internationally that school nurses provide a comprehensive approach to care which includes: mental health care, facilitation of mental health literacy, assessment, health education advice and support for individuals and groups of students, families and staff, therapeutic communication, collaboration with school community and external service providers and referrals to internal and external health service agencies (Australian Nursing Federation, 2012; Barnes, Walsh, et al., 2004; Buckley et al., 2009; Council on School Health Services, 2008; Debell, 2006; Green & Reffel, 2009; Humensky et al., 2010; Merrell et al., 2007; Seigart et al., 2013; Shannon et al., 2010). If school nurse practice was clearly defined and nurses received professional training to further develop their expertise it is likely they could increase their effectiveness in promoting mental health and preventing significant mental health problems – there is some evidence that nurses are able to perform this role successfully (Baisch et al., 2011; Chipman & Gooch, 2003; Haddad et al., 2010;

Prymachuk et al., 2011). Despite the fact that nurses are providing adolescent mental health care there remains ambiguity about the nurse working in this context and without a clear practice framework for nurses this is hardly surprising (Seigart et al., 2013; Weare & Nind, 2011). This study provides the evidence that students, parents, teachers, nurses, and allied health professionals believe that it is appropriate for school nurses to provide adolescent mental health care in secondary schools. Furthermore, with input from the whole school community this qualitative and quantitative study seeks to develop a framework for the school nurse's practice in secondary schools.

1.3 Aim

The aim of this study is to undertake a formative evaluation to investigate and explore the school community's understanding of the role of the school nurse in the assessment and management of adolescent mental health issues to inform the development of a mental health promotion framework for the practice of secondary school nurses.

1.4 Objectives

The specific objectives of the research are:

1. To identify if the proposed framework is seen to be of benefit to various stakeholders, young people, parents and the school community.
2. To identify if the framework needs to be modified and made appropriate for the needs of the school and whole community.
3. To assess the support to the school health nurse in the implementation of the framework.

A framework that is developed with extensive input from stakeholders in school communities is more likely to be successful compared to one developed and implemented imposed by only school nurses. In addition, it is especially important for nurses to have access to resources which enable the nurse to perform their role effectively.

1.5 Thesis outline

Chapter two provides a selective critical review of the literature which is presented in four major sub-sections. In the first sub-section the reader is introduced to the developmental period of childhood where theory, concepts, and evidenced based knowledge relating to childhood development will be presented. The second sub-section provides a critical discussion about the development period of adolescence. The third sub-section of the review includes a critical review of the literature that identifies the context of the school as an appropriate environment where adolescent health seeking behaviour and adolescent mental health care are supported and promoted. The fourth sub-section of the literature review identifies the strengths, limitations and gaps in the literature regarding the role of the nurse in secondary schools nationally and internationally. The author then discusses the prevalence of adolescents presenting to the school nurse with mental health issues is identified and the nurse's role in providing adolescent mental health care is critically reviewed and discussed. Finally, the need for a practice framework for nurses working in secondary schools is highlighted.

In chapter three, the methodology used in this study is outlined and described. It begins with an outline of the study design which includes the program logic model that assisted to plan the formative evaluation phase (Taylor-Powell & Henert, 2008). The mixed methods approach of the study is identified and the rationale for using this approach in the current study is discussed. The participants and setting, procedure, and organisation of the data collection are identified. The next subsection outlines the quantitative data collection methods including the parent questionnaire, which contains a validated instrument relating to parent's perception of the role of the school nurse (Gross, Cohen, & Kahan 2006). The student questionnaire is introduced. The methods for the quantitative data analysis are identified and explained. The next subsection identifies the qualitative component of the study. The sample selection, and procedures to gain consent are identified. The focus group and one-on-one interview guide that was used to explore stakeholder's perspectives about the role of the school nurse is introduced and discussed. Next, the method of data collection and management are identified followed by an explanation of the constant comparison analysis approach that originated from grounded theory and has been used in this study. The steps taken to ensure rigour during the qualitative phase of the

study are discussed. Lastly, ethical considerations and data storage methods used by the researcher are identified.

Chapter four presents the quantitative and qualitative results of the study. Firstly, parent and student response rates are presented. This is followed by the parent prevalence rates for parent characteristics, experience and perception of the school nurse's role. Binary, categorical and continuous variables were derived from raw data prior to statistical analysis. Contingency tables and Chi-square were used to investigate possible difference for parents and students with regard to a range of outcomes. Analysis of Variance (ANOVA) with Bonferoni correction was used to compare mean scores for parent's perception of the school nurse role. The section concludes with student's perception of the importance of compassionate care in the school nurse's role non-parametric analysis (Mann-Whitney U; Kruskal-Wallis) was performed to examine relationships between schools, gender and year at school as independent variables and the compassion score as the dependent variable.

Next the qualitative results are presented and explained. This section introduces the model of the nurses practice framework that emerged from the qualitative data. A discussion about each theme of the model is then presented with supporting narrative.

Chapter five presents the reader with a discussion where the major findings are summarised, interpreted and discussed with extant literature. The importance of each theme within the school nurses framework for practice is identified and discussed. Implications for nursing practice in schools are highlighted. Following this the strengths and limitations of the study are discussed. Finally, recommendations are made as a result of this study, and conclusions are drawn.

The appendices include a copy of the program logic model that was used to develop the questionnaires. The meeting guide, parent and student questionnaires, focus group moderator's guide, parent and student information sheets, and participant consent forms are also included.

2 LITERATURE REVIEW

2.1 Introduction and chapter review

In this chapter a critical review of the literature is provided which relates to the role of the school nurse in the secondary school setting. The primary focus of the research is to propose a framework for nurses working in school which includes the whole school community: parents, students, teaching staff and allied health, and service providers within the wider community to assist toward improving mental health care for adolescents. Strengths and weaknesses of prior research are investigated and gaps in the peer reviewed literature are described.

To appreciate the significance of the proposed framework it is important to understand the developmental period of childhood as this provides a foundation and impacts on adolescent development. Theory, concepts and evidenced based knowledge relating to childhood development will be presented. Firstly, bioecological theory will be introduced as it is used widely to highlight the various contexts that support child and adolescent development. The family and community resource framework will then be identified as an appropriate conceptual framework to consider in more detail the impact of the family and school on child development. The concept of biological embedding will be identified, explaining how early experiences are cumulative and effect development. The effects of stress and attachment in early childhood development will be discussed.

Secondly, as the focus of this research involves adolescents as key participants it is essential to examine theory relevant to this period of development. This section will explore the changes which occur in puberty and adolescence. Adolescence will be identified as a sensitive developmental period where hormones during puberty contribute toward changes in the brain. These changes in brain structure including the function of the prefrontal cortex will be explained. Literature examining the effects of stress and its impact on functioning during adolescence will be examined. The effects of dopamine on the brain and its relationship with depression and influence on adolescent behaviour including risk seeking will be explained. The prevalence and impact of mental health issues in adolescence will be discussed with evidence to support the significance of prevention and early intervention and how the

nurse's role is integral toward assisting adolescents, their families and community to promote adolescent mental health.

To enable school nurses to be able to care for adolescents it is necessary to explore adolescent's help seeking behaviour. Barriers and facilitators in the help seeking process will be critically examined using evidence to highlight the importance of help seeking behaviour and the significance of the nurse's role in this process. Recommendations to encourage help seeking behaviour and to improve adolescent mental health care will be reviewed in relation to the role of the school health nurse.

Finally, as the context is set in the secondary school environment where the nurse works, it is necessary to review literature around guidelines, policies, frameworks and the law specific to the nurse's role in the school setting. This will include key aspects of the nurse's role from traditional to contemporary, including: mental health literacy, general and mental health care assessment, triage, therapeutic communication, collaboration and referral. Additional resources to enable the nurse to provide care in these key areas are highlighted. The literature review will form a basis to develop a framework for nurse's practice in the secondary school setting with specific emphasis on adolescent mental health care.

2.2 Child development

To understand ways in which it is best to assist adolescents with their health it is necessary to review biological, psychological and social processes which shape development in early childhood which in turn influences adolescent development. Recent research (Hertzman, 2013; Shonkoff, Boyce, & McEwen, 2009) identifies how findings from neuroscience, genetics and biogenetics influence pathways of early development influencing health outcomes later in life. An integrated review of the literature (Nelson, Kendall, & Shields, 2013) concurred that the development of a child is a result of both influences: genetic biology and the environment. The result of the interplay between experiences and events in early development and how the brain responds to stress provide a foundation which effects long term health consequences (Kendall, et al.,2009; McEwan, 2007). Both positive and negative experiences have a direct impact on brain pathway development (Nelson et al., 2013).

2.2.1 Bioecological theory

It is now widely agreed among biological, psychological, and social scientists that developmental systems theory is the most useful way to integrate research-based knowledge about human development (Belsky, 2013). Bronfenbrenner, a prominent psychologist, developed the ecological model of child development using a systems theory approach based on academic research from neuroscience to sociology. This model provides a foundation to study the influences on child development where it is believed that the influences outside the child's immediate environment impact on the child's development (Kendall, et al., 2009; Bronfenbrenner, 1986). The ecological model proposes that five systems shape children's understanding, perception and motivation. These systems include: the "microsystem", the "mesosystem," the "exosystem", the "macrosystem" and the "chronosystem" (Bronfenbrenner, 1986, 1994).

The "microsystem" is where the child is influenced initially by the parents, family, and early caregivers. Earlier research (Luthar & Brown, 2007) has shown powerful evidence of child brain development in the early caregiving environment highlighting scientific findings that if the child's needs are met they are more likely to achieve their physical, mental and cognitive potential. Additionally, there is evidence that nurturing relationships with parents and other children have a profound influence on social and emotional regulation whereas, conversely, harsh early care giving environments can lead to long lasting brain development problems and increase the likelihood of poor mental and physical health later in life (McEwen, 2007).

The 'mesosystem', is described as a system of microsystems, which extends outside the home, such as: school, communities groups and clubs. The "exosystem is identified as contexts which *influence* child development but they are not directly involved, such as: parent's workplace. These systems are particularly important for child and adolescent development as they provide the family with services resources such as: information, support education, childcare, work and social supports. During the course of normal adolescent development parenting requires access to local support and services and the quality and access to these services is likely to impact on adolescent developmental outcomes (Kendall et al., 2009; Zubrick, Williams, Silburn, & Vimpani, 2000).

The fourth system, the “macrosystem” extends beyond the family, school and neighbourhood and is identified as the distal structural components of society; cultural, economic and political factors which include the social determinants of health and development (Kendall et al., 2009, Bronfenbrenner, 1994). These components are largely outside the individual child’s and family’s control, yet they may influence opportunities and health either positively or negatively. Within the last system “chronosystem” there is a change in the consistency overtime in the characteristics of both the person and in the environment in which they live. Examples of changes include the following: employment, socioeconomic status, family structure, and place of residency. These changes also may have influence on family function and child and adolescent development (Bronfenbrenner, 1994).

In his later writing, Bronfenbrenner moves from an ecological paradigm to take into account the role of genes and biological processes in development, relabelling the theory as a “bioecological” theory. Bronfenbrenner recognised that theories of development must be able to explain the way social factors, such as interactions with others in the family and at school, influence psychological processes and behaviour, and, in turn, physiological mechanisms that regulate all neurological and metabolic functioning (Kendall et al., 2009). The theory explains the continuous reciprocal interaction that takes place between person and environment, acknowledging that biological, psychological, and social process do not happen independently (Bronfenbrenner, 1994).

Many researchers, practitioners and policy makers in Australia who now use bioecological theory also use the family and community resource framework (FCRF) developed by Brooks-Gunn and colleagues to focus on characteristics of families and community settings, such as schools, in more detail (Brooks-Gunn, Brown, Duncan, & Anderson Moore, 1995). The relevance of the FCRF for the work of school nurses in the secondary school setting will be discussed in the following section.

The FCRF was developed to assist further understanding how and why socioeconomic circumstances impact on child development. The framework “provides a means of studying in greater detail the psychological and social processes within the family and community that are associated with differences in health and developmental outcomes” (Kendall, 2003, p. 1). According to Brooks-

Gunn and colleagues (1995) there are four categories of family resources critical for child development these include: income, time, human capital and psychological capital resources. Additionally, social capital resources in the community such as: child care services, schools, peer groups, community groups and wider social context influence child development. In a critical review of the resource framework Kendall (2003) suggested that because human capital and psychological capital are inextricably linked and time is a social capital resource, it is better to simplify the framework to include financial, physical, human, and social capital resources.

Financial capital includes income and other sources of wealth, such as investments and inheritance. Physical capital includes the family home, access to vehicles and other material resources, as well as access to books and information technology in schools (Kendall, 2003). Human capital includes: parent's level of education and qualifications achieved, parental physical and mental health, parenting behaviour, and culturally acquired knowledge and beliefs, values and traditions (Kendall & Li, 2005). Parenting behaviour varies widely in the following areas: disciplinary techniques, rules, monitoring behaviour, parent child communication, hostility, warmth, acceptance, consistency, positive interaction, beliefs, attitudes, culture and modeling (Zubrick et al., 2000). Human capital is transmitted from parents to their children in two ways; through biology DNA encoded in genes at conception and secondly, through acquired knowledge, skills and family culture (Becker & Tomes, 1986). Children are fortunate if they acquire favourable genetic attributes and parents who have ability, and foster childhood learning (Kendall, 2003). It is recognised that human capital and social capital are complementary, human capital is possessed by the individual whereas social capital is the relations between individuals (Zubrick et al., 2000).

Social capital refers to the depth of relationships between people in a family or community, and includes: feelings of trust and security, neighbourhood connections, measures of school and classroom connectedness, sense of community, social participation, and availability of support services (Zubrick et al., 2000, p.1). Social capital within the family includes parent's time and effort spent with the child (Kendall, 2003; Zubrick et al., 2000). Perhaps the best example of social capital in the family is the attachment relationship that develops between parents and their

children. The importance of attachment and its influence on child and adolescent development will be discussed briefly.

Bowlby theorised that attachment relationships are critical for optimal psychological functioning across the life-course (Bowlby, 1951, 2008). Research with mothers and babies that has been undertaken over many years supports this theory (Bretherton, 1992; Catania, Hetrick, Newman, & Purcell, 2011; Field, 2010). Ainsworth's "strange situation" procedure has been replicated many times and it remains the "gold standard" method of identifying disordered infant attachment that is often associated with later mental health problems in adolescence (Ainsworth, 1979; Moran, Pederson, & Krupka, 2005; Zeanah, Berlin, & Boris, 2011). While infant attachment has been the focus of research, attachment relationships are no less important in adolescence as young people develop new relationships with people outside of the family, such as teachers and their peers (Bretherton, 1992; Bronfenbrenner & Morris, 2006; Catania et al., 2011; Moran et al., 2005).

While it has been found that social capital inside the family has a great influence on child and adolescent development, so too does social capital outside the family (Kendall, 2003). Parent's social relationships outside the home with members of community institutions, such as school staff, also have an important influence on childhood and adolescent development (Jessor, 1993). As mentioned previously, the period of adolescent development is punctuated by a shift to greater independence from parents to friends and peers who are a significant influence (Leather, 2009). Just as families are seen to have social capital resources, so do schools in the form of staff, students, and others in the community working together collaboratively in an atmosphere of trust to achieve individual and social goals (Zubrick et al., 2000). With appropriate training and support school nurses have the potential to contribute both human and social capital to promote optimal adolescent mental health.

2.2.2 Biological embedding

As discussed in the previous section, bioecological theory has greatly influenced the way family and community characteristics are understood with regard to child and adolescent development (Kendall & Li, 2005). Bioecological theory has also greatly influenced the understanding of the way these environmental factors affect biological processes of development. The concept of biological embedding explains how

factors in the physical and psychosocial environments effect physiological development during pregnancy, childhood, and adolescence (Hertzman, 2013; Shonkoff et al., 2009). These processes include gene expression, brain plasticity, and stress responsiveness through psycho-neuro-endocrine-immune pathways. Extensive research demonstrates that early experiences effect development in two ways. Firstly, there are critical periods when physiology is especially sensitive to the influence of both physical and psychosocial environmental factors. While many influences are positive, some, such as maternal alcohol use and chronic maternal stress during pregnancy are negative or even toxic. Secondly, there are pathway effects whereby adversities during early life accumulate influencing health, wellbeing, learning and behaviour over the life course (Kendall et al., 2009; McEwan, 2009). The family and school environments that adolescents experience are powerful drivers of biological, psychological and social functioning. The experience of stress is an especially important factor that will be discussed in more detail in the following section.

2.2.3 Stress response

In a review spanning two decades, McEwen (2007) summarises major findings focussing on the brain and short and long term effects of the physiological mediators of the stress response with the brain as a target of stress and also how the brain controls stress responses. Two different types of stress are described: good stress which is also known as *protective* and bad stress which is *damaging*. In the example of positive stress, the body responds by releasing hormones which increase heart rate and blood pressure, redirect blood to the brain, mobilize nutrients and cause a state of alertness and fear. These responses are generally protective in a range of life circumstances which may include: sitting an exam, climbing stairs, participating in a competitive running race, or being frustrated. In this situation the body responds to a typical short term stressful event and maintains homeostasis or allostasis.

Short term positive stress experiences are important and beneficial for a child's healthy development. In a nurturing stable environment it is important that the child can achieve an appropriate adaptive response and lay foundation patterns for brain pathways (Nelson et al., 2013). Tolerable stress has the potential to disrupt brain architecture, however, in a supportive environment the response to stress can be restored to baseline (Catania et al., 2011). A supportive environment will also enable the child to practice healthy adaptive responses to adverse experiences, which lays a

beginning foundation of brain pathways and behavioural response to build on in readiness for adolescence (Shonkoff et al., 2012).

On the other hand, stressful experiences can be damaging when they arise from multiple sources and continue over prolonged periods of time. For example, when an adolescent is constantly arguing with his parents at home, his teachers at school, and other students, it is very likely he will be negatively affected both psychologically and physiologically. Children and adolescents who have experienced significant life-stresses in their family over time, such as abuse, poverty, dysfunctional relationships, and a lack of social support, are very vulnerable to the negative effects of current stress because their stress response systems have been altered through biological embedding. This is illustrated in a very recent Australian study that found that negative early life events were predictive of increased anxiety symptoms and the likelihood of having an anxiety disorder over the five year period of follow up. The child's behavioural inhibition and stressful family life events had an additive impact on the development of anxiety problems (Broeren, Newall, Dodd, Locker, & Hudson, 2014).

In the event of chronic stress the body is unable to achieve homeostasis or allostasis, and because the brain is the central regulator of stress response, the consequence of prolonged chronic stress has effects on allostatic load (McEwen, 2007; McEwen & Gianaros, 2011). The consequence is detrimental to brain architecture, and can lead to lifelong impairments in learning, behaviour, physical and mental health (Nelson et al, 2013, McEwen, 2007; Shonkoff et al, 2009; 2013, Kendall et al; 2009). Chronic stress has been found to cause functional and structural changes in the amygdala and hippocampus, which are the limbic structures, associated with processing of emotion and also structure and function in the prefrontal cortex, where the role is to process and regulate emotion (McEwen & Gianaros, 2011). As a result of this altered brain architecture, the child's stress management system is altered causing a lower resistance to the individual's stress threshold and increasing the risk of stress related disease and cognitive impairment throughout the life course (Catania et al., 2011; Shonkoff et al., 2009).

Adverse child experience is known to increase the risk of a smaller prefrontal cortex, greater activation of the hypothalamic-pituitary-gonadal axis (HPA), and an

elevation of inflammation levels compared with those children who are not maltreated (Danese & McEwen, 2012). These adverse childhood experiences have been found to result in a smaller volume of the prefrontal and hippocampus, greater elevation of the HPA axis, and elevated levels of inflammation compared to those adults who did not suffer childhood maltreatment. Allostatic load causes lasting changes in nervous, immune and endocrine systems are continued through to adolescence and adulthood (Danese & McEwen, 2012).

Furthermore, it is well established through research that for many the effects of adversity during childhood continues through to adolescence and adulthood. One recent study, for example, compared a self-report questionnaire on childhood maltreatment with Magnetic resonance imaging (MRI) results (Edmiston et al., 2011). The questionnaire included aspects of maltreatment as: physical, emotional and sexual abuse and physical and emotional neglect, and was administered to 42 adolescents. The participants were recruited from a community sample recruited into a longitudinal cohort study, which had been identified at birth as being at risk for childhood maltreatment. At the time of follow-up during adolescence they had not been diagnosed with any major neurological dysfunction or psychiatric disorder. The results showed adverse childhood experience correlated negatively with reduced grey matter volume in the prefrontal cortex, striatum, amygdala, sensory association cortices, and cerebellum. These findings are important as they continue to demonstrate the negative long term consequence of childhood adversity on brain development which impacts on adolescent development.

2.2.4 Summary

This section has outlined theory and research relating to early childhood development: bioecological theory, biological embedding, stress response and attachment. The effects of positive and adverse experiences in early childhood and their subsequent effect on brain development and impact on the life course is highlighted. The following section will review the developmental stage of adolescence as explained by prominent theorists and contemporary research which identifies interplay of genes and the environment and its effect on individual neuropsychological development. Typical adolescent development and mental health will be examined as well as consequences secondary to an adverse or stressful adolescent journey without accompanied support.

2.3 Adolescent development

Significant contributions influencing the understanding of child and adolescent development have been made by prominent theorists: Freud, Piaget, Erikson and Kohlberg. Each theorist's unique contribution to the stage of adolescent development will be discussed briefly because they lay the foundation for current knowledge and continue to be utilised in current clinical practice. Freud (1856-1939) was a psychoanalyst who was instrumental in developing childhood and adolescent theory while practising, treating and observing patients suffering with hysteria, pain and convulsions (Freud, 1909; Wigfield, Byrnes, & Eccles, 2006). Freud proposed a theory of childhood sexuality which occurs in the first six years and incorporates three psychosexual stages: oral, anal and phallic (Berger, 2005). Following these three stages is a period of sexual latency when sexual thoughts are dormant and at about age 12 the final psychosexual stage "the genital stage" commences (Barkway, 2013). Freud's theory recognised the period of adolescence where the young person would seek pleasure sensations and sexual stimulation in a satisfying relationship (Berger, 2005). Each Freudian stage is associated with parent and child conflicts, and how these conflicts are resolved contributes toward personality development and lifelong behaviour (Berger, 2005). More recent understanding of adolescent development led to critique of Freud's theory suggesting that cognitive and social changes also cause adolescents to debate and bicker with parents as they assert their independence (Wigfield et al., 2012).

However, Freud's pioneer theories are widely accepted as a foundation to understand child and adolescent development (Wigfield et al., 2012). These accepted ideas include: development occurs in stages, unconscious motives affect our behaviour, and early years are a formative of personality development (Berger, 2005, p.33). Freud's work was recorded in case studies with reflections and recollections, and subsequently criticized for a lack of scientific testing (Berger, 2005; Freud, 1909). Freud's theory has been criticized questioning its application to the population as it is based on male assessment only, however critique of Freud's theory, suggested feminists consider its application of child development under a patriarchal society and that Freud's insights were vital to women's liberation (Blackman, Cromby, Hook, Papadopoulos, & Walkerdine, 2008; Mitchell, 1974). In later years, Freud's student Erik Erikson would consider Freud's theoretical stages of child development as too

few and limiting and further build on Freud's theories to become a major influence on psychology and psychoanalysis (Berger, 2005; Douvan, 1997; Elkind, 1970).

Following on from Freud, Erikson would neither support nor deny Freud's theories. Erikson's work was considered as instrumental in further evolving psychoanalytic theory and conceptualizes a healthy personality rather than the opposite to a sick one (Elkind, 1970). Erikson made three major contributions to the study of the human ego: there are psychosocial stages of ego development, personality develops further following childhood, and that each stage of development has a positive and negative stage (Elkind, 1970, p.6). He proposed eight developmental stages which are underpinned by the concept that each stage is a challenge or crisis and a foundation for a life question to be answered (Berger, 2005; Erikson, 1984).

Erikson has been influential identifying adolescence as a time associated with unique problems. In his theory of identity versus role confusion (stage five ages 12-18) Erikson describes the period of adolescence: as a problem to find a romantic partner, marked by physical and psychological maturity, and a shift in thinking to consider other's perspectives to wonder what people think of them (Elkind, 1970, p.13). Erikson is largely responsible for defining adolescence as a period of identity struggle describing adolescent development at the positive end as ego identity, and the negative end, role confusion (Douvan, 1997).

Piaget (1896-1988) was a major pioneer of cognitive therapy and how children think (Berger, 2005). Piaget was responsible for suggesting that there was a developmental sequence to intellectual growth and it was important to consider "how children think" as opposed to "what children know" (Berger, 2005, p. 40). Piaget's theory developed understanding about how children think, and reveals their world experience to construct reality observations of children. This led to a consideration that thinking was not based on a continuum from simple to complex, rather, a set of stages of thinking (Barkway, 2013; Berger, 2005). These stages of cognitive development require active searching for knowledge and can vary in speed, they include: sensorimotor, pre-operational, concrete and formal operational (Piaget, 2008). Piaget explained that adolescence is a period of formal operational development to try new roles and experiences and the characteristic of this stage is to

think about hypothetical concepts, logical, abstract and idealistic (Barkway, 2013; Berger, 2005).

Further knowledge and understanding of child and adolescent development has led to a criticism of Piaget's theory suggesting that evidence fails to support Piaget's theory of formal operational thinking (Wigfield et al., 2012). It is refuted that under age 11 there is an inability to be capable of abstract thought and a capability for most children after this age, and furthermore, the Piaget model does not account for further skills and tendencies associated with adolescence (Wigfield et al., 2012).

Building on Piaget's theories, Kolberg (1963-1981) examined responses to moral dilemmas and developed three levels: preconventional, conventional and post conventional; and six stages of moral reasoning children adolescents and adults. In the first two stages the individual reasons in terms of their own welfare, stages three and four they emphasize social rules, and lastly stages five and six are the highest stages of moral reasoning focusing on moral principles (Barkway, 2013; Berger, 2005). A later stage seven was developed where the individual would consider the consequence of actions on the greater world (Barkway, 2013). As far as clinical application, it is suggested for health professionals to consider where the individual is in terms of level of development with moral reasoning (Barkway, 2013). However, a point for consideration is the limitation of Kolberg's theory which is criticized for citing a male gender bias in theory development which did not consider development as it related to girls and women, and secondly, being limited to a Western context, failing to account for cultural traditions (Gilligan, 1982; Wainryb, 1993).

Understandings about adolescence have changed over time. Adolescence is a normative phase of development that has been extended into young adulthood due to social and economic changes in recent years. Current understanding derived from contemporary research that has been guided by an interactionist developmental systems approach recognises that adolescent development is manifested by complex changes in the individual, environment and relationships (Kendall, 2003; McEwen, 2012; Wigfield et al., 2012). Concepts that are part of normative adolescent development, such as emotional, attentional, and social regulation, will be explained in the following section. Additionally, the behavioural manifestations of neurocognitive processes including: self-esteem, body image, self-efficacy, identity,

empathy, formal operational thinking, and reasoning, will be described. Neurocognitive changes which influence adolescent development will also be discussed and explained.

2.3.1 Adolescent normative development

Adolescence is a period of growth and development characterised by physical, cognitive, emotional and social changes. These changes have now been recognised to continue for over a decade, particularly in westernized countries due to changes in: longer education, greater affluence and birth control (Bennett et al., 2009). Adolescence is defined not by age but acquisition of key development tasks in the following domains: social and emotional, cognitive and moral (Hazen, Schlozman, & Beresin, 2008). During adolescence there are psychological changes accompanied with social and emotional maturation. Cognitive development includes: abstract and advanced reasoning, greater impulse control, effective assessment of risk versus reward, improved working memory and language, and increased ability to regulate emotions (Blakemore, 2012; Giedd, 2012; Sisk & Foster, 2004). During adolescence, competence and related beliefs about self-efficacy and perceived ability to perform a task, and take control in a circumstance, are increased (Barkway, 2013; Wigfield et al., 2012).

Moral development occurs during adolescence where morals become less concrete and perspectives of others are given consideration while simultaneously questioning values of institutions including school and parents (Hazen et al., 2008). Furthermore, adolescent changes include: separating from parents, a connection with a peer group, development of sexuality and relationships, and a greater development of a personal identity and changes in levels of self-consciousness (Blakemore, 2012; Davey, Yücel, & Allen, 2008). Typically, behaviour changes accompanied at adolescence include: increased risk taking, increased sensation seeking and a move away from parents to greater connections with peers (Giedd, 2012). These changes will be briefly discussed as they are frequently associated with reasons for adolescents to visit the school nurse.

2.3.1.1 *Peer relationships and bullying*

Due to changes in cognitive skill development adolescents experience changes in their social friendship structures (Berger, 2005; Wigfield et al., 2012). Adolescents

increase their social relationships with peer relationships becoming more complex and hierarchical than those in childhood (Blakemore, 2012; Brown, 2004). These relationships during adolescence are unstable and accompanied with heightened sensitivity to acceptance or rejection (Brown, 2004; Nelson, Leibenluft, McClure, & Pine, 2005). Friendships have a profound influence on development (Wigfield et al., 2012). Adolescent peer affiliation arises from seeking out peer groups with similar interests such as sporting or study groups. Adolescent choice of peer group is suggested to be influenced by both positive and poor parenting (Barkway, 2013; Berger, 2005; Wigfield et al., 2012). Peer influence plays an important role in adolescent development and behaviour. Peer influence may be a negative or positive influence (Barkway, 2013; Hazen et al., 2008; Wigfield et al., 2012). Resistance to peer pressure or negative peer influence is reported to increase the establishment of a stronger sense of identity in later adolescence (Hazen et al., 2008). Furthermore, supportive relationships and social acceptance facilitates the ability to manage major life transitions successfully, whereas negative relationships are cited to effect health detrimentally (Berger, 2005; Calhoun et al., 2014).

Research identifies the presence of discord within and between adolescent peer groups and individuals who are subject to antagonism or victimisation, whereby higher status members ridicule lower status members or those outside the group (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Davey et al., 2008). Being bullied is cited to be a common developmental experience which is responsible for causing stress, and subsequent emotional, and physical effects (Nelson et al., 2013). Bullying is associated with many negative developmental outcomes including: loneliness, depression, anxiety, low self-esteem and poor school performance (Bond et al., 2001).

2.3.1.2 *Body image and self esteem*

During adolescence, importance and concerns manifest around appearance and body image (Crockett & Petersen, 1987). Research identifies the inextricable link between perception of appearance and self-worth which emerges as a strong predictor of self-esteem (Clay, Vignoles, & Dittmar, 2005). This has been illustrated in a recent longitudinal study where relationship between body dissatisfaction and self-esteem was significant in both boys and girls among all groups of adolescents (Van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainer, 2010). Over time the

association between body dissatisfaction and self-esteem did not change and recommendations to address body image concerns are particularly salient in the secondary school setting (Van den Berg et al., 2010).

Heightened perception of body image, body dissatisfaction, and reduced self-esteem that occur during middle adolescence may lead to eating disorders and depression (Ciarrochi, Heaven, & Davies, 2007; Clay et al., 2005; Petersen et al., 1993; Wichstrøm, 1999). Low self-esteem is also significantly related to suicide ideation and delinquency (Ciarrochi et al., 2007). Adolescent's self-esteem improves over time as a result of: developmental changes in personality, increased ability to take on roles, increased freedom and autonomy resulting in an ability to manage ways to increase self-esteem, reduced impact of peers, and self-esteem becoming more stable (McCarthy & Hoge, 1982). Recommendations to build resilience and positive thinking to promote self-esteem, and improve adolescent mental health have implications for school nurse practice (Ciarrochi et al., 2007).

2.3.1.3 *Risk taking*

There is consistent evidence that early onset of puberty in boys and girls is associated with different peer affiliation, and increased patterns of sensation seeking which includes: the use of alcohol, tobacco and marijuana (Fisher, Schneider, Pegler, & Napolitano, 1991; Hazen et al., 2008; Martin et al.; Patton et al., 2007; Sawyer, 2000). Additionally, early onset of puberty is associated with increased antisocial behaviour and deviant behaviour in boys and delinquency and sexual experience in girls (Duncan, Ritter, Dornbusch, Gross, & Carlsmith, 1985; Flannery, Rowe, & Gulley, 1993). In an early longitudinal study, problem behaviours such as: illicit drug and alcohol use, delinquency, and precocious sexual intercourse may be understood to be a syndrome of problem behaviours and occur in samples of normal adolescents (Jessor & Jessor, 1977). It is now recognised that adolescents who engage in one problem behaviour, such as alcohol and other drug use, are prone to engage in other problem behaviours, and these behaviours are linked to developmental, social, health and environmental influences (Hazen et al., 2008; Leather, 2009).

Also, peer group, poor parental supervision and executive processes play a role in risk taking and antisocial behaviour (Bennett et al., 2009; Ellis, 2002). A decline in risk taking drinking was found with adolescents maturing and acquisition of adult

roles including: marriage, full time employment, and parenting (Fisher et al., 1991). Conversely, increased risk taking behaviour can constructive adolescent development as it promotes greater autonomy and shift to greater independence from parents (Fisher et al., 1991; Jessor & Jessor, 1977). These findings illustrate the importance of supporting adolescents during this vulnerable sensitive development stage.

As previously discussed, there are large individual differences in timing and behaviour with regard to child and adolescent development. Adolescents cope differently to the stressful demands of this period of development because of individual differences in the interplay between biological, psychological and social processes including gene expression, brain plasticity, stress responsiveness, emotional regulation, cognitive functioning, cultural influences, and the physical environment (Blakemore, 2012; Zelazo & Carlson, 2012). Research suggests that adolescent brain development is sensitive to experiential input and that neural mechanisms underlie adolescent development. A greater understanding of changes in the structure and function of the brain and the effect on cognition and behaviour has been achieved through autopsy, neuropsychological testing, and more recently, sophisticated advances through Magnetic Resonance Imaging (MRI) and functional MRI (fMRI) (Blakemore, 2012; Wigfield et al., 2012). These changes in structure and function give rise to changes in decision making, planning, learning, risk taking, relationship behaviour, emotion regulation, and response to rewards. The next section will discuss salient individual neuropsychological and behavioural changes during adolescence as this understanding can potentially foster the improved care of adolescents in schools.

2.3.2 Neurophysiology related to behaviour during adolescence

Adolescence is a developmental period which begins with puberty and culminates with the broadening of adult social processes where there is maturation of adult social and cognitive behaviours (Patton & Viner, 2007; Sisk & Foster, 2004). The hormones of puberty are the catalyst for a second structural reorganisation of the brain and during adolescence steroid hormones not only activate but organize and further sensitize neural circuits to activate adult behaviour in an appropriate social context (Blakemore, 2012; Petanjek et al., 2011; Sisk & Foster, 2004). Furthermore, adolescent maturation of reproductive behaviour requires remodelling and activation of neural circuits involved in the importance of sexual stimuli and sensory

associations, sexual motivation and sexual performance (Sisk & Foster, 2004, p,1044). There is also evidence that during adolescence experiences are responsible in brain reorganisation whereby neurocircuitry and neurochemistry can be altered. These alterations in the brain then affect behaviour as well as neuroendocrine and autonomic function (McEwen & Morrison, 2013; Sisk & Foster, 2004).

During early childhood and secondly in puberty there is an increase of grey matter in the frontal lobe (Blakemore, 2012; Giedd et al., 1999). During adolescence the brain matures with the brain's function becoming more specialised. This process of maturation continues until the mid-20s (Davey et al., 2008). The changes in the brain occur because it is able to change according to the environment that is experienced and this adaptability is referred to as "plasticity" (Giedd, 2012). Early childhood and adolescence are identified as peak developmental periods for plasticity and while this continues throughout the life course there is a loss of plasticity with age (Bloss et al., 2011; McEwen & Morrison, 2013; Petanjek et al., 2011).

During adolescence there are significant changes in brain morphology identified on MRI which include: remodelling of cortical, (prefrontal, parietal, and temporal areas) limbic (amygdala, hippocampus, and insular cortex) and reward centres in the brain (Blakemore, 2012; Sisk & Foster, 2004). Over the last 15 years advances in fMRI have been able to demonstrate significant remodelling of the brain during adolescence revealing how brain changes lead to an increased ability to undertake complex cognitive tasks, such as mentalizing and conceptual thinking (Blakemore, 2012). Remodelling involves an increase in myelination, associated with an increase in white matter and decrease in grey matter, causing a strengthening in frequently used neural pathways and "pruning" (particularly in the prefrontal cortex) to eliminate infrequently used connections (Blakemore, 2012; Davey et al., 2008; Giedd et al., 1999; Sisk & Foster, 2004).

The prefrontal cortex which links the emotion centre (limbic system) to the thinking centre (frontal cortex) of the brain undergoes a prolonged course of maturation that continues until the early 20s. This maturation is associated with neural circuitry involved in judgement, impulse control, long range planning, and an increased ability for flexible social behaviour (Blakemore, 2012; Giedd, 2012; McEwen & Morrison, 2013; Nelson & Guyer, 2011). Current literature discusses the role of the prefrontal

cortex to include “hot” and “cool” executive function which develops rapidly in early childhood, then continues into adolescence. In this way, the growth of neural networks in the prefrontal cortex contributes to self-regulation in a deliberate process (Wigfield et al., 2012; Zelazo & Carlson, 2012). Executive function is responsible for adolescent’s ability to organise, reflect and co-ordinate on formal operational constructs (Wigfield et al 2012).

These neurocognitive processes include planned, goal directed control of thought, action and emotion which include cognitive flexibility, inhibitory control, and working memory (Zelazo & Carlson, 2012, p.354). Disruption of brain development secondary to adverse childhood life experiences puts the adolescent at risk for emotional and behavioural problems (Edmiston et al., 2011). Furthermore, the prefrontal cortex is integral to generating flexible behaviour in terms of valuation, inhibition and rule use (Nelson and Guyer, 2011). The ability to make complex decisions is associated with reward seeking behaviour. A vulnerability to depression occurs when anticipated rewards do not eventuate (Davey et al., 2008). Because depression is extremely common during adolescence, reward seeking behaviour which is regulated by the dopaminergic system and its effects on the brain will be discussed in some detail in the following section.

2.3.3 Reward seeking behaviour and the dopaminergic system

Structural and functional changes in the brain during adolescence result in new cognitive and emotional responses that alter the way adolescents interact with the social environment. The pursuit of interpersonal rewards which is a priority during adolescence is regulated by the prefrontal cortex and dopaminergic system (Davey et al., 2008). During puberty there are profound hormone related changes in the dopaminergic system and these changes result in significant development of the dopaminergic input into the frontal cortex during adolescence (Davey et al., 2008; Giedd, 2012). Dopamine is the hormone that is responsible for all basic human drives, such as hunger, sleep, and risk taking behaviour (Giedd, 2012, Sisk & Foster, 2004).

Dopamine release causes the translation of motivation into action via a complex system involving multiple neural connections which overlap and sometimes have reciprocal influences on each other (Davey et al., 2008, p.5). Dopamine is

responsible for influencing neurological development in the prefrontal cortex where advancement in structure and function leads to greater sophistication for complex reward seeking (Davey et al., 2008; Sisk & Foster, 2004). Dopamine release is activated by anticipation of novel or unexpected rewards, and it energizes the seeking of rewards. When a person feels that distant rewards are frustrated they momentarily suppress or alter the reward system, which can lead to depression (Davey et al., 2008).

The discussion in these sections underpins knowledge and understanding of adolescent behaviour which is central to the provision of adolescent mental health care. It is well established that times of transition are the most important periods of human development. A great deal of evidence suggests that the transition between childhood and adulthood is the most significant of all (Berger, 2005). This transition is marked by structural and functional changes in the brain such as: brain plasticity and increased role of the recently sophisticated prefrontal cortex. As a result, the ability to perform complex cognitive tasks and regulate decision making are established.

Having outlined normal neurophysiological and behavioural manifestations of adolescent development it is appropriate now to identify and discuss dysfunctional emotional states and behaviour problems that occur in a significant proportion of the adolescent population. For some young people the normal adolescent period of development is punctuated by episodic psychopathology characterised by internalising and externalising, emotional and behavioural problems. Anxiety and depression are especially common during adolescence and in some cases they mediate a link to serious problems such as: self-harm, suicide, and eating disorders (Collin et al., 2011; Loth, MacLehose, Bucchianeri, Crow, & Neumark-Sztainer, 2014; Martin, 2010; Wilson, 2010). While anxiety and depression are common among adolescents they are not necessarily clinically significant. As discussed previously, adolescence is a very stressful period because of the complexity of the developmental tasks associated with this major life transition. While stress is a normal part of life, major stressful life events, and less major stressors that occur over prolonged periods of time, often result in anxiety and distress (Petersen et al., 1993; Slade et al., 2009).

Anxiety and depression are frequently associated and they both occur on a continuum of severity which can be understood in relation to the normal population curve. In many contexts the experience of the great majority of people lies within an area of the curve that is close to the mean or average. It is well established statistically that 68 per cent of the population will fall within one standard deviation either side of the mean (Moore, 2010). Another 27 per cent fall within two standard deviations from the mean. With regard to anxiety and depression, 34 per cent of the population will have the experience more intensely than average and 16 per cent will have the experience even more intensely. Those who experience anxiety and depression most intensely are very often no longer able to function effectively. These people usually need treatments, such as medication and psychotherapy, to enable them to resume a normal life (OECD, 2014; Petersen et al., 1993; World Health Organisation, 2010). The remaining 34 per cent who experience anxiety and depression more intensely than average are likely to benefit greatly from additional emotional support and knowledge and understanding of their situation (McEwen, 2007). With additional support most of these people will not progress to a stage where they require medical treatment. Furthermore, with additional support they will be able to cope with their symptoms so they do not interfere with everyday life. Without additional support many are at risk of significant disruptions to social and cognitive development that affect family and peer relationships, and school achievement (Bennett et al., 2009; Petersen et al., 1993; Slade et al., 2009; World Health Organisation, 2010). Adolescents present frequently to the school nurse with emotional and behavioural problems, therefore placing the school nurse in an ideal position to promote mental health care.

2.4 Adolescent psychopathology

As identified earlier, major contexts during adolescence include: school, family, and peer group. Adolescence is accompanied with stressful life events caused by biological changes during puberty which effects body and self-image, and changes in social contexts including: moving to secondary school, change in peer groups and possible change in family structure such as divorce or separation (Bennett et al., 2009; Ellis, 2002). These major life events influence brain structural and functional alteration can be stressful, resulting in a negative impact on psychological wellbeing. The extent of difficult changes predicts psychopathology (Barnes & Rowe, 2013;

Evans et al., 2007; Petersen et al., 1993).

2.4.1 Description and prevalence of adolescent mental health problems

2.4.1.1 *Disorders of mood*

For a range of physiological and psychosocial reasons, mental health problems, especially anxiety, depression, self-harm, suicide, and eating disorders are common among adolescents (Anderson & Teicher, 2008). In the last decade, internalising disorders such as anxiety and depression have increased which is attributed to the influence of socio-cultural influences (Bennett et al., 2009). In both adolescent males and females pubertal development is associated with a depressed mood; however, it is more frequently reported in girls than boys (Crockett & Petersen, 1987; Ellis, 2002; Petersen et al., 1993). A depressed mood is frequently present with other feelings and problems such as anxiety and social withdrawal (Petersen et al., 1993).

Major depression is an especially common and serious disorder of adolescence. Chronic and extreme stress is identified as a catalyst for biological dysregulation (Petersen et al., 1993). Major depression is associated with other problems and disorders during adolescence including: social withdrawal, social problems, attention problems, aggression, thought problems, delinquency and somatic complaints (Petersen et al., 1993). An onset of depression in adolescence significantly increased the likelihood of major depression and anxiety in adulthood (Wilson, 2010). Lifetime prevalence increases dramatically from one per cent of the population under 12 years of age to approximately 17-25 per cent by the end of adolescence (Anderson & Teicher, 2008). The 2:1 female: male prevalence ratio for unipolar depression is a well-established finding (Angold & Costello, 2006).

A recent WA randomised controlled trial conducted in 63 government schools evaluated the impact of a universal mental health promotion program on adolescent (n=3288) tobacco and alcohol use. The study found that adolescents with mental health problems such as anxiety and depression are associated with a higher incidence of adolescent risk taking behaviours such as smoking and drinking compared to adolescents without mental health problems (Roberts, Williams, Kane, Pintabona, & Cross, 2011). It is suggested that behavioural problems are a result of the imbalance between emotional reactions and cognitive abilities (Bennett et al.,

2009). The most recent Australian data from the National Survey of Mental Health and Wellbeing found one in four young people between the ages of sixteen to twenty-four will experience an affective, anxiety or substance use disorder in a 12-month period (Collin et al., 2011; Rickwood, Raphael, & Pilgrim, 2011). First onset of a mental health disorder usually occurs in early childhood or adolescence, with roughly half of all lifetime mental disorders initiating during the mid-teens (Kessler et al., 2007; OECD, 2014).

Further reports identify the prevalent issue of adolescent mental health problems citing that one in five adolescents experience some form of emotional disorder (Chipman and Gooch, 2003; Patton et al, 2000). A report undertaken by the World Health Organisation (Belfer, 2008) known as “the Atlas project” used studies and key informants to focus on the magnitude of global adolescent mental health problems. It is evident within epidemiological data that one quarter of children and adolescents suffer from a disabling mental illness and half of adult mental disorders are secondary to an onset during adolescence, furthermore suicide is the third leading cause of death in adolescence. Similarly in Australia between 2004 and 2005, one fifth of all deaths in the 16-24 year age group were as a result of suicide (Wilson, 2010).

2.4.1.2 *Panic attack and psychosis*

More recent research suggests that one in four young Australians experiences a mental health problem or difficulty (Collin et al., 2011). Research has shown disturbingly severe disorders which are usually preceded by less severe disorders are seldom brought to clinicians’ attention (Kessler et al., 2007; OECD, 2014). Panic attacks are cited as rare pre puberty and increase after puberty, particularly in adolescent girls due to changes in gonadal hormones (Hayward & Killen, 1992), whereas psychotic disorders are more prevalent in boys than girls post puberty (Bennett et al., 2009).

2.4.1.3 *Self-harm and eating disorders*

Research shows that during early adolescence the incidence of self-harm increases, with a peak at age 15 in girls. Self-harm is associated with increased substance use and early sexual activity with a decline in self-harm occurring with age (Patton et al., 2004). In addition, it is reported that self-injury appears to be a common disorder,

and adolescents may be engaging in self-harm behaviour more than current studies have reported (Martin, 2010).

Eating disorders including anorexia and bulimia also emerge during at adolescence with a strong association found between pubertal development and eating disorders, rather than age (Killen et al., 1992; Swarr & Richards, 1996). During adolescence personal factors including perceptions of body image and dissatisfaction of weight, self-esteem and depression predict eating disorders and dieting 10 years later (Fisher et al., 1991; Loth et al., 2014). For some young people, at least, mental health disorders that emerge during childhood will persist into adulthood (Copeland, Shanahan, Costello, & Angold, 2009; Patton et al., 2004).

2.5 Impact and cost of adolescent mental health problems

In this review I have identified that the global magnitude of adolescent mental health issues is significant. Research highlights the significant impact that mental health has on educational achievement (Evans et al., 2007). There is increasing recognition that student outcomes in literacy, numeracy and science are attributable as much too emotional, attentional, and social regulation as intellectual ability (Evans et al., 2007). Mental health problems are likely to impact negatively on all aspects of life for both the individual and their family (Boulter & Rickford, 2013). Furthermore, mental health issues place a burden on the community in terms of the cost associated with social welfare, loss of productivity, and loss of employment opportunity (Jane-Llopis, 2006; OECD, 2014). Researchers for the 2007 Australian National Survey of Mental Health and Wellbeing (NSMHWB) conducted face to face surveys of 8841 households including participants aged between 16 to 85 years (Slade, Johnston, Oakley Browne, Andrews, & Whiteford, 2009). Almost half of the Australian population met criteria for an anxiety, affective and/or substance use disorder at some stage in their lifetime). One in five Australians experienced a mental disorder in the past 12 months and one in 10 in the past 30 days (Slade et al., 2009, p.598). Anxiety disorders were the most common class of disorder within the 12 month period (Slade et al., 2009).

Researchers conducting the study found that people with an anxiety disorder or affective disorder were unable to engage in usual activities such as: home responsibilities, work and study, and there was an impact on everyday life in close

relationships and social life on average four to six days per month respectively (Slade et al., 2009). These findings demonstrate the dramatic interference and subsequent impact on the individual and community caused by mental health problems (World Health Organisation, 2010). The cost to the community is significant with an economic report identifying the direct cost of untreated adolescent mental health problems to be 10.6 billion dollars in Australia in 2009 (Access Economics, 2009). In addition to the burden on society associated with the cost of mental health disorders, these data highlight the need for prevention and early intervention during early childhood and adolescence to reduce the incidence and prevalence of more serious mental health problems.

Research has shown that opportunities for preventing mental health problems are most important during childhood and adolescence (Catania et al., 2011; Rickwood et al., 2011; Wilson & Deane, 2001, 2010). It is critical to identify and effectively treat problems in early childhood and adolescence as prevention and early intervention strategies can delay or prevent primary disorders and development of secondary comorbid disorders as well as impact on social and vocational function (Boulter & Rickford, 2013; Kessler et al., 2007).

2.5.1 Adolescents not seeking help

Extensive research demonstrates that globally up to three quarters of adolescents suffering with psychological distress may not be accessing help (Day, 2008; Slade et al., 2009; Wilson & Deane, 2010). There is evidence that Australian secondary school and university students who are anxious and depressed are not seeking help (Wilson & Deane, 2010; Wilson, Rickwood, & Deane, 2007). Health service use among young men aged 16 to 24 years has been found to be particularly low (Slade et al., 2009). Literature from international studies concurs with these findings (OECD, 2014). A large epidemiological cross-sectional Norwegian school based study on health surveyed students aged 15 and 16 years old (n=11,154) found that of those students with a very high level of symptoms of anxiety and depression less than half sought professional help for symptoms (Zachrisson, Rodje, & Mykletun, 2006). Additionally, researchers identified, in a large population based study (Mauerhofer, Berchtold, Michaud, & Suris, 2009) taken from a Swiss National representative sample of 7429 students aged 16-20 years, out of the sample, 1931 (26%) students reported needing help for a problem of sadness or depression. Of the

students who had a mental health problem, 256 students reported they sought help for psychological problems whereas 1675 students did not. Additionally, earlier information and advice may impact on and equip students for health seeking strategies.

2.5.2 Families and community support

It is well established, that the ecological contexts of families, school, and community provide risk and protective factors which influence child and adolescent development (McEwen, 2007; Oberle et al., 2014). The period of normal adolescent development is often described as tumultuous, however, help seeking and having access to social support is protective for adolescent developmental outcomes (Barker, 2007, p.3). Parents are in a key position to support adolescents and the quality of parent's attachment has shown to have a strong impact on self-esteem and coping (Benson & Parker, 2004; Paterson, Pryor, & Field, 1995). The structure and emotional support provided by caring loving parents provides protection against risk taking behaviour and negative peer influence, and promotes emotional wellbeing and social competence (Barker, 2007; Fisher et al., 1991; Hazen et al., 2008; Petersen et al., 1993; Resnick et al., 1997; Wiefferink et al., 2006). An American longitudinal study of tenth grade students (n=16,749) about adolescent functioning found high parental support and monitoring was related to greater self-esteem and low risk behaviours. (Benson & Parker, 2004). During adolescence the effects of stress and allostatic load have been shown to reduce through emotional support and useful information offered by friends, family, and health professionals. Additionally, social support is associated with improved overall mental health (McEwen, 2007).

Schools and community have been identified as key settings to provide support for adolescents (Duggan, Heath, Toste, & Ross, 2011; Oberle et al., 2014). Development during adolescence includes a shift away from parents (Berger, 2005; Wigfield et al., 2012). Schools are able to provide an important sense of connectedness and belonging with emotional support from other adult authority figures including: teachers and coaches (Barker, 2007; Oberle et al., 2014; Paulus & Rowling, 2009). It is evident that school connectedness is a protective factor which promotes positive adolescent health outcomes (Barnes & Rowe, 2013; Paulus & Rowling, 2009; Resnick et al., 1997). A longitudinal cross sectional American research study of

(n=12,118) adolescents found “family connectedness and school connectedness is protective against every health risk behaviour measure except history of pregnancy” (Resnick et al., 1997, p.823). It has been identified that adolescent mental health issues are a significant global concern which effect adolescent developmental outcomes. Furthermore, families, schools and community are appropriate contexts to identify adolescent mental health concerns and promote mental health care. The next section will review the significance of adolescents help seeking behaviour and social support. Factors which enhance and barriers which prevent adolescent help seeking behaviour will be identified.

2.6 Adolescent help seeking behaviour

As discussed, it is critical that adolescents with significant personal problems and acute health care needs have access to care, support and services. International research highlights that adolescent health seeking behaviour is particularly important (Barker, 2007). Adolescents require assistance during *normal* stressors of adolescence, and globally *most* adolescents require help, support and orientation during the transition from childhood to adolescence (Barker, 2007). This is supported by Rickwood who states: “*all* young people have multiple health related needs which include support for personal growth, identity development and growing independence” (2012, p.19). Additionally, it is identified that help seeking and having access to and using social supports are protective factors for many adolescent health and developmental outcomes (Barnes & Rowe, 2013; Oberle et al., 2014).

Furthermore, the National Action Plan for the Prevention, Prevention and Early Intervention for Mental Health introduced a spectrum of interventions for mental health (Mental Health and Special Programs Branch Commonwealth Department of Health and Aged Care, 2000). This spectrum highlights a requirement across the spectrum to promote mental health and wellbeing, and early intervention, rather than to only focus illness and crisis management. Universal, selective and indicated prevention and mental health promotion can inform mental health policy and interventions in the secondary school setting (Mental Health and Special Programs Branch Commonwealth Department of Health and Aged Care, 2000). These reports illustrate the importance and provide direction for prevention and early intervention which is directly related to the nurse’s role.

2.6.1 Definition and theory of help seeking

An international literature review identified a lack of uniformity in definitions defining help-seeking behaviour (Barker, 2007). The review found while help seeking behaviour and health seeking behaviour are two different terms, sometimes they are referred to interchangeably. Help seeking is defined as: communicating a need for help, including: understanding, advice, information, treatment and general support in response to a distress or problem (Barker, 2007; Rickwood et al., 2005). This includes seeking help from formal or informal sources. Formal sources include health professionals and people trained in providing mental health help and advice for example: counsellors, psychologists, medical professionals, religious leaders, teachers and youth workers. Informal sources include: peer groups and friends, family members or community groups and other adults in the community (Barker, 2007; Rickwood et al., 2005). Help seeking is described as a personal process which requires self-awareness of the need for help, and interpersonal skills to access help (Rickwood et al., 2005).

2.6.2 Help seeking seminal literature reviews

Three large seminal literature reviews regarding adolescent help seeking behaviour will be critically examined with integration with other relevant contemporary studies to develop a model of care for nurses in the secondary school setting to assist with adolescent mental health care (Barker, 2007; Catania et al., 2011; Rickwood et al., 2005). Help seeking behaviour and support for adolescents is a very large topic, therefore this study will provide an outline of major issues and is guided by The World Health Organisation's model on help seeking behaviour (Barker, 2007). The following three elements within the model will be identified and discussed: individual and exogenous factors associated with risk taking, and programme efforts and policy initiatives to promote adolescent help seeking (Barker, 2007).

2.6.3 Individual and exogenous factors associated with help seeking

2.6.3.1 Personal beliefs about help seeking and internalised gender norms

Individual factors associated with help seeking including: personal beliefs about help seeking, internalised gender norms, perceptions of others as helpful, personal coping skills, previous experience with help seeking, self-efficacy and stigma will be described. The 2007 NSMHWB survey revealed 86 per cent of people who did not

seek help for their mental health problem indicated a belief they did not need help from a mental health professional (Wilson, Rickford, et al., 2011). Adolescents who have trouble identifying, describing and managing their emotions are less likely to seek help (Rickwood, Deane, & Wilson, 2007; Wilson & Deane, 2010). Furthermore, young people may not seek help due to the belief of the need for autonomy and that they can or should be able to solve their own problems (Rickwood et al., 2007; Wilson, Rickford, et al., 2011; Wilson & Deane, 2001). Additionally, adolescents may fail to seek help due to being unaware of their symptoms and levels of psychological distress relating it to tiredness, or blame others. Their problem or distress may be left unrecognised, or they may be enlightened after a friend or family member point this out (Martin, 2012; Wilson et al., 2007).

The way adolescents internalize gender norms is said to be influenced by individual and exogenous factors (Barker, 2007, p.10). Cultural constraints including: language barriers, expectation of care, and problem identification and cultural appropriate management are also highlighted as key areas for consideration for health seeking behaviour (Barker, 2007; Martin, 2012). Studies confirm that girls are more likely to seek help than boys in parts of America, Latin America, Australia and Western Europe (Barker, 2007; Hutchinson & John, 2012; Rickwood et al., 2005; Robinson et al., 2010). Research has found that boys and young men are more likely to deny problems which place them at greater risk of substance abuse (Barker, 2007; Rickwood et al., 2007; Slade et al., 2009).

2.6.3.2 Perceptions of others as helpful

It is clearly established that seeking help from any source is dependent on “trust” rather than the need for help. Research found adolescents are more likely to seek help if they felt they trusted the source to understand their problem and offer useful help. Furthermore, trust and confidentiality is central to the relationship between health service providers and adolescents (Barker, 2007; Boulter & Rickford, 2013; Muir et al., 2009; Rickwood et al., 2007; Wilson & Deane, 2001). It is evident that adolescents felt more comfortable with health professionals they knew, and that some felt afraid, embarrassed and/or shy with unfamiliar health professionals not known to them (Rickwood et al., 2005). Additionally, people who come in regular contact with young people who are in a position to develop an ongoing relationship

with them are ideally placed to provide emotional support and refer on to mental health services, along with further training to identify and access this support (Rickwood et al., 2005). The role of the nurse facilitating a therapeutic relationship is a salient issue and will be discussed in the last section of this literature review in the section 2.8.2.4.

A trusting relationship with peers and parents was found to promote help seeking for emotional and social problems with peers and partners becoming more influential in later adolescence (Barker, 2007; Rickwood et al., 2005; Rickwood et al., 2007; Wilson, Rickford, et al., 2011). However, some issues for help seeking behaviour in developing countries, for example, sexual health, are more likely to be accessed by health professionals or an extended family member rather than parents (Barker, 2007). A large Swiss National representative study (n= 7,429) of students aged 16-20 years found young people who talked about their psychological problem with adults, especially education professionals, were more likely to accept help from health professionals (Mauerhofer et al., 2009). While this study identified that nurses were employed in Switzerland schools, it failed to mention the nurse's role in assisting adolescents with mental health problems. An extensive search of peer reviewed literature identified a gap in the literature discussing adolescent help seeking behaviour, specifically regarding the role of the nurse in providing or facilitating access to mental health care. This will be addressed in this thesis in 2.8.2.2.

2.6.3.3 *Personal coping skills*

Belief that the problem can be resolved is identified as an important factor to help seeking for young people (Barker, 2007; Rickwood et al., 2005). Personal and family resilience traits such as: optimism, verbal abilities and sociability have been identified as varied in individuals and influence the ability to cope (Barker, 2007). Emotional competence is identified as a facilitator to seek support, whereas limited emotional competence may result in fewer friendship supports and less informal help. Additionally, fear of embarrassment may also contribute towards a reduced motivation to seek help (Rickwood et al., 2005).

2.6.3.4 *Previous experiences with seeking help, mental health literacy and self-efficacy*

Young people are more likely to get help if they have some knowledge about mental health issues and sources for help (Mauerhofer et al., 2009). Research indicates that help seeking behaviour is a learned behaviour, and influenced by past experiences. If the experience was negative or expectations unmet, it will lead to reduced likelihood of accessing help (Barker, 2007; Rickwood et al., 2005; Rickwood et al., 2007; Watsford & Rickford, 2013). Conversely, students were more likely to seek help if their prior help seeking experience was successful (Wilson & Deane, 2001). It is necessary for clinicians to work collaboratively with adolescents and provide information and support to facilitate realistic expectations of health seeking behaviour and mental health care (Martin, 2012; Watsford & Rickford, 2013).

Mental health literacy is important to consider when understanding help seeking skills. Mental health literacy includes: knowledge of signs and symptoms of mental health problems and when it is necessary to seek help in addition to having an understanding of available service as well as what to expect from these services (Jorm, 2000). Additionally, health literacy includes: skills, knowledge and strategies that individuals build on throughout their lives, in various contexts influenced by interactions with peers and the wider community (Kirsch, 2001). Lack of mental health literacy is identified as a barrier for help seeking and conversely, acquisition of mental health literacy is a facilitator of help seeking (Barker, 2007). Few young people are able to recognise the signs and symptoms of mental health problems, either for themselves or peers, and most lack the knowledge and skills associated with help seeking (Rickwood et al., 2005; Wilson, 2010). Given that mental health problems often initiate during adolescence, it is essential for mental health literacy to be introduced before the need arises (Anderson & Teicher, 2008; Rickwood et al., 2005). There is also evidence that adolescent self-efficacy is related to help seeking behaviour. For an adolescent to access help, the belief that they can seek help and that doing so will make a difference is related to their behaviour (Barker, 2007; Watsford & Rickford, 2013; Wilson & Deane, 2001).

2.6.3.5 *Perceived stigma with the need for help*

Stigma and mental health issues share a relationship which impacts negatively on help seeking behaviour (Martin, 2012; Stephens-Richer, Metcalf, Blanchard, Mangan, & Burns, 2011; Wilson & Deane, 2010; Wilson, Rickwood, Bushnell, Caputi, & Thomas, 2011). People with socially unacceptable behaviour as a result of mental health problems may be stigmatised by ignorant care providers who label them as attention seeking and time wasting, which may result in discrimination in care (Martin, 2012; World Health Organisation, 2010). For some people who feel stigmatised and isolated, turning to the internet is a strategy to find support and assistance for mental health issues (see following section) (Stephens-Richer et al., 2011). Help seeking is influenced by both potential barriers and enablers which include a complex range of organisation and environmental factors such as: the availability of services and service infrastructure in addition to distance from services, finances and access to transport (Barker, 2007; Martin, 2012; Muir et al., 2009; Stevenson, 2010). Furthermore, staff receptivity to adolescent needs may inhibit or promote adolescent help seeking behaviour (Barker, 2007; Martin, 2012).

2.6.4 Programme efforts and policy initiatives to promote adolescent help seeking

2.6.4.1 *Relocating services to reach adolescents*

Use of technology such as mobile phones and internet use is common among young people (Collin et al., 2011; Giedd, 2012). There is considerable literature on the emergence of help via Information Technology (IT), this includes: information and interventions to engage young people to seek help and the increasing incidence of young people accessing help via IT (Collin et al., 2011; Rickwood et al., 2011; Rickwood et al., 2007; Wilson, Rickford, et al., 2011).

In 2012-13, 83 per cent of Australians were reported as internet users (Australian Bureau of Statistics, 2014). Young people aged between 15 to 17 years were the highest proportion of users (97%), with young people's usage reported as the highest amongst the younger age groups (persons under the age of 35). Internet savvy 15–17 year olds most commonly went online for educational purposes (93%) and ninety percent of 15 to 20 year olds engaged in social networking. Gender is not a barrier for internet use with males and females accessing at similar rates (84% and 83% respectively). The internet is highly accessible, it is reported that people access the

internet at different locations including: homework, neighbours and friends houses (Australian Bureau of Statistics, 2014). Regardless of gender, income and education, the internet is used prolifically by adolescents and this needs to be considered in the context of help seeking behaviour and has implications in school nursing (Australian Bureau of Statistics, 2014; Rickwood, 2012).

Results from NSMHWB showed while three quarters of people did not access help for their diagnosed common mental health condition, half had tried to self-manage their symptoms by strategies which included seeking help through on line chat rooms (Wilson, Rickford, et al., 2011). As levels of psychological distress increased for young people they were less likely to seek help from a friend, parent, peer, or teacher and turned to anonymous sources which may contribute toward the likelihood to use internet services (Collin et al., 2011; Rickwood et al., 2005). This is reflected in a recent Australian study that evaluated young people's use (n=1,152) of an online mental health service ReachOut.com. The study used three methods including: website statistics cross sectional surveys, and content analysis to examine the potential of on-line services offered by ReachOut.com to address the challenge of facilitating help seeking in young people. Evaluation of the program included a review examining who used the service, and the extent to which it improved mental health literacy, social connectedness and reduced stigma. The study reported ReachOut effectively engages young people, particularly those with high levels of psychological distress and supports young people to become service ready (Collin et al., 2011). These findings are important as they indicate the positive support an adolescent is able to seek online for mental health issues. Authors for another Australian research survey exploring internet use for mental health problems in young people (n=4,000) reported that at least 20 per cent of 12 to 25 year olds had searched the internet for physical and mental health information and the majority felt online information was helpful (Burns, Davenport, Durkin, Luscombe, & Hickie, 2010).

While authors for these studies acknowledged the uptake of help seeking via the internet and its importance and effectiveness to deliver youth mental health interventions, these findings illustrate the power of this medium and its potential for positive and harmful access to information. Accessibility is cited as a positive aspect of internet use for help seeking for mental health care. Secondly, once a problem is

identified, a range of resources are available including: online information, social networks, and skill building tools (Burns et al., 2010; Rickwood, 2012). There is evidence that quality mental health internet sites such as “headspace” and “ReachOut.com” are evaluated to provide best practice, evidence based quality services to young people with mental health issues (Collin et al., 2011; Muir et al., 2009). However, a concern is raised that the unregulated and unselective use of the Internet for help seeking leaves users unaware of benefits and value and may places users at risk (Rickwood, 2012).

Monitoring of Internet sites is too broad a topic for this thesis; however, a few salient points will be highlighted. It is difficult to remove all harmful content from internet sites and exposure is controlled at the internet service provider level (Swannell et al., 2010). Australian legislation requires that service provider hosts delete content from servers which is deemed unsuitable for minors (Office of Legislative Drafting and Publishing). While the Australian Government has examined internet filtering at a national level, it is limited in its application due to the constantly changing nature of technology environments (Australian Communications Media Authority, 2008). In response to these concerns the Australian Government has allocated 14.4 million over the next five years to develop an online e-health portal to direct clients and professionals to high quality, well monitored, evidence based interventions (Rickwood, 2012).

Mental health professionals need to be aware that online support and care plays a significant role, and to consider recommending quality internet sites for adolescents to access mental health information which may influence mental health and wellbeing (Blanchard, 2011; Swannell et al., 2010). Furthermore, health professionals involved in mental health care need to include innovative service delivery including online options to effectively support young people and their mental wellbeing across the entire spectrum (Ghaddar et al., 2012; Rickwood, 2012; Rickwood et al., 2011). Given the breadth of information available and the regular use of the Internet by adolescents is it essential young people develop the skills to critically analyse and evaluate health information (Ghaddar et al., 2012). Given schools provide an ideal setting to access adolescents (National Association of School Nurses, 2014; Stevenson, 2010; World Health Organisation, 2010), and adolescents present frequently to the school nurse (Shannon et al., 2010), the role of

the nurse may be instrumental to promote awareness and advise safe use of technology for mental health issues.

2.6.4.2 Parents and peers inclusion in programs and information for adolescent mental health care

As identified earlier, adolescents have a tendency to avoid help for mental health problems and may turn to parents and friends for help in the first instance, therefore, education programmes and support for parents and friends is critical to assist young people to seek early intervention (Australian Infant, 2008; Boulter & Rickford, 2013; Howe et al., 2011; Rickwood et al., 2005; Wilson, 2010). The importance of parents is critical: “the point is: other than in exceptional circumstances it is only the family not any one single healthcare professional or organisation that takes responsibility for the health and wellbeing of the family member” (Kendall & Tallon, 2011, p.1788).

While peers can provide good support (Calhoun et al., 2014) there are circumstances where peer support may be detrimental. If the peers are troubled and the “support” is one of mutual co-dependence related to poor social cognitive problem solving it may lead to an inability to respond appropriately and provide helpful responses (Rickwood et al., 2005). For this purpose it is appropriate that prevention initiatives assist families and friends with information to recognise symptoms of mental health problems and how to support the young person as well as assist them to access help (Rickwood et al., 2005; Rickwood et al., 2007; Wilson, 2010).

It is evident that adolescents are willing to engage and understand a need for mental health promotion programs in schools which may assist to reduce help seeking barriers and promote health seeking behaviours (Wilson & Deane, 2001; Woolfson, Woolfson, Mooney, & Bryce, 2009). An Australian qualitative study using focus groups (N=6) found adolescents believed education could assist to reduce their barriers to seek help. Additionally adolescents identified that help seeking behaviour could be promoted by education that explained problems are a normal part of life, (Wilson & Deane, 2001). Additionally, adolescents value a supportive school environment with teachers who listen, are supportive, and non-judgemental (Aston, 2014).

2.6.4.3 *Services to be adolescent friendly*

International literature cites the need to include and involve adolescents in mental health care programs. The UN (2004; cited by Australian Infant Child, Adolescent and Family Mental Health Association (AICAFMHA), 2008, p.14) states “youth participation is about developing partnerships between young people and adults in all areas of life, so that young people are valued in society and that the community can benefit from their contribution, ideas and energies”. Furthermore, Australian and UK policy recognise that views of children, young people, carers and their families should be taken into account and they should be encouraged to actively participate when planning, improving and evaluating services and in policy and service development (Day, 2008; Department of Health and Ageing, 2009).

To encourage and support adolescents in help seeking behaviour and to guide and inform service provision, including evaluation, adolescent’s opinions need to be respected (James, 2007; Rickwood et al., 2007; Woolfson et al., 2009). Additionally, the concept of adolescent inclusion and active participation is suggested in key principles to improve effectiveness of service provision and care (Catania et al., 2011; Percy-Smith, 2007). This sentiment is reflected by young people involved in focus groups where adolescents explained that they would like choice and to be responsible in decision making with service engagement, and this could lead to engagement of care (Wilson & Deane, 2001).

A recent example of youth (N=15) participating in their mental health care was evident in the development of a youth participation model. The model included the establishment of a group of young people ‘Youth Alliance’ for the development of youth mental health services on the NSW central coast (Howe et al., 2011). The Youth Alliance model was developed in response to the National Mental Health Plan that revealed that youth participation is limited within the mental health sector in Australia (Department of Health and Ageing, 2009). Strategies of the program included: establishment of a group of young people (including a full time paid coordinator) to promote workplace relationships, train, and develop policies and procedures to support youth in the community. The model was evaluated using an external evaluation consultant using mixed methods approach which included: questionnaires, interviews and project record data. Following implementation, the results found the model contributed to the evidence that there are benefits for young

people to be involved and participate in their mental health care with youth friendly and accessible services (Howe et al., 2011). Furthermore, it is recognised that meaningful participation will lead to a sense of connectedness which may foster resilience and impact positively on mental health and well-being (Oliver, Collin, Burns, & Nicholas, 2006). These findings offer evidence to include adolescents in the development of the school nurse's framework of a model of care for adolescent mental health.

2.6.5 Summary

It has been identified that adolescents are reluctant to seek help and adolescent help seeking behaviour needs to be encouraged. The next section will identify the context of school is an appropriate environment where adolescent help seeking behaviour, and adolescent mental health are promoted and supported, with the nurse ideally placed as an appropriate resource person.

2.7 The role of the nurse in secondary school mental health

2.7.1 Introduction

The nurse's role in schools is not well understood, locally, nationally and internationally. This section will explore literature regarding the current context in which nurse's work and expectations of the nurse's role will be examined from the perspectives of the parents, students, and the school community. Gaps in the literature will be identified and discussed regarding the school nurse's role in the provision of general care which is often considered as traditional care, and a contemporary comprehensive approach to care, which includes the provision of mental health care. A review of the current qualification requirements, recommended qualifications including postgraduate studies for nurses to practice in schools will be provided. Literature regarding the prevalence of adolescent students presenting with mental health issues, and the school nurse's role in assessment, prevention and management of mental health problems will be examined and discussed. Particular emphasis on the nurse's role including: facilitating a therapeutic relationship, collaboration and referral will be highlighted with reference to confidentiality requirements. Additional resources to further support nurse's practice in schools will be critically reviewed including: time, professional development, support available to the nurse, and the nurse's clinic.

2.7.1.1 *Lack of Understanding of the School Nurse's Role*

Throughout the literature locally, nationally, and internationally it is widely accepted there is a lack of understanding concerning the role of the school nurse. Ambiguity regarding the nurse's role is cited over the last decade and most recently in literature from USA (Green & Reffel, 2009; Keller & Ryberg, 2004; Seigart et al., 2013; Smith & Firmin, 2009), UK (Debell, 2006; Merrell et al., 2007) and Australia (Guzys et al., 2013; Moses et al., 2008). Reasons for the nurse's role being poorly understood are numerous and complex including: different practice models, (Keller & Ryberg, 2004), differences in school nurse ratios and dissimilarity in roles which is associated with budget and time constraints (Seigart et al., 2013), a lack of clarity in the job title and expectations causing confusion around the scope of practice (Guzys et al., 2013; Merrell et al., 2007; Smith & Firmin, 2009), a lack of understanding around professional responsibilities and legal requirements in the role (Newell et al., 2003; Sendall et al., 2011; Smith & Firmin, 2009).

It is evident that school administration staff, teachers and nurses have differences in understanding about care provided by the nurse. These differences include: provision of direct care, treating chronic health conditions, health education and connecting families and staff to external service providers (Green & Reffel, 2009; Guzys et al., 2013). Additionally, it is noted in Australia there are school nurses practicing in rural and remote areas where additional health services are unavailable or absent. As a result, many school nurses in this context feel compelled to operate beyond their scope of expertise, which causes a blur of professional boundaries. For example; in the rural setting, nurses sometimes find themselves in difficult situations such as: adolescents experiencing complex or life threatening illness, and without access to specialist healthcare at the time, the nurse is required to manage the healthcare needs immediately and in the short-term (Barnes, Walsh, et al., 2004; Mills, Birks, & Hegney, 2010).

A recent qualitative study used interpretive case studies gathered by in-depth interviews (n=73) with nurses, teachers, administrators, parents and community leaders to compare and contrast the provision of school based health services in the US, Australia and Canada (Seigart et al., 2013). The study found there were different models of care in place, Australia and Canada being similar, many without School Based Health Centres (SBHC) or a comprehensive health service on site, and

many schools are without a fulltime or part-time nurse. In contrast in the US there are approximately 1700 SBHC nationwide, many which have a fulltime nurse on site.

Despite the differences in models of care, school nurses in the three countries encountered similar barriers to provide care, these include: limited resources of nurse's availability, and unmanageable workloads (Seigart et al., 2013). Similar to the US, Canada and Australia also experienced increasing complexity of children with high health care needs. Without access to appropriate care, including a school nurse, schools are challenged to care for students appropriately. Lastly, within the three countries there is lack of understanding regarding the school nurse's role amongst administrators, teachers, parents, and government agencies who do not understand the comprehensive role and reduce it to a "Band-Aid application role" (Seigart et al., 2013).

Seigart and colleague's (2013) study is limited by using a qualitative approach and therefore the results are unable to be generalized. Secondly, data collection locations only included: the east coast of Australia; Ontario and Quebec, in the Canada and, New York and Pennsylvania in the US. Seigart's (2013) research identifies various models for the provision of school-based health care. Despite the limitations of Seigart and colleagues' (2013) study, it remains particularly relevant as it highlights the nature of similar issues regarding lack of role clarity that school nurses face nationally and internationally. Furthermore, the study provides evidence to recommend increased and enhanced onsite school based nurse services in Australia, Canada and the US (Seigart et al., 2013). In Western Australia, the setting of this thesis, there are different health care structures available in schools. In Western Australia schools are coordinated through three education sectors; Department of Education WA (government or public schools), Catholic Education Office WA (CEOWA) (private Catholic Schools) and Association of Independent Schools WA (AISWA) (independent private schools). Some schools are associated with both CEOWA and AISWA.

There are 152 independent schools in Western Australia rural and metropolitan settings, these include primary and secondary schools, both of which are responsible for providing education to over 70,000 children each year (Association Of

Independent Schools Western Australia, 2010). In Western Australia independent schools provide care for students with all abilities and social background including remote and disadvantaged communities. The independent schools may be affiliated with religions such as: Catholic, Anglican, Church of England, Islamic, Baptist, Montessori and Methodist. Of the 152 independent schools, 123 schools are members of the Association of Independent Schools Western Australia (AISWA). Out of the 123 AISWA member schools, only 24 schools offer care by an onsite school nurse, who may be employed fulltime or part-time. The specialist resources accessible are varied, often with limited access to a social worker, pastoral care worker and, or school psychologist. Within Western Australia, the Principal of each independent school has the responsibility to determine the model of health service care offered by the school, and staff employment, including: teachers, administration, school nurse and health services staff (Association Of Independent Schools Western Australia, 2010).

There are 800 primary and secondary Public schools in Western Australia responsible for teaching 283,739 students each year, of these, 80,208 are secondary students (The Government of Western Australia, 2013-2014). There are no published reports available that identify recommended ratios for school nurses to students in Western Australian Public secondary schools, however recent communication with the acting director in the south zone identified that there are 51 FTE school nurses in Western Australian Public metropolitan secondary schools (L.Woolfenden, personal communication, April 13, 2015). School nurse support is varied with some schools providing a fulltime school nurse, with others providing part-time nursing care. Some school nurses will provide services exclusively to secondary schools, whereas other school nurses will provide a service to both secondary and primary schools. Similar to independent schools, the availability of school psychologist and support services varies, with the Western Australian Government funding 285.6 FTE to provide services to school staff and students (The Government of Western Australia, 2013-2014). The Department of Education and The Department of Health have a Memorandum of Understanding (MOU) for the provision of school nurse services for school health services for school students attending public schools in Western Australia (Memorandum of Understanding between The Department Of Education

and The Department Of Health, 2013-2014). The MOU is supported by school level agreements and negotiated by the Principal and school nurse at each school.

Section 2.8.3.2 will identify and discuss ratios of school nurses to student within schools and the impact on the provision of care. Findings clearly indicate that the nurse's role is not well understood with differences in practice models in place. Previous research has failed to provide a wider analysis on the perceptions of parents and students regarding their expectations of the nurse's role. The next section provides a critical review of the literature examining the traditional and contemporary role of the nurse. Firstly, it is necessary to define school nursing.

2.7.1.2 Definition of school nursing

In America, The National Association of School Nurses (NASN) is aligned in a collaborative partnership with the American Academy of Paediatrics (AAP) (Council on School Health Services, 2008). This professional body recognises the specialist role of the school nurse in partnership to provide comprehensive health services to all children and youth (Council on School Health Services, 2008). NASN developed a definition of school nursing:

As specialized practice of professional nursing that advances the wellbeing, academic success, and lifelong achievement of students. To that end, school nurses facilitate positive student responses to normal development; promote health and safety; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, advocacy and learning (Council on School Health Services, 2008, p.269).

2.7.1.3 Traditional school nurse's role general health care

There is considerable literature examining the role of the school nurse. It is generally agreed across the US, UK, Australia, and New Zealand that the school nurse's role includes traditional aspects of general nursing care such as: basic emergency care to ill and injured students (commonly referred to as first aid), direct hands on care to students and staff for subacute minor conditions, immunisation, health screening for vision hearing and weight, and management and treatment for chronic health conditions (Buckley et al., 2009; Council on School Health Services, 2008; Downie et al., 2002; Green & Reffel, 2009; Guzys et al., 2013; Merrell et al., 2007; Seigart et al., 2013). In the US, policy guidelines identify care provided by the school nurse and suggest that the traditional aspects of the school nurses role are provided as a

Minimum (Council on School Health Services, 2008). Furthermore, the aforementioned definition recognises that school nurses provide a comprehensive approach to care which will be discussed (Council on School Health Services, 2008; National Association of School Nurses, 2005).

2.7.1.4 *Contemporary school nurses includes mental health care*

Literature highlights a transition from the traditional model of care offered by the school nurse to a more comprehensive social model of care (Council on School Health Services, 2008). This shift is partly due to societal changes in social and family structure, and changes in patterns of health and illness such as: an increase in obesity and asthma prevalence, and child and adolescent mental health problems (McMurray & Clendon, 2015; Sendall et al., 2011; World Health Organisation, 2010). In addition, there is an increased understanding that nurses are ideally placed to promote and provide health education and to identify and assist in the management of young people's mental health issues (Baisch et al., 2011; Haddad et al., 2010; Merrell et al., 2007). It is evident internationally that school nurses provide a comprehensive approach to care which includes: mental health care, facilitation of mental health literacy, assessment, health education advice and support for individuals and groups of students, families and staff, therapeutic communication, collaboration with school community and external service providers and referrals to internal and external health service agencies (Australian Nursing Federation, 2012; Barnes, Walsh, et al., 2004; Buckley et al., 2009; Council on School Health Services, 2008; Debell, 2006; Green & Reffel, 2009; Humensky et al., 2010; Merrell et al., 2007; Seigart et al., 2013; Shannon et al., 2010). The following section will discuss the nurse's role in adolescent mental health care in schools followed by the nurse's role and elements of care using a comprehensive approach.

2.7.1.5 *Adolescent mental health care provided by school nurses*

There is some evidence locally, nationally and internationally that school nurses increasingly focus on mental health and psychosocial issues (Merrell et al., 2007; 2014; Pryjmachuk et al., 2011; Shannon et al., 2010). A qualitative study in Western Australia found the traditional role of the school nurse has been to focus on physical health and development and that now the role has diversified so that many nurses now report that they spend most of their time addressing mental health concerns, working with teachers and parents as well as the students themselves (Downie et al.,

2002). Other Australian researchers concur with these findings and add that up to 75 per cent of individual school nurse consultations were predominantly psychosocial, but also included medical problems, sexual health, and risk taking behaviour (Barnes, Walsh, et al., 2004).

Similarly, a large survey of health professionals in the United Kingdom (UK) (Wilson et al., 2008) found that there has been a significant increase in the proportion of adolescents experiencing mental health problems in recent years and that school nurses play an important role in the assessment and management of mental health and wellbeing. Another UK study (Debell, 2006) reviewed the practice of school nurses in four countries and identified that the focus of school health nursing has shifted to a public health focus and that often the nurse was the first point in call for a mental health problem. Wilson (2008) undertook a study describing the workload of health visitors (n=71) and school nurses (n=100) and found that they spent a large amount of their time dealing with difficult emotional, psychological, and behavioural problems with problems such as: self-harm, aggression, depression, and suicidal thoughts. It was also reported few nurses and health visitors had specific training in adolescent mental health care (Wilson et al., 2008). Furthermore, another UK study found most (55%) nurses reported spending more than a quarter of their time involved with student's psychological problems and nearly half of the respondents did not have any post registration training in mental health (Haddad et al., 2010). More recently, a qualitative study in the UK which examined school nurse's (n=33) perspectives on managing mental health problems in children and adolescents found nurses saw mental health work as an important area of practice (Pryjmachuk et al., 2011).

2.7.1.6 Somatisation, stress and the need to see the school nurse

A growing awareness of frequent school nurse visits for school related stress and somatization has led to research in this area (Puskar & Bernardo, 2007; Shannon et al., 2010; Torsheim & Wold, 2001a, 2001b). A recent literature review examined the frequency of visits to the nurse by school aged children and adolescents for somatic symptoms (Shannon et al., 2010). The review included thirty nine descriptive epidemiological studies published in peer reviewed journals in the United States, Canada, and Europe (Shannon et al., 2010). Results indicated there are a high proportion of school aged children and adolescents visiting the school nurse for

primary care. Adolescent somatisation is a prevalent issue which manifests as reporting problems to the nurse when under stress with school children presenting to the nurse with complaints of headaches and stomach aches, both of which are associated with psychosocial variables of anxiety and depression, childhood adversity and school stress (Shannon et al., 2010).

A large population study of Norwegian students aged 11 to 15 years (n=4,952) found students with high degrees of school related stress and low social support to have increased episodes of somatic symptoms (Torsheim & Wold, 2001a). Somatic complaints included: headache, abdominal pain, backache and dizziness compared to non-stressed students. Furthermore, students who reported a lot of school related stress were six more times more likely to report somatic symptoms than non-stressed students (Torsheim & Wold, 2001a). Similarly, another Norwegian study of eighth grade students (n= 1,585) found perceived academic stress was associated with more somatic complaints, (Torsheim & Wold, 2001b).

Finally, a cross sectional study of Norwegian adolescents (n=862) examined the associations between psychosomatic symptoms and school aged stress to personal and social resources, and found increased school distress and alienation was associated with increased psychosomatic symptoms including, headaches, stomach-aches, backaches, and feeling dizzy (Natvig, Albrektsen, Adderssen, & Qvarnstrom, 1999). It is evident there is a consistent association between the relation of stress at school and the presence of psycho somatic symptoms in adolescence, and a need for the school nurse role to care for an increasing proportion of children diagnosed as high risk for mental health disorders (National Association of School Nurses, 2005). These findings highlight the incidence of school children presenting to the nurse with psychosomatic symptoms, placing the nurse in a position to identify and manage mental health issues (Baisch et al., 2011; Haddad et al., 2010; Kendall et al., 2010; Seigart et al., 2013).

2.7.1.7 Lack of a framework for school nurses to provide mental health care

Despite these findings, the role of the school nurse in Australian schools has not been clearly defined to include mental health care. Additionally, there is little uniformity or consistency in mental health care practice even within Australian States. A study in Queensland sought to explore the role of the school nurse and identified that the

scope of their practice is broad, including an advanced level of practice required to manage mental health issues (Barnes, Walsh, et al., 2004). It is interesting, for example, that the MindMatters program discussed in section 2.7.5.3 which focuses on mental health care using a whole school approach, suggests that other allied health services such as school counsellor and psychologist *should* be included within the students services, or welfare team, however, the program fails to clearly indicate the role of the school nurse (De Jong, 2005; Wyn, Cahill, Holdsworth, Louise, et al., 2000). Additionally, the MindMatters program identifies pathways of care to support adolescents with mental health problems with the aim of linking school and doctors in general practice, however, it does not clearly mention the role of the school nurse (Crockett, 2013; Rickwood, 2005; Rowling & Mason, 2005).

It is widely accepted the school nurse's role is a highly specialized, complex and challenging autonomous role which requires sound problem solving, and independent decision making skills (Guzys et al., 2013). Additionally, it is suggested the role of the school nurse requires broad-based knowledge from a variety of disciplines and expertise in the areas of paediatric, public health, and mental health nursing is required (Smith & Firmin, 2009). If school nurse practice was clearly defined and nurses received professional training to further develop their expertise it is likely they could increase their effectiveness in promoting mental health and preventing significant mental health problems – there is some evidence that nurses are able to perform this role successfully (Baisch et al., 2011; Chipman & Gooch, 2003; Haddad et al., 2010; Pryjmachuk et al., 2011). While the school nurse's role has been a focus for discussion and study for many years, this research will identify the level of educational preparedness currently required and recommendations for practice in adolescent mental health care.

2.7.1.8 *Qualifications*

In Western Australia, *government* school nurses are required to hold a Bachelor's Degree in Nursing, or equivalent, which takes three to three and a half years of study. Having completed a Degree, nurses are registered to practice in a mental health setting. In Western Australia it is recommended that, prior to initial community health practice, school nurses undertake a Graduate Certificate or a Post-Graduate Diploma in Child and Adolescent Health Nursing. Both the Certificate and the Diploma include Units with strong psychosocial and mental health components. A

significant number of school nurses complete a Post-Graduate Diploma in Mental Health Nursing (Kendall et al., 2010). However, within Australia there are differences for educational requirements to practice as a school nurse. On the east coast of Australia in Queensland and Victoria, school nurses are required to hold a general registered nursing qualification (Sendall et al., 2011). In Western Australia there are no legal or mandatory requirements for school nurses to hold a nursing degree as a minimum qualification, resulting in some independent schools employing enrolled nurses, classified as Division 2 nurses with Australian Health Practitioner Regulation Agency (APRHA). In Western Australia enrolled nurses undertake 18 months of education and have limitations around their scope of practice (Australian Health Practitioner Regulation Agency, 2013, 2014).

In the United States of America (US), due to the nature of autonomous practice the NASN recommend US school nurses are licenced, and a minimum educational preparation of a baccalaureate degree is suggested (Broussard & White, 2013; National Association of School Nurses, 2014). Lesser qualified assistants in nursing, including those who hold certificates to dispense medications are to be trained and supervised by the school nurse (Council on School Health Services, 2008). In the US a tiered approach model has been suggested which differentiates school nurse roles depending of the level of qualification held (Keller & Ryberg, 2004). Care is provided by baccalaureate degree prepared generalist school nurses who are supported by master's degree prepared school nurses, who are required to attend administration roles at district and regional level. The highest level of responsibility would be a school nurse analyst level with expectations to analyse, develop, implement and evaluate state program and research (Keller & Ryberg, 2004).

Recently, it was reported school nurses in Louisiana are not required to have a bachelor's degree, whereas, in many other states US school nurses must hold a bachelor degree, with many qualified at masters or PhD level (Broussard & White, 2013). In the US there are opportunities for a nurse practitioner role, unlike in Australia and Canada (Seigart et al., 2013). In Wales (UK) school nurses were found to be educationally unprepared with only just over one third (n=249) holding a professional qualification in school nursing which included school nursing certificate, diploma or degree in comparison to over 75 per cent of US nurses holding a baccalaureate degree (Merrell et al., 2007). The next section will review

recommended skills and knowledge required by the for the school nurse to providing mental health care.

2.7.1.9 Suggested Qualifications and Education

It is evident internationally that there are no consistently recognised requirements for school nurses. Furthermore, given the evidence of the specialised nature of the role and the demands of this highly specialised field, it is suggested that postgraduate qualifications should be mandatory and would be appropriate in the following areas including; primary health care and health promotion, adolescent health and development, adolescent mental health, family planning and sexual health, and youth studies (Barnes, Walsh, et al., 2004; Buckley et al., 2009; KPMG, 2009; Sendall et al., 2011). Recent research in the US, Canada and Australia suggest it would be beneficial for students and families for schools to provide a service offered by qualified nurse practitioners (Guzys et al., 2013; Seigart et al., 2013). Additionally, nurses have recognised the need to have formal education and training in recognising and managing adolescent mental health care issues including: eating disorders, self-harm, anxiety and depression, and brief psychological interventions (Haddad et al., 2010; Pryjmachuk et al., 2011). In this review I have identified elements of practice within the nurse's role to provide care in the secondary school setting. The next section will identify and discuss elements of the nurse's role which include: mental health literacy, assessment, information and support, therapeutic communication, and collaboration.

2.7.2 Elements of the nurse's role

2.7.2.1 Mental health literacy

As identified earlier in section 2.6.3.4 mental health literacy is an essential skill and includes skills and knowledge to understand mental health problems and disorders, discern appropriate information and how to access help. The HPS framework discussed in section 2.7 emphasises the importance of promoting mental health literacy using a whole school approach. The nurse has been identified as an appropriate person to assist students, families and staff to facilitate improved mental health literacy (DeSocio, Stember, & Schrinisky, 2006; Ghaddar et al., 2012; Robinson et al., 2010). It is suggested nurses are able to facilitate increased awareness and knowledge about mental health issues and access to resources through

newsletters and class and one-on-one information sessions (Ghaddar et al., 2012; Green & Reffel, 2009). There is evidence nurses participate within a team approach to promote school based curriculum in the areas of anti-bullying and suicide prevention programs, and programs to promote resiliency behaviours, help seeking behaviour, positive self-esteem (Centre for Mental Health in Schools at UCLA, 2008; National Association of School Nurses, 2014).

2.7.2.2 Assessment for general and mental health care, confidentiality and triage

To provide general and mental health care in schools nurses require sound knowledge accompanied with assessment skills. Literature identifies the school nurse's role in general health and mental health assessment. There is consistent evidence that assessment is a key role of school nurse practice (Barnes, Walsh, et al., 2004; Debell, 2006; Gross et al., 2006; KPMG, 2009; National Association of School Nurses, 2005). Furthermore, it is well established that the nurse's role includes mental health assessment (Debell, 2006; Kendall et al., 2010; KPMG, 2009; Onnela, Vuokila-Oikkonen, Hurtig, & Ebeling, 2014; Puskar & Bernardo, 2007; Shannon et al., 2010; Stevenson, 2010). It is recognised that school nurses are well placed to assess and screen for developing mental health problems in adolescents before symptoms alert other professionals to intervene (Barnes, Walsh, et al., 2004; Kendall et al., 2010; National Association of School Nurses, 2014; Puskar & Bernardo, 2007). Once assessment has considered physical aetiology is not the single cause of concern the school nurse's assessment will focus on social, emotional and mental health wellbeing (Shannon et al., 2010). Given the school nurse's level of knowledge and expertise regarding mental health care and assessment it is evident the school nurse is appropriate person to provide early detection and treatment for mental health problems (Puskar & Bernardo, 2007; Stevenson, 2010).

During the process of assessment nurses will undertake a process known as 'triage' where the nurse will consider the priority of the presenting illness or injury and manage this accordingly (Kralik & Van Loon, 2011; Smart, Pollard, & Walpole, 1999). Literature identifies the nurse's role in the triage processes most commonly in the acute emergency setting (Smart et al., 1999). When nurses are involved in triage for mental health care in the emergency setting it is important the nurse demonstrates: a high level of expertise, the ability to provide a prompt result, to display a team orientated approach, a commitment to assessment, problem solving

and co-ordination skills to manage care (Wynaden, 2010, p. 32). However, it is recognised similar skills are required in the school setting. In this setting the triage process is described where the nurse consults, refers and continues to follow up (Puskar & Bernardo, 2007).

Puskar and Bernardo (2007) describe the assessment process which begins with general screening questions. The skills, knowledge and abilities of the nurse enable the nurse to recognise mental health problems, and the development of a trusting relationship between the nurse and the adolescent will facilitate a discussion to include the family, social and school environments (Puskar & Bernardo, 2007). Mental health assessment considers risk and protective factors that impact on psychosocial health and wellbeing (Barnes & Rowe, 2013; Puskar & Bernardo, 2007; Shannon et al., 2010). As part of adolescent mental health assessment nurses ascertain further knowledge and understanding of adolescent life at home and school by using appropriate assessment tools such as: Home, Education, Activities, Drugs, Sexuality, Suicide, Depression (HEADDS) tool (Kool et al., 2008; McMurray & Clendon, 2015). Assessment areas (home, education, activities, drugs, sexuality, suicide, depression) and their relationship with adolescent mental health, and requirement to be considered have been discussed in sections 2.8.1.5 and 5.3.13. Furthermore, research indicates the HEADDS tool can facilitate access to services and promote trust between the nurse and the student (Kool et al., 2008).

Nurse's knowledge and understanding of legal, ethical and confidentiality guidelines regarding practice is critical to professional assessment and care. In Australia nurses are registered with Australian Health Practitioner Regulation Agency (APRHA) and Nursing and Midwifery Board of Australia who provide guidelines around client confidentiality (Australian Health Practitioner Regulation Agency, 2008). Additionally, resources such as "Working with Youth" offer guidelines for practitioners in Western Australia around the law and mature minors, mandatory reporting, and circumstances which warrant sharing of information with other service providers (Department of Health Western Australia, 2007). It is a legal requirement that nurses are mandated to report cases of child abuse and neglect (Department of Health Western Australia, 2007; Smith & Firmin, 2009). Research identifies that nurses need to communicate 'rules' around their legal obligation with students to avoid misunderstanding between nurses and students (Smith & Firmin, 2009).

Furthermore, it is well established nurses operate in settings where privacy and confidentiality are honoured, creating trust and therefore being seen as someone students can go and talk to (Barker, 2007; Department of Health Western Australia, 2007; KPMG, 2009; Prymachuk et al., 2011).

2.7.2.3 *Information and support (reactive and proactive)*

This section will identify the nurse's role in providing information and support. It is well known that school nurses are perceived to be a safe and approachable source of information and valuable support (Kendall et al., 2010, p.4). Within the literature review "education" is used interchangeably with "information". Research identifies the school nurse provides health education by providing health information (Downie et al., 2002). Therefore, this review will include research focusing on the school nurse's role in facilitating education and providing information and use the term information throughout this review.

There is consistent evidence that the school nurse provides information in the classroom setting and in a one on one basis. The nurse's role includes being invited to conduct classroom presentations for students as a guest speaker on general health topics such as: sexual health, nutrition, exercise, smoking prevention and cessation, prevention of sexually transmitted diseases and parenting (Downie et al., 2002; National Association of School Nurses, 2008; Seigart et al., 2013; Sendall et al., 2011). Additionally, the nurse delivers class room presentations for students on topics related to mental health issues such as: grieving, eating disorders, illicit drug use, suicide and depression (Downie et al., 2002; KPMG, 2009). Research identifies the nurse's role in providing and updating health information for teachers and parents on topics such as: parenting, drugs, medication and anaphylaxis management, infectious diseases, immunisations, asthma and epilepsy, adolescent development, and general health care (Downie et al., 2002; Green & Reffel, 2009; KPMG, 2009; Merrell et al., 2007; Smith & Firmin, 2009).

During the provision of care, nurses may provide one- on-one information with students (Downie et al., 2002). Examples of information provided in a one-on-one context include: healthy lifestyle choices, sexual health and contraception, and smoking cessation (Downie et al., 2002; Lee, 2011; National Association of School Nurses, 2008; Smith & Firmin, 2009). However, the nurse's role in providing

information in groups or on one-on-one basis is a contentious issue. Some teaching and administration staff are reluctant to accept the role moving beyond first aid and reticent to identify school as an appropriate place for mental health work by failing to understand that providing information occurs outside a traditional classroom setting, (Downie et al., 2002; Green & Reffel, 2009; Prymachuk et al., 2011; Smith & Firmin, 2009). Furthermore, some teachers have described the nurse's role in providing information as ill-defined (Downie et al., 2002) and nurses have acknowledged that the delivery of information in some sessions is inconsistent (Seigart et al., 2013).

Throughout the literature review there is evidence the nurse provides students, parents with information accompanied with support. Individual student support includes reassurance about the developmental transition of adolescence, and support for adolescents is offered in group settings for young parents and teen pregnancy (Barnes, Walsh, et al., 2004). As far as supporting students and families, the school nurse provides mental health advice and support and counselling in areas such as bullying, mental health and substance misuse, hygiene and nutrition (Haddad et al., 2010; Merrell et al., 2007). Nurses are able to provide parents with information about mental health issues and explain how biophysiology may contribute to depression and other mental health problems. Furthermore, nurses may suggest further medical referral and treatment as necessary (Stevenson, 2010). There are evidence teachers and administration workers value the nurse's role in working with parents (Baisch et al., 2011). The supportive role of the nurse requires having time, being available to listen, acknowledge, and provide understanding of students concerns, which has been described as counselling (Downie et al., 2002). 'Counselling' is a term used throughout the nursing research literature, however given the professional sensitivity around the use of this term this review will use the terms therapeutic communication and discuss the nurse's role in providing this care.

2.7.2.4 *Therapeutic communication*

The majority of the school nurse's practice is helping and supporting students with psychosocial issues (Barnes, Walsh, et al., 2004; Merrell et al., 2007; Prymachuk et al., 2011; Seigart et al., 2013). Research identifies the nurse's role in providing therapeutic communication to troubled students to assist them with healthy choices and to provide support until alternative service providers are available (Barnes,

Walsh, et al., 2004; KPMG, 2009; Smith & Firmin, 2009). To facilitate trust between adolescents and the school nurse, there is a need to develop meaningful relationships, and adolescents need to feel comfortable to discuss sensitive issues and believe that confidentiality is respected (Armstrong, 2004; Barnes, Walsh, et al., 2004; Prymachuk et al., 2011). Research has found nurses use sound communication and interpersonal skills accompanied with compassion and empathy to create a safe environment where adolescents are encouraged to feel listened to (KPMG, 2009; Prymachuk et al., 2011; Puskar & Bernardo, 2007; Smith & Firmin, 2009).

2.7.2.5 Collaboration

School nurses are well placed to work collaboratively in a partnership approach involving parents and teachers (DeSocio & Hootman, 2004; Lee, 2011; National Association of School Nurses, 2005, 2014). A recent evaluation of the nurse's role in the US found that the school nurse promotes interdisciplinary collaboration (Baisch et al., 2011). Partnerships and communication between schools and families has been found to increase skills, knowledge and resources to promote health child development (Michael, Dittus, & Epstein, 2007). It is also recognised that school nurses facilitate relationships between services. The nurse has been identified as an appropriate person to make an assessment of an adolescent with mental health problems and discuss referral pathways with the adolescent, parents, school staff and internal and external specialist care providers (Armstrong, 2004; DeSocio & Hootman, 2004; Green & Reffel, 2009; Haddad et al., 2010; Puskar & Bernardo, 2007; Stevenson, 2010).

A literature review conducted over a ten year period examined the effect of the current state of children's mental health, impact on school success and the implications for school nursing (DeSocio & Hootman, 2004). The review outcome identified that the nurse advocates for children and families, consulting with many service providers including: the education system, and medical system (DeSocio & Hootman, 2004). Furthermore, an Australian qualitative study (Armstrong, 2004) identified that young people do not always access the services they require, however the school health nurse can provide encouragement and link adolescents and their families to outside services. There is consistent evidence the nurse's role in collaboration includes referral to internal and external services providers (Downie et al., 2002; Humensky et al., 2010; Stevenson, 2010). Lastly, research identifies

collaboration becomes difficult when the nurse's role is unclear, especially in the area of confidentiality (Guzys et al., 2013; Weist et al., 2012). With elements of the nurse's role identified and discussed it is appropriate to outline the additional resources required for the school nurse to effectively manage and care for adolescent mental health issues in the secondary school setting. The next section of the literature review will discuss resources that are required to enable nurses to practice effectively which include: teams, time and ratio, support and clinic.

2.7.3 Resources for school nurse practice

2.7.3.1 *Teams*

There is consistent evidence that the school nurse is or should be included in the interdisciplinary student services team or student wellbeing teams (Baisch et al., 2011; KPMG, 2009; National Association of School Nurses, 2014). The team meetings should promote relationships across the disciplines to work collaboratively and promote student health and wellbeing (Baisch et al., 2011; KPMG, 2009; National Association of School Nurses, 2008; Weist et al., 2009). The team may include the following members: school nurse, pastoral care workers, social workers, counsellors, psychologists, and school education staff, community mental health or juvenile justice staff, and family or parent advocates (Teich, Robinson, & Weist, 2008; Weist et al., 2012). Research identifies strategies for the team meetings to assist with student mental health which include: sharing information and mental health resources, regular structured meetings at suitable times for all participants, feedback and evaluation (Weist et al., 2012). Recent research regarding the inclusion of the school nurse in the student wellbeing team is strongly supported by nurses, Principals, and administration staff (Baisch et al., 2011; Sendall et al., 2011). Despite the support for nurses to attend the student wellbeing meetings it is reported that some schools rarely have meetings or do not have them at all (Teich et al., 2008). Additionally, nurses report confidentiality as a barrier to information sharing and tensions arising associated with blurred boundaries of roles (McMurray & Clendon, 2015; Sendall et al., 2011; Weist et al., 2012).

2.7.3.2 *Time and ratio*

There is consistent evidence that government recommended targets for nurse to student ratios are ill-defined and unregulated. In the U.S the National Association of

School Nurses recommends that each school has a fulltime school nurse with a ratio of 1 nurse per 750 students, and 1 nurse for 250 students when they have complex needs (National Association of School Nurses, 2008). Research has shown that the recommended nurse to student ratios in the U.S. are not endorsed with reports indicating that only slightly more than 50 per cent of schools have the recommended nurse to student ratio, and the nurse to student ratio is more like 1:1350 (Green & Reffel, 2009). Furthermore, only 50 per cent of schools employ registered nurses, whereas at least 32 percent employ health aids (Green & Reffel, 2009, p.62). Most schools in Australia and Canada do not have fulltime nurses onsite with nurse to student ratios reported as: 1:3000 in Canada and 65 fulltime nurses to provide programs for 1600 schools with 60,000 students in Victoria (Griffin, Nadebaum, & Edgecombe, 2006; Seigart et al., 2013). The government target in the UK recommends one nurse to each secondary school, and nurse to student ratios in the healthcare sector are reported as: 1:2594 and 1:1167 in the local government authority schools (Merrell et al., 2007). Additionally, it was reported nurses providing care for boarding school students extend care beyond their working day (Merrell et al., 2007).

It is well established that unmanageable workloads are a common concern, related to students who have complex care needs, and an increase in the frequency of mental health care needs (Baisch et al., 2011; Seigart et al., 2013; Teich et al., 2008). Nurse's workloads are described as hectic, busy, and demanding with large workloads as a barrier to provide appropriate mental health care (Prymachuk et al., 2011; Sendall et al., 2011). Additionally, research identifies that appropriate time is required for nurses to deliver care effectively (Guzys et al., 2013).

2.7.3.3 *Support*

It is well known the school nurse's role is challenging and demanding, and working autonomously can be professionally isolating, therefore, there is a potential risk for fatigue and burnout (Downie et al., 2002; Guzys et al., 2013; Sendall et al., 2011). Literature has identified a lack of support available for school and community nurses (Borrow, Munns, & Henderson, 2011; Prymachuk et al., 2011; Sendall et al., 2011). Nurses have identified that informal peer support is important and helpful for reflective practice, and nurses need formal strategies in place to debrief when necessary (Barnes, Courtney, et al., 2004; Guzys et al., 2013; Prymachuk et al.,

2011). Additionally, nurses acknowledged that formal clinical supervision in a supportive environment enables reflective practice and promotes clinical and professional confidence (Guzys et al., 2013; Kool et al., 2008; Petanjek et al., 2011). However, nurses have raised concerns about managers facilitating clinical supervision and the term ‘supervision’ and suggest that formal support is provided where nurses can reflect on practice with an aim to provide improved evidence based care (Guzys et al., 2013; KPMG, 2009).

2.7.3.4 *Clinic*

A range of characteristics have been identified to promote adolescent friendly clinics which include but are not limited to the following: space and privacy, comfortable surroundings, convenient hours and location, and separate space and time available (Barker, 2007). Additionally, it is recommended that schools provide appropriate clinics with dedicated spaces for nurses to practice (Kendall et al., 2010; Kool et al., 2008). Despite these recommendations it is apparent that nurses face barriers to practice due to inappropriate facilities which include a lack of space, and working in rooms hidden away that are unsuitable for seeing children (Petanjek et al., 2011; Seigart et al., 2013)

2.7.4 Summary

Adolescence is a critical, sensitive period of development. The impact of adolescent mental health problems on adolescent developmental outcomes and over the life course is significant. School nurse literature has concentrated on the traditional and contemporary roles of the nurse, and has identified the increasing incidence of adolescent mental health issues requiring the school nurse to provide general and mental health care. The role of the school nurse in the assessment and management of adolescent mental health issues has been identified as important, to work together with adolescents, families, and the school community to assist toward the improvement of adolescent mental health care.

However, it is evident in the literature that the school nurse’s role is ill defined, and lacks a practice framework to guide school nurses to care for adolescents in the secondary school setting. Furthermore, a framework for school nurse’s practice is able to be proposed following an increased understanding from the perspectives of adolescents, parents, and school communities regarding the school nurse’s role. In

addition, it is especially important for nurses to have access to resources which enable the nurse to perform their role effectively.

2.1 Working in schools: Health promoting schools

2.1.1 Mental health in the secondary school setting: Interventions

After home, school has been found to be the second most influential environment in a child's life (Moses et al., 2008; Rickwood et al., 2007). This literature review has established the period of adolescence is a critical stage of development associated with emotional and behaviour change. The transition to secondary school is suggested as an opportune time to intervene to promote positive health, prevent physical and mental health problems and to provide targeted strategies for student at risk (Roberts et al., 2011). Australian adolescents are required to attend school until they are at least sixteen years of age, placing the school environment as an opportunistic setting to prevent mental health problems and to promote mental health care (Rickwood, 2005; Weist, Paternite, Wheatley-Rowe, & Gall, 2009). Universally targeted prevention programs for anxiety and depression are likely to be cost effective when implemented at middle childhood and adolescence (World Health Organisation, 2010).

Early intervention and the prevention of mental health problems is the second priority area of the Commonwealth Government's "Fourth National Mental Health Plan: An agenda for collaborative government action in mental health 2009-2014" and adolescents are recognised as a strategic target for mental health promotion activities (Department of Health and Ageing, 2009). Additionally, the recent Western Australian Government Mental Health Alcohol and Other Drug Services Plan aim to build resilience of children and families through targeted approaches to reduce the incidence of mental illness (The Government of Western Australia, 2015). The promotion of mental health within secondary schools is a key element of the "Health Promoting Schools" framework which is recognised at international, national, and local levels (Commonwealth Department of Health and Family Services & Australian Health Promoting Schools Association, 1997).

2.1.1.1 Spectrum of Interventions

The Australian Government's National Mental Health Plan and the recent Western Australian Government Mental Health Alcohol and Other Drug Services Plan incorporate the Spectrum of Interventions for mental health, based on a model originally developed by the Institute of Medicine in Washington (Department of

Health and Ageing, 2009; Mrazek & Haggerty, 1994; The Government of Western Australia, 2015). The Spectrum of Interventions recognised that to reduce the burden of mental health problems, strategies need to be incorporated across the entire spectrum of prevention, treatment and recovery (Rickwood, 2012). Mental health promotion occurs across the entire spectrum and provides opportunity to address issues such as stigma and caring for people with mental health problems. Whole school programs provide mental health promotion and prevention which includes universal (general), selective (at risk), indicated (high risk), case identification and some early interventions (Department of Health and Ageing, 2009; Rickwood, 2012).

Universal prevention strategies aim to promote an environment that promotes mental health and wellbeing and implementation of curriculum; which works to develop and enhance mental health related knowledge, attitudes and behaviour of teachers, students and the broader school community. Selective interventions target student who are at risk of developing mental health problems while indicated interventions target students who may show early signs or symptoms of a mental health problem. In addition to targeted school based strategies selective and indicated prevention interventions aim to foster and engage with partnerships and services to provide additional services, help and support for at risk students and; for students with significant problems, interventions to cope (Mental Health and Special Programs Branch Commonwealth Department of Health and Aged Care, 2000; Rickwood, 2005; Wyn, Cahill, Holdsworth, Louise, & Carson, 2000).

2.1.1.2 *Health promoting schools*

The Health Promotion Schools (HPS) framework was developed in 1995 by The World Health Organisation in a response to a settings approach to promote health where people worked, live, study and play (World Health Organization, 1996). The HPS framework aims to link all the components which shape the health of young people at a local, regional, national and global level using an integrated whole school approach to prepare children for life focussing on present child health and wellbeing, and on their future health as adults (World Health Organization, 1996). Furthermore, a comprehensive approach which is developed from a socio-ecological approach to health is adapted for school health promotion approach to health (Bronfenbrenner & Morris, 2006; Bruce, Klein, & Keleher, 2012; McMurray & Clendon, 2015).

The HPS framework provides a structure for schools to plan, implement, and evaluate health promotion strategies in three domains: School Organisation Ethos and Environment: Curriculum Learning and Teaching; and Partnerships and Services (Burns et al., 2014; World Health Organization, 1996). The “Friendly Schools Friendly Families” (FSFF) program adopted a whole school approach, based on the Health Promoting Schools framework and aimed to reduce the prevalence of being bullied and create a positive social environment and enhance connectedness between students, staff and parents in primary schools (Cross et al., 2012).

The Health Promoting Schools framework was implemented across the three domains: School Organisation, Ethos, and Environment. To build capacity and gain support and commitment staff were involved in professional development about awareness, and skills to prevent bullying. Multiple staff and community members participated in the project including: teachers, administration, pastoral care, and parents. Participation included formulating a school bullying policy, which included strategies and procedures to respond to bullying. School health services and external service providers were included in the project, and school ethos was encouraged through a whole school approach that focussed on knowledge, skills and attitudes across the whole school community. School Curriculum Teaching and Learning: Curricular were developed and teachers were supported with intensive professional development to enhance implementation. Partnerships and services: Links with external service providers were promoted and collaboration with parents was encouraged through workshops, parent training communication and awareness raising (Burns, Crawford, Cross, & Comfort, 2014, p. 2-3). A randomised control trial was employed to measure the effectiveness of the program (Cross et al., 2012).

2.1.1.3 *HPS and MindMatters*

The HPS framework has been used as a framework for a wide range of school based programs targeting many health issues, including mental health (Burns et al., 2014; Rowling & Mason, 2005; Weare & Nind, 2011). Comprehensive mental health programs such as: “MindMatters” and “MindMatters Plus” which include the promotion of mental health literacy and self-efficacy provide examples of application of the HPS framework (Wyn, Cahill, Holdsworth, Louise, et al., 2000). MindMatters is an Australian national mental health initiative which draws on the HPS framework

to incorporate mental health promotion as a whole school approach in school programs, rather than only including mental health education to the curriculum (Wyman et al., 2010; Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000). Additionally, MindMatters Plus and MindMatters Plus GP offer school based programs which have formal connections to community providers to provide treatments for students with high support needs (Crockett, 2013).

2.1.1.4 *Evaluation of HPS and MindMatters*

The HPS framework provides a guide to promote health in school settings, with examples of the nurse being involved in health promotion involving the whole school community through classroom activities such as: classroom presentations, school based health promotion displays and information provision (Barnes, Courtney, Pratt, & Walsh, 2004; Moses et al., 2008). However, the HPS framework has been criticized as difficult to understand, and that it has not conclusively been shown to provide a gold standard for practice (Bruce et al., 2012; St Leger, 2001). Furthermore, it is suggested that stakeholders need a shared vision to successfully implement the HPS framework (Bruce et al., 2012). A systematic search of the literature (Weare & Nind, 2011) found fifty-two systematic reviews and meta-analyses on mental health in schools identified small to moderate statistical significance in beneficial interventions for children, families and communities in terms of social, educational, and academic outcomes. For example there was small to moderate impacts of universal interventions on mental health, mental health problems, mental health problems and disorders, and bullying. In these areas the effects of interventions were dramatically higher when targeted to higher risk children. Moderate results were reported from the impact of universal interventions on social and emotional skills and competencies and on family and classroom environments. The impacts on commitment to schooling and academic achievements were small to moderate (Weare & Nind, 2011, p. 64). Whole school approaches were found to be effective if they were implemented completely and accurately and ineffective if they were not implemented with clarity, commitment and dependability (Weare & Nind, 2011).

After a decade of the implementation of MindMatters research using a whole school approach, evaluation found school personnel changed beliefs and practices for

advancing student mental health and wellbeing. However, leadership and professional learning were identified as needing increased focus (Paulus & Rowling, 2009). The evaluation found leadership within schools, between schools, and with outside agencies needs attention, and recommends dedicated resources for strategies, communication plans and clear referral pathways for students with mental health needs (Paulus & Rowling, 2009). It is recommended that students are included in school leadership, provided they have been trained (Weare & Markham, 2005; Weare & Nind, 2011).

Results found teachers lack comfort and confidence with MindMatters materials and recommended teacher professional learning (Paulus & Rowling, 2009). Teachers need assistance to build on their knowledge and skills in mental health recognition and action beyond awareness raising (Trudgen & Lawn, 2011). Furthermore, schools need to provide funding, time and resources to ensure the successful implementation of the MindMatters program (Burns et al., 2014; Cross et al., 2012; Hazell, 2005; Kelly, Jorm, & Wright, 2007). Rigorously evaluated programs such as FSFF provide support for the need for teacher professional development and school commitment in terms of financial and human resources (Cross 2012).

2.1.1.5 *Mental Health First Aid*

The Mental Health First Aid (MHFA) course was developed in Australia in 2000 with the aim to increase participants' awareness of, and signs and symptoms of mental health problem (Kitchener, Jorm, & Kelly, 2013). The intervention includes training to provide participants with the skills to provide initial help to a person developing a mental health problem or who is suffering a mental health crisis and the skills to seek help. The MHFA course is now available internationally and offers face-to-face and e-learning modes (Jorm, Kitchener, Fischer, & Cvetkovski, 2010). A range of specialised MHFA courses have been specifically developed for different settings, including schools, and populations such as: culturally and linguistically diverse participants, Aboriginal and Torres Strait Islanders, secondary and tertiary students, and nurses (Australian Research Alliance For Children and Youth, 2014; Hungerford et al., 2012; Jorm et al., 2010; Kitchener et al., 2013).

A review of three published randomised controlled trials evaluating Mental Health First Aid training found statically significant benefits in the areas of improved attitudes in knowledge, attitude, and help seeking behaviour to others with mental health problems (Kitchener & Jorm, 2006). Furthermore, an evaluation of the e-learning MHFA course using a randomised control trail study found positive effects of e-learning for reducing the stigma about mental health problems (Jorm et al., 2010). Research has identified that adolescents and young people are receptive to peer led education regarding mental health information (Crockett, 2013). Furthermore, a recently developed protocol to promote MHFA training in the university setting has potential for application in the secondary school setting which would meet targets set by the Western Australian Government to promote the adoption of evidence based Mental Health First Aid training throughout the community (Crawford et al., 2015; The Government of Western Australia, 2015).

Another program, the Australian national Headspace PASS!- Promoting Access and Support Seeking Program, uses class room presentations to promote the importance of help seeking and implements role play activities to teach young people how to seek help and what to do if the request for help is met with an unhelpful response. Class room presentations as part of this program have been found to facilitate improvements in young people's mental health (Muir et al., 2009; Wilson & Deane, 2010). These programs have particular relevance to the school nurse who can be instrumental in facilitating awareness and engagement.

Internationally significant work has been undertaken in school-based bullying and aggression prevention research. In Australia this research has measured the effectiveness of whole school based interventions with early research (Cross, Pintabona, Hall, Hamilton, & Erceg, 2004) informing subsequent interventions (Cross et al., 2012). As described earlier in this section, the "Friendly Schools Friendly Families" (FSFF) adopted a whole school approach to bullying prevention (Cross et al., 2012). The randomised control trial measured the effectiveness of a whole school intervention at high, moderate and low intervention levels. The study found the prevalence of being bullied was lower in high and moderate intervention schools compared to low intervention schools, and lowest in high intervention schools. While both high and moderate intervention schools included a whole school approach, high intervention schools also included capacity building and parental

involvement in addition to other strategies (Cross et al., 2012). The involvement of school health services played a key role in the FSFF program, however, the school nurse's role was not clearly identified (Cross et al., 2012). While the FSFF was able to demonstrate positive changes in student behaviour (Cross et al., 2012) many other mental health promotion programs in schools lack strength, with evaluations resulting in outcomes which fail to provide evidence for systematic reviews (Weare & Nind, 2011).

2.1.2 Summary

This review has identified and discussed the importance of mental health promotion in schools using a whole school approach, and identified some interventions that have addressed mental health using this approach. Research has shown that whole school mental (Department of Health and Ageing, 2009) health promotion programs need to identify clear evidence based interventions which result in measurable outcomes (Kelly et al., 2007; Weare & Nind, 2011). In this review I have identified a gap in the literature regarding the nurse's role in participating in mental health care programs in schools. The next section will identify and discuss the significance of nurse's role working in schools with adolescents, parents and the school community in an endeavour to promote adolescent health. Additional resources to enable the nurse to practice effectively will be discussed.

3 METHODS

3.1 Introduction

In the first section of this chapter the design of the study and the theoretical perspectives that were adopted will be explained. The next section contains a brief description of the strategy that was used to review relevant literature. In the following section the characteristics of participants involved in the study and the settings in which data were collected are outlined. The procedure for participant recruitment and the general organisation of data collection is then described, followed by detailed accounts of both quantitative and qualitative methods and data collection. The chapter is concluded with an overview of ethical considerations and steps taken to manage data.

3.2 Study design

3.2.1 Introduction

This section begins with a description of the study within the context of a health promotion intervention. The basic principles of health promotion are described as well as the principles of program evaluation that is undertaken in health promotion practice. This leads to an explanation of formative evaluation which is widely accepted in health promotion research and practice as the “gold standard” method for ensuring a proposed intervention meets the needs of the community for which it is developed, and is most likely to have the impact that is intended (Lobo, Petrich, & Burns, 2014). The formative evaluation was undertaken using a mixed methods data collection strategy. The mixed methods approach, including strengths and limitations, are described followed by the rationale for choosing mixed methods as an appropriate method for the study.

3.2.2 Health promotion

The field of health promotion has become prominent in health care policy and practice in both developed and developing countries throughout the world since the time of the Ottawa Charter (Lobo, Petrich, & Burns, 2014; World Health Organisation, 1996). The Ottawa Charter highlighted the importance of health at a global level for the first time and identified five strategies to guide international efforts directed at the promotion of healthy environments and healthy lifestyles as

opposed to the diagnosis and treatment of disease: build healthy public policy, create supportive environments, strengthen community action, develop personal skills, and reorientate health services (World Health Organisation, 1996; McMurray & Clendon, 2015). Health promotion is defined as a combination of educational, organisational, economic and political actions designed with consumer participation, to enable individuals, groups and whole communities to increase control over, and improve health through changes in knowledge, attitudes, behaviour, policy, and social and environmental conditions (Howat et al, 2003, p.84). The theoretical basis for this research was influenced by the Health Promoting Schools framework which recognises the need for a comprehensive, whole school approach to improving the health of the school community (Burns et al., 2014; WHO 1996). The use of the Spectrum of Interventions also provided theoretical background and a model to help structure mental health prevention and promotion in the school setting (Mrazek & Haggerty, 1994).

3.2.3 Program evaluation

The evaluation of health promotion programs is embedded in the process of program development. Program evaluation includes both formative and summative aspects. Formative evaluation takes place when interventions are first proposed in order to make sure the materials are suitable for, and likely to be utilised by, the audience for which they are intended. Summative evaluation takes place when interventions have been tested with the intended audience (formative evaluation). The purpose of summative evaluation is to make sure that interventions are implemented as intended and lead to the outcomes that were planned. To be effective in meeting stated objectives, the development of health promotion programs require a continuous cycle of assessment, planning, implementation, and evaluation (Lobo, Petrich & Burns, 2014).

3.2.4 Formative evaluation

Formative evaluation aims to answer questions of relevance to identified health problems, to ascertain the practicality of different intervention methods (Nutbeam & Bauman 2006; Stelter, 2006) and assess program feasibility and efficacy (Windsor, Baranowski, Clark & Cutter, 1994). These important questions should not be answered only through logical thought or discussion with a group of experts. With the best of intentions, those responsible for developing programs are unlikely to

understand the perspectives and needs of the people for whom the program is intended. For this reason it is necessary to explain the proposed program to stakeholders and ask if it is seen to be useful and of value. The views of stakeholders are then taken into consideration and the program is modified so that it is a better fit for the people and context in which it was first developed (Nutbeam & Bauman 2006; Stelter, 2006).

Recent research in Australia, the US, and the UK highlights the importance of formative evaluation in contemporary health promotion practice in the development of health promotion programs (Akin et al., 2014; Bauman, Smith, Maibach, & Reger-Nash, 2006; Kramer, Roemer, Liljenquist, Shin, & Hart, 2014; Williams, Woodby, Bailey, & Burgio, 2013). When formative evaluation is undertaken, it is usual to collect data using both quantitative and qualitative methodologies (Kramer et al., 2014; Mahoney et al., 2014; Plow et al., 2014).

The focus of this formative evaluation is a practice framework for nurses working in secondary schools to enable them to better address the health needs of students. Consistent with the use of formative evaluation in health promotion research this study sought to assess if the practice framework for school nurses would address a significant need within the school community and is appropriate in the Australian secondary school setting.

In accordance with the use of formative evaluation in health promotion research, a program logic model (Taylor-Powell & Henert, 2008) (Appendix A) was used to identify the key components of the proposed practice framework (Kramer et al., 2014). The program logic model provided a planning structure and conceptual framework to guide the formative evaluation. A review of literature and collaboration with key stakeholders informed the development of the model.

The Program Logic Model identified five components of the framework: 1. Mental health literacy education; 2) Training and recognising mental health problems and taking urgent action; 3) Self referred screening and triage; 4) Education and counselling; and 5) Liaison and collaboration. These five components of the program logic model were broadly considered in the design of the student and parent

questionnaires, and the focus group and interview schedules. In this way, the previous knowledge and understanding of the researcher was made explicit and the questionnaires and discussion were given direction. Once these instruments were developed, no further consideration was given to the program logic model. It was not shown to participants or discussed with them. Themes used in the framework for school nurse practice (Figure 4.3) evolved from the qualitative data. Mental health literacy and triage were the only terms borrowed from the logic model to label themes that described concepts that were discussed by participants.

This study adopted a mixed methods approach. Three independent co-educational secondary schools in metropolitan Perth, Western Australia that were representative of low, medium, and high levels of advantage agreed to participate. Quantitative data were collected from a convenience sample of parents and students and qualitative data were collected from purposive sample of parents, students, teachers, nurses and allied health staff within the school community.

3.2.5 Use of mixed methods

Mixed methods are a well-known and frequently used research methodology which combines the use of two different methodological approaches which are usually quantitative and qualitative in a single study (Freshwater & Cahill, 2012; Mengshoel, 2012). Qualitative and quantitative methods have different ontological and epistemological approaches but there are advantages to each, and when used together the strength in one approach is able to compensate for the limitation in the other (Bryman, 2007; Doyle, Brady, & Byrne, 2009; Richardson-Tench, Taylor, Kermode, & Roberts, 2014). Quantitative research refers to traditional scientific positivist research methodology, whereas qualitative research is focused on understanding the participant's perspectives (Bryman, 2004). The differences are identified in Table 3.1. (See following page).

Table 3.1
Major Assumptions of the Positivist and Constructivist Paradigms

Type of assumption	Positivist /Quantitative	Constructivist/Qualitative
The nature of reality	Reality exists, there is a real world driven by real natural causes	Reality is multiple and subjective, mentally constructed by individuals
Relationship between the researcher and those being researched	The researcher is independent from those being researched	The researcher interacts with those being researched ; findings are the creation of the interactive process
The role of values in the enquiry	Values and biases are to be held in check objectivity is sought	Subjectivity and values are inevitable and desirable
Best methods for obtaining evidence	Deductive process Testing of theory	Inductive process Generation of theory

Note: Adapted from “Introduction to nursing research in an evidence-based practice environment” by D. Polit and C. Beck, 2010, “Essentials of nursing: Appraising evidence for nursing practice” p.7. Copyright 2014 Wolters Kluwer, Health Lippincott, Williams and Wilkins. Adapted from “Research designs” by A. Bryman, 2004, “Social research methods” p.36. Copyright Oxford University Press.

A mixed methods approach can provide a more in-depth understanding of the research question and can elicit more comprehensive findings than when using a qualitative or quantitative approach alone (Cresswell, Fretters, & Ivankova, 2004; Mengshoel, 2012; Richardson-Tench et al., 2014). It is well established that research questions within the nursing discipline are complex and multifaceted, and suit both major paradigms (Flemming, 2007). Using a mixed methods approach should reflect the holistic nature of nursing, and integrate knowledge from the experiential aspects of qualitative research and objective evidence from quantitative research (Doyle et al., 2009; Flemming, 2007). This research uses the constant comparison analysis which originated from grounded theory, which compares individual experiences and group experiences to identify major categories. This research does not adopt a true classical grounded theory approach, however uses grounded theory to develop a framework.

3.2.6 Concurrent design

There are different types of designs or frameworks when using a mixed methods approach; this study used a concurrent mixed methods design (Morse & Niehaus, 2009; Richardson-Tench et al., 2014). The concurrent design approach is to collect qualitative and quantitative data simultaneously, with the purpose of confirming, cross validating or corroborating findings within the study (Bryman, 2006; Wilkins & Woodgate, 2008). A concurrent design was appropriate as this study involved a broad encompassing research question with multiple groups of participants (Morse & Niehaus, 2009). Additionally, a concurrent design assists to compensate for data collection time required when using a mixed method approach, as time is cited as a limitation of mixed methods approach (Polit & Beck, 2010).

Triangulation allowed for the collaboration and, or contrast of quantitative and qualitative findings (Bryman, 2006; Cresswell et al., 2004; Richardson-Tench et al., 2014). Therefore, the qualitative data may contrast or clarify quantitative data and vice versa (Bryman, 2007). In this study the quantitative data provided parents and students perspectives of the school nurse's role. The qualitative component of the study provided a more detailed understanding of the participant's perceptions and expectations of the school nurse's role and allowed for new themes associated with the school nurse's role to emerge. In this study the qualitative data provided a more complete and richer understanding of the participants perspectives to enhance and confirm the quantitative data and provide a greater certainty to confirm the key findings (Cresswell & Tashakkori, 2008; Giddings & Grant, 2007). The quantitative and qualitative components of the study are presented in the following sections.

3.3 Literature review strategy

An integrated review of the international literature was conducted to investigate and explore the role of the school nurse to promote adolescent mental health care. Integrated literature reviews have become prominent internationally in the review of nursing research and evidence based nursing practice (Toracco, 2005; Whitemore & Knafl 2005). The purpose of an integrated literature review is to review, critique, and synthesize literature to provide a comprehensive understanding of the topic being researched (Toracco, 2005; Whitemore & Knafl 2005).

Literature was sourced using keyword searches accessed through electronic databases through Curtin University Library: PsychInfo, Science Direct, CINAHL, Medline, Proquest and Scopus. In addition the reference lists of the articles obtained during the search were reviewed. The search was undertaken using terms associated with nursing and the role of nurses working in schools, adolescent mental health, adolescent help seeking behaviour, and adolescent development. The search terms included various combinations of the following: school nurse, primary school nurse, secondary school nurse, high school nurse, elementary school nurse, senior school nurse, junior school nurse, school nurse qualifications, school nurse supervision, school nurse assessment, school nurse triage, school nurses and health promotion, school nurses and health promoting schools, school nurses and counselling, school nurses and therapeutic communication, adolescent behaviour, risk taking, bullying, self-esteem, body image, anxiety, depression, eating disorders, psychoses, adolescent help seeking behaviour, child development, adolescent development, attachment, social development, emotional development, psychosocial development, plasticity, allostasis, and social gradient.

Literature in languages other than English was excluded or if they did not address the specific topic of the review. The gray literature or literature that is not readily available was also reviewed. Information collection also included literature from WHO documents, government sources, non-government organisation reports, and other relevant literature such as the Australian Research Alliance for Children and Youth (2014), and doctoral theses. Abstracts of relevant studies were examined. Full articles were retrieved and evaluated. All suitable studies were included regardless of the study design or year published. The use of literature as early as (1909) is attributed to the relevance of previous theory underpinning the study. A total of 430 Australian and international research articles were reviewed. Articles pertaining to the work of school nurses in primary, junior, and elementary schools were discarded if the focus was solely school nurses working with pre-adolescent children. While there were a number of articles that discussed the role of school nurses in this context, they were not included because the practice framework was originally proposed for students who were experiencing high rates of anxiety and depression who were beginning to seek help for their problems independently from their parents. The approach taken in the thesis was a departure from almost all other published

studies in the field in that the focus was on students, parents, teachers, and the school community generally rather than school nurses exclusively. After careful consideration 298 articles were selected for inclusion in the review.

3.4 Participants and setting

A convenience sample of three independent co-educational secondary schools in metropolitan Perth Western Australia was chosen for this study. Perth has a population of 1.67 million people comprising 445,645 families (Australian Bureau of Statistics, 2013). The median weekly income for families is \$1,454.00 which is slightly lower than the Western Australian State average (\$1,620.00) which is reported as the second highest of the Australian states and territories. Perth is a very wealthy city within the very wealthy state of WA. WA has experienced a mining boom in recent years that has had a significant impact on the economy and the lives of the residents. Perth is unlike most cities in the world where there is a strong correlation between education and income. In WA many people in the highest incomes are trades people and unskilled labourers who are working in construction and mining. For example, this difference is reflected in the wages with those employed in the mining sector where the highest full time average weekly income on ordinary time is \$2,469.60, compared to that in the lowest average weekly income in ordinary time in retail \$1,031.80 (Australian Bureau of Statistics, 2013a; McKenzie, 2013).

While there are few people who experience poverty in the absolute sense of not being able to afford the basic necessities of life, there is a great deal of relative poverty where people have considerably less financial security and materials possessions than others. This can be seen very clearly in the Australian Bureau of Statistic (ABS) Socio Economic Indexes for Areas (SEIFA) indices that identify pockets of relative advantage and disadvantage by suburb and local government area. As discussed in the literature review, family's access to material and social resources has an impact on their ability to participate in society (ABS, 2006). It is important to review each school's area of relative level of socio-economic advantage as each area is quite different.

3.4.1 Demographics of each school's suburb and local government area

The schools chosen included those from a range of socio-economic Index scores. SEIFA is a suite of information created from census data which provides four summary measures (score, rank, decile and percentile) that can be used to explore a different aspect of the socio-economic conditions by geographical areas. In Australia each geographical area is given a score which can be used to compare how “relatively disadvantaged” one area is to another. SEIFA indices are based on the income, level of education, employment, level of occupation: skilled and unskilled, household income, housing expenditure, and assets. The higher the number in each category the more advantaged the area is (ABS, 2006). For example the lowest SEIFA decile is level 1 and the highest is level ten.

The targeted adolescents ranged from year 7 to 12. There was not any restriction on class sizes. The three schools in this study A, B and C are located in different geographical areas within Western Australia's capital city Perth. Each school is located within a local government area, often labelled as “The City of”. The purpose of the local government is to plan and make key decisions on policies and developments affecting the area and to be efficient, accountable and financially sustainable. All local governments are required to work within a strategic plan including six strategic directions: community, environment, housing, land uses, places, infrastructure, transport and governance, advocacy and corporate management. Local Government statistics show that there are pronounced differences in the schools that were chosen for the study in terms of the population densities of the catchment areas ranging from urban to semi-rural. School A is located in the “City of A” which covers an area of approximately 20 km². School B is located in the “City of B” servicing 260km² and School C is located in the “City of C” approximately 686km² (ABS, 2013b). The local government area contains a catchment of suburbs from which most students of each school reside, although some students travel from further away. Despite the marked difference in population densities, each school's local government area's SEIFA INDEX shows that they are socio demographically remarkably similar as seen in figure (3.1) see following page.

Figure 3.1
Local Government Area SEIFA INDEXES for schools A, B, C

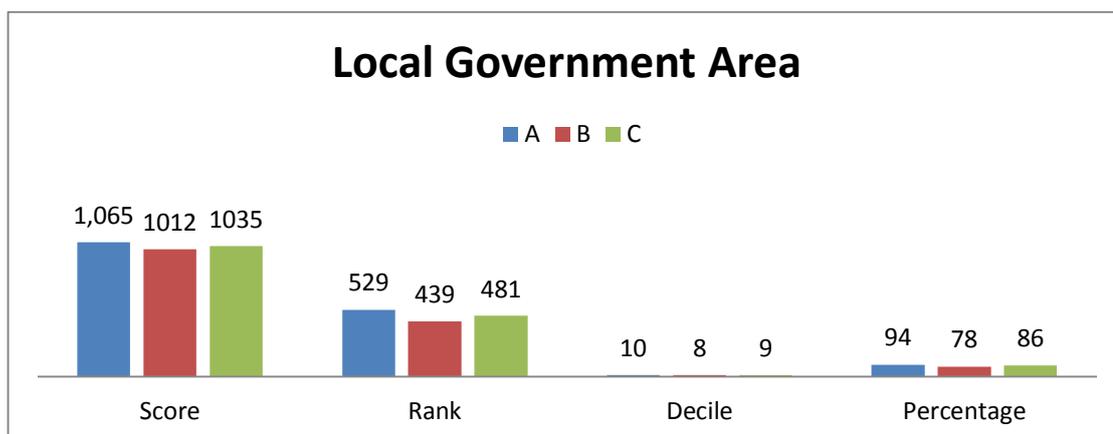
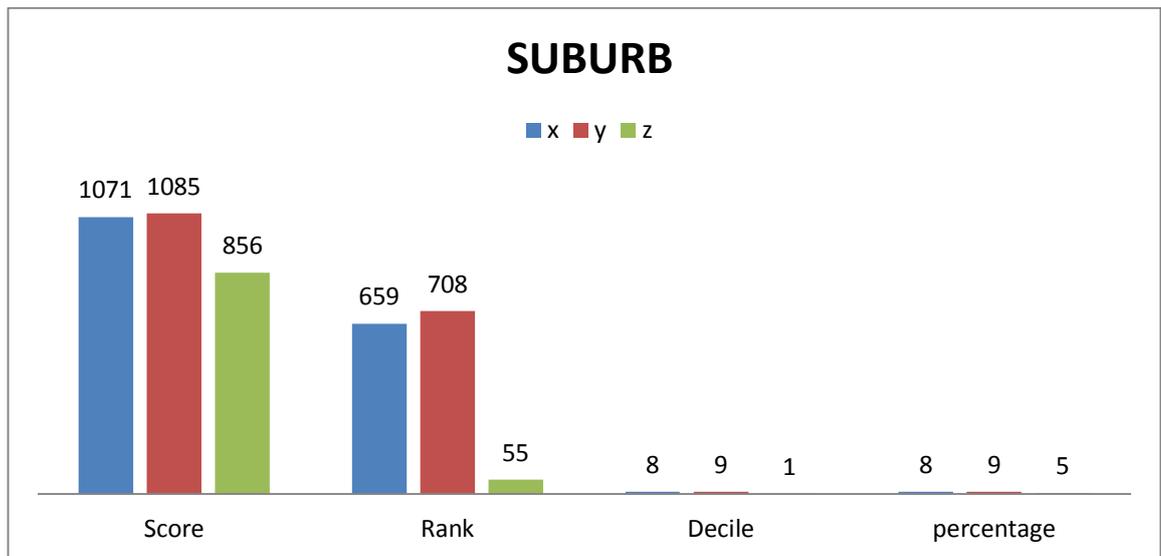


Figure 3.1 shows that the City of A where School A is situated has a higher SEIFA score, rank, decile and percentage compared with schools B and C. Figure 3.1 also shows that school C local government area City of C has a higher rank, score, decile and percentage compared with School C located in the City of B.

It is important to note that the SEIFA index summarises characteristics of people in the area and does not reflect on one household or an individual's situation. When reviewing the SEIFA index of an area, it is imperative to consciously avoid an ecological fallacy which occurs due to error of assumption, making a causal interpretation about an individual behaviour or phenomenon as a result of group data (Schwartz, 1994). For example, in the context of this study it would be an ecological fallacy to assume that everyone in the City of A has the same income.

While all 3 of the local government area have a similar decile, the profile of the specific suburb in which each school is situated is markedly different as shown in Figure 3.2 (see following page). Figure (3.2) shows the SEIFA INDEX for each suburb where school A, B and C are located.

Figure 3.2
Local Government Area SEIFA INDEXES for schools A, B, C



A review of the SEIFA INDEX of each suburb provides a different representation than the SEIFA INDEX for the local government. It is clear that in the suburb where school C is located there is a dramatically lower SEIFA rank, score, decile and percentage than suburbs where schools A and B are located. It is interesting to note that while school A has a higher decile and percentage than school B in the SEIFA INDEX for local government; the suburb where school A is located has a lower decile and percentage than school B in the SEIFA INDEX for the suburb.

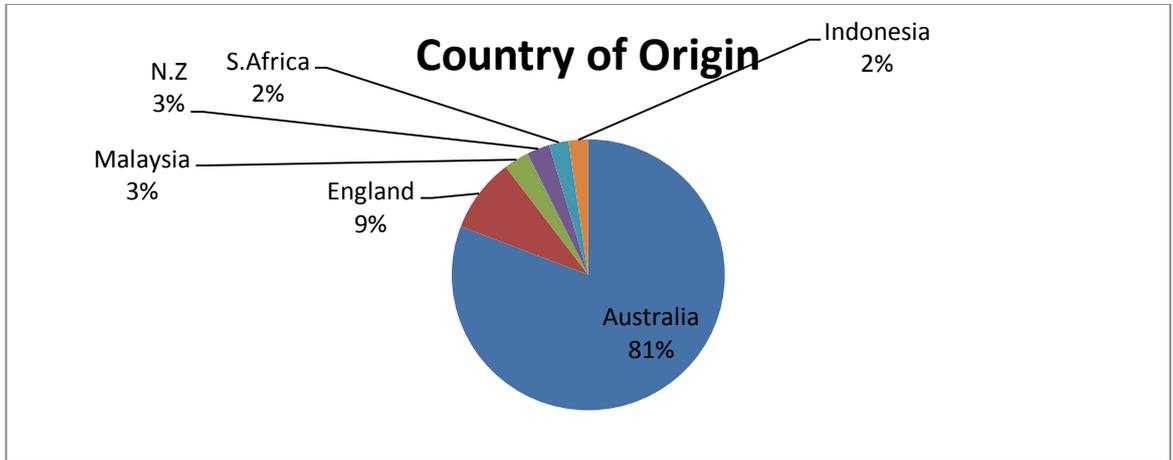
While a convenience sample was chosen for this study, the sample represented reflects diversity. As the following breakdown of the socio demographic data shows, it is very clear that there is a significant difference in the population from each geographical area. The socio demographic data is drawn from ABS data (ABS, 2011a, 2011b, 2011c), in following areas: population, household income and expenditure, country of origin, employment and occupations. Each suburb will be reviewed presenting the demographics of each area, followed by a comparison of the data.

3.4.1.1 *School A*

School A is located in a wealthy suburb (X) within the City of A. Suburb X has a population of 13,399 people and 3,373 families. The average weekly income is \$1,433.00, the average mortgage payments are \$2025 per month and the average rent is \$330.00 (ABS, 2011b). Figure 3.3 shows the country of origin of the population in

suburb X where the school is located. Eighty one per cent of the population are born in Australia, with England being the second largest place of birth (9%).

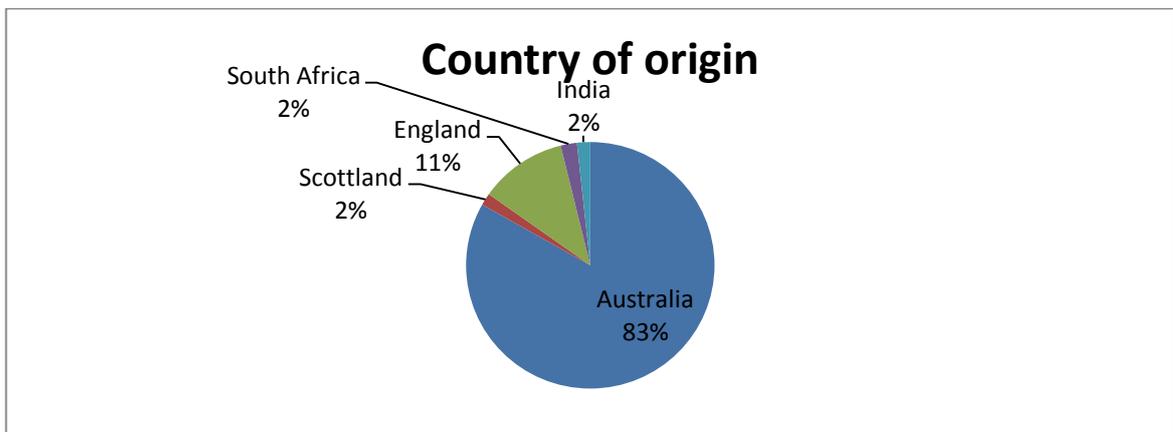
Figure 3.3
Country of origin suburb X school A



3.4.1.2 School B

School B is located in (Y) within the City of B which has a population of 15,883 people and 4,447 families. The average weekly income is \$1,931 the average mortgage payments are \$2383 per month, and the average weekly rent is \$370 (ABS, 2011c). As figure 3.4 shows the suburb where School B is located is similar to School A as far as country of origin, 83 per cent of the population are born in Australia and 11 percent born in England.

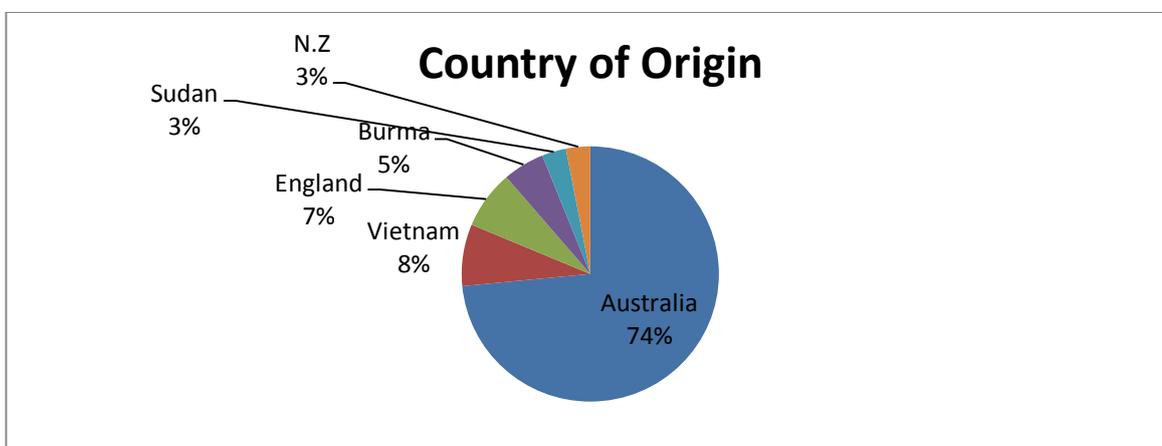
Figure 3.4
Country of origin suburb Y school B



3.4.1.3 School C

School C is located in suburb (Z) in the city of C. There are 3,897 people and 974 families. The average weekly income is \$947 the average mortgage payments are \$1387 per month, and the average weekly rent is \$250.00 (ABS, 2011a). Figure 3.5 (see following page) shows country of origin of suburb Z where school C is located. By comparing figures 5.4 and 5.5 it is apparent that School C has the lowest percentage of the population born in Australia (74%) and the largest percentage of people from where English is a second language compared with schools A and C.

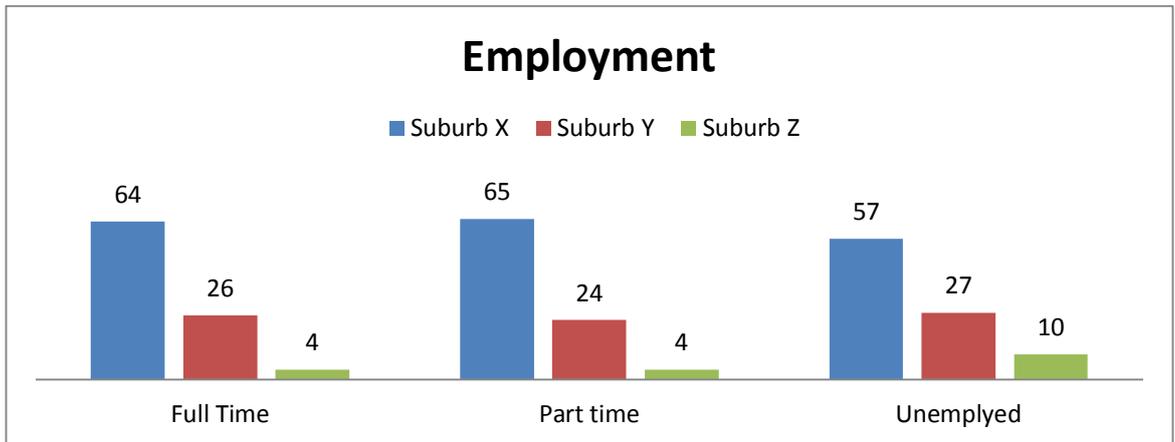
Figure 3.5
Country of origin suburb Z school C



3.4.1.4 Employment

Figure 3.6 (see following page) shows the level of employment within the three suburbs where the schools are located. Suburb Z has considerably higher unemployment (10%) compared to suburb X and Y, (4%) respectively. There are also less people employed full time and more employed Part-time than suburbs X and Y.

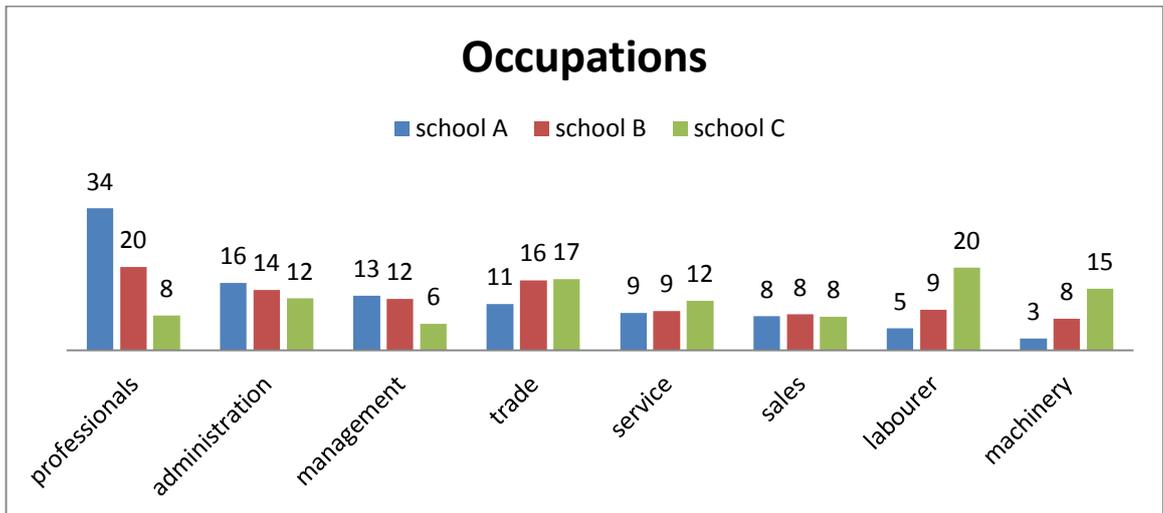
Figure 3.6
Employment levels suburb X, Y, Z



3.4.1.5 Occupations

Figure 3.7 shows occupations held by the population within each school's suburb. In suburb X where school A is located, the occupants are largely employed in professional, administration and management roles, followed by schools B and C. Labourers, tradespersons, and machine operators, are the most represented careers in school C, followed by school B and A respectively.

Figure 3.7
Occupations held by population in Suburb X, Y, and Z schools A, B, C



3.4.2 Relevance of SEIFA data

These data show that the 3 schools came from very diverse socio-economic levels of advantage. There was a range of parent occupations, and also a range of income and country of origin represented in each area. While the number of schools precludes

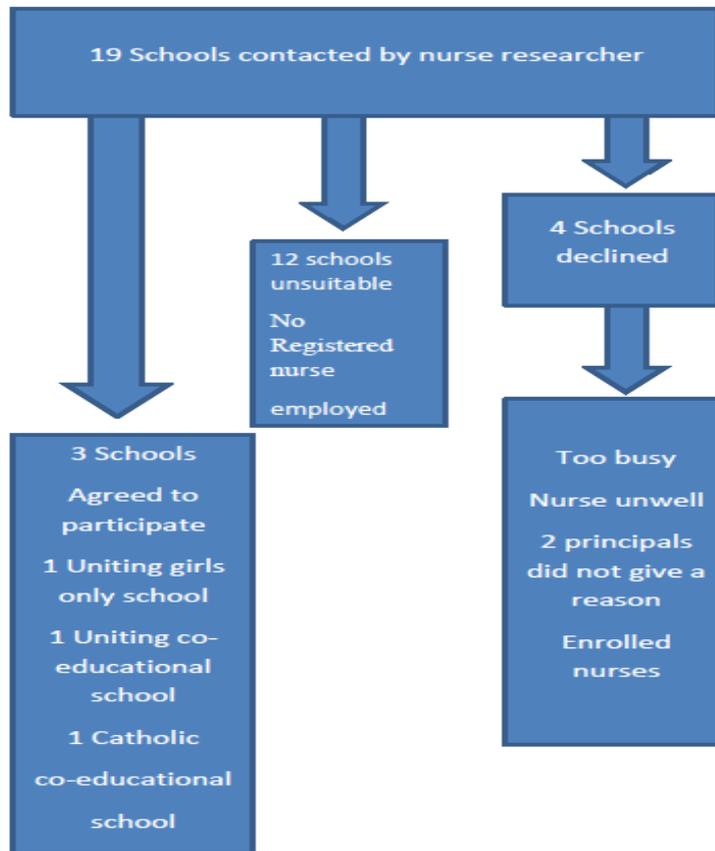
generalizability, the diversity of this sample represented a good cross section of the Perth community.

3.5 Procedure

3.5.1 School recruitment

The process of school recruitment is presented in Figure 3.8 (see following page), that shows first the nurse researcher contacted nineteen metropolitan independent and Catholic schools by telephone to establish if the school had a nurse. Of these, twelve schools explained they did not employ a registered nurse, with secretaries at two schools explaining that in the past they have, and from their perspective they would like to have a nurse reemployed. Furthermore, four schools that were contacted were unsuitable to participate in the research for the following reasons: the Principal stated that the school was too busy to be able to participate in the research; the school nurse had a significant personal health issue and it was proposed by the school it was not appropriate at this time; one school employed enrolled nurses; and lastly, two School Principals declined without stating their reasons. One registered nurse who was enthusiastic about the project expressed her great disappointment following a lack of support to participate in the project determined by the School Principal. The schools that agreed to participate included: a Catholic co-educational school, a Uniting co-educational school, and a Uniting girls only school. Data were collected between April 2012 and January 2013. The nurse researcher contacted each school's secretary personally, by telephone, and met with the school nurse initially, and then the Principal or Deputy Principal, to present the research proposal aims and objectives. The whole school was invited to participate in the study, and the Principal determined that the school may participate. Independent schools were selected for this study, as the Principal has greater autonomy to enable the school to engage in a research activity. Each School Principal expressed interest in the research as improving adolescent mental health outcomes is embedded in each school's ethos.

Figure 3.8
Recruitment model



3.5.2 Organisation of data collection at each school

In the first instance, the nurse researcher contacted nineteen metropolitan independent and Catholic schools by telephone to establish if the school had a nurse. Of these, twelve schools explained they did not employ a registered nurse. Once the nurse researcher established there was a nurse employed a conversation by telephone determined her interest in participating in the study. If the nurse indicated her enthusiasm for the study a pre-proposal was forwarded by email for the nurse and School Principal to review (Appendix B). The Nurse Researcher and the School Nurse agreed/planned that the school nurse would discuss the possibility with the

School Principal to determine the school's interest and potential possibility for participation in the project. Following the conversation with the Principal each School Nurse contacted the Nurse Researcher with proposed dates for a meeting together with the Principal, School Nurse(s) and Researcher. At this meeting the purpose of the study was clarified, using a meeting guide (Appendix C). The meeting guide covered the following points: the project outline, a plan to collect the data including questionnaires, one-on-one interviews and focus groups, informing the community, advertising the project, distribution of forms and provision of equipment. At this meeting, information regarding the project was provided to each meeting attendee (Appendices: D, E, G, and H). during this meeting each school formerly accepted an opportunity to engage in the research project. At each school meeting, the school nurse and key staff were assigned by the Principal to co-ordinate data collection activities. These key staff were as follows: the Dean of Pastoral care (School A), Deputy Principal (School B) and Nurse (School C). Following acceptance of the partnership between the Nurse Researcher and the school, data collection was planned at a time that suited the school and the Nurse Researcher. A timeframe for the plan was developed at each meeting to collect qualitative and quantitative data. For the quantitative data the Nurse Researcher was aiming to select approximately 50 students and their parents from randomly chosen classes in year groups 7 – 12 to complete the brief questionnaire each that would take no more than 10 minutes.

3.6 The quantitative component of the study

A questionnaire was developed and sent to parents (Appendix D) and students (Appendix E) within each of the school communities to gather data on parents' and students' understanding about the role of the school health nurse in general and the role with regard to mental health promotion. The parents were invited to participate in the study via the school newsletter. Each school was sent parent information sheets (Appendix G and Appendix H) describing the study in more detail with the opportunity for parents to ask more questions then, or later by telephone. The newsletter provided an invitation for parent's to access and complete the survey via an electronic link created from Survey Monkey (Collier, Johnson, & Dellavalle, 2005). Each School Principal also provided all parents with an opportunity to participate via an email invitation. The school newsletter also provided information

which alternatively suggested that parents could access a hard copy of the survey at the health centre. Interested parents responded by returning the completed questionnaire in the provided self-addressed sealed envelope, to be collected by the nurse researcher from the health centre.

Participating students were also invited to complete a questionnaire (Appendix E). The questionnaire was four pages and administered by hard copy or on-line. Schools A and C chose to distribute hard copy surveys during classes. Student completed the surveys during class time and they were collected by teachers who compiled them for the nurse researcher. School B chose to distribute the survey electronically to the students who were given class time to complete it.

3.6.1 Parent questionnaire

The parent questionnaire consisted of two pages and four sections (Appendix D). Section one asked whether their child had seen the nurse. Section two asked about whether the parent's expectations had been met following their child's visit to the nurse. Section three asked if parents would be happy for their child to see the nurse in the future. Sections one, two and three all used a tick box style. Section three also included open ended questions allowing the opportunity to write comments. Section four contained a validated instrument that has been used to identify perceptions of the school nurse role in a large population-based study in Israel (Gross et al., 2006). The instrument was included in a published article. As this was included in the public domain the permission of the author was not sought to use the tool.

The instrument asks a series of twelve questions relating to the parent's perception of the role of the school nurse using a 4- point Likert scale (i.e., not important, slightly important, quite important and very important). Two questions asked about the traditional role of the nurse including first aid and hygiene. Four questions asked about the nurse's role to provide and participate in health education with school teachers and students. Three questions were centred on mental health assessment and mental health promotion and three questions related to following up on students of concern. Reliability and validity of the questionnaire was reported in the previous study (Gross, Cohen, & Kahan, 2006) by a correlation of the responses to similar items, however, statistics were not reported. Content validity was conducted with experienced school health nurse academics, health promotion and research

academics (n=8) at Curtin University. A single question: “low performance may indicate the presence of health problems in students” was removed due to it being deemed unsuitable because it was unclear and is repeated in other questions.

3.6.2 Student questionnaire

The student questionnaire was divided into two sections which were preceded by six introductory questions (Appendix E). The introductory questions asked the student's gender and year. More specifically, question three asked if the student knew that the school had a nurse. Question four asked if the nurse had been involved in student's health education in the following areas: first aid, general, sexual and mental health by using a tick box style of questions. Question four also included lines for the student to write comments about any other health education that the nurse had been involved in. Question five asked if the student believed it was good for the nurse to be involved in their education. Question six asked if the student had been to see the school nurse. Students were then asked to complete Section B if they had ever been to see the nurse and Section A if they had not.

The first question in Section A, question seven, asked the student why had they not been to see the nurse. Possible responses were: no reason to go, too shy, busy, embarrassed or worried that the nurse may tell their parents. The question also included opportunity for the student to list other reasons why they had not been. Question eight contained seven statements with responses recorded on a 4-point Likert scale (i.e., not important, slightly important, quite important and very important). Five of the statements asked how important it would be for the nurse to demonstrate compassionate care if the student *had* been to see her/him. Five statements asked about the nurse's communication skills, one statement asked about the student's level of comfort with the nurse, and one statement asked if it would be important for them if the advice was good and helpful. The remaining two statements asked if it would be important if there was enough time allocated for the visit, and if privacy was maintained.

The first question in Section B asked the students how they knew the school had a nurse. Possible responses were: website, newsletter, being informed by a parent or teacher, and seeing the clinic. The question also provided a space for the student to identify other ways they may have been aware of the service. Question ten asked

how many times the student had ever been to see the nurse in the last week, month and year by including lines for the student to provide their answer.

Question 11 asked the student's about access to the clinic. Three tick boxes were provided for the student to identify if access was difficult, easy or very easy. Question 12 asked the student's when they last visited the nurse did they need to make an appointment. Question 13 asked the student if they were able to see the nurse straight away. Question 14 asked if the nurse was unavailable, did the student return. Question 15 asked the student the reason for their visit to the nurse and offered five responses including: first aid, feeling unwell, sexual health, support and to talk to someone and, information and advice by using a tick box style of questions. Question 15 also included lines for the student to write comments about any other another reason for the visit to the nurse.

Question 16 contained seven statements with responses recorded on a 4-point Likert scale (i.e., not important, slightly important, quite important and very important). Five of the statements asked how important it was for the nurse to demonstrate compassionate care at the visit. Five statements asked about the nurse's communication skills, one statement asked about the student's level of comfort with the nurse, and one statement asked if it would be important for them if the advice was good and helpful. The remaining two statements asked if it would be important if there was enough time allocated for the visit and if privacy was maintained.

Question 17 offered a series of five questions about the outcome following the student's visit to the nurse, using a tick box style (yes, no and not applicable (N.A)). The first question asked the student's if their parents were involved. The students were asked if they required a follow up appointment with the nurse. One question asked if the student was referred to their general practitioner. The following two questions asked about referrals including: outside service providers such as the hospital and referrals within the school such as the pastoral care provider.

Content validity was conducted with the same professionals who conducted the validity testing for the parent questionnaire. Face validity was piloted with 10 students and their parents known to academic child health staff. Parents and students reported that the questionnaire took approximately 10 minutes to complete. No parent or student reported that a question was difficult to understand and no-one

asked for clarification. A number of respondents did suggest the addition of a “not applicable” category for Question 17 that asked about outcomes related to the last visit to the nurse. Responses showed that information was perceived similarly amongst the participating students.

3.6.3 Statistical power

It was decided at the outset of the project to sample from all students in all year groups of the school, rather than attempt a stratified random sample, which would have increased the complexity of the required statistical analysis and placed additional burden on schools. It was thought to be feasible to take a convenience sample of up to 50 students and 50 parents from each of six year groups at each school, so as to obtain views from as wide a range of perspectives as possible. Power calculations were not undertaken because the sample was not chosen from the entire school community at random. Circumstances out of the control of the Nurse Researcher, such as some students attending school camp, meant that the numbers obtained were not achieved. While it was not intended to make inferences about the findings of this study to the general population of secondary school students and parents, the numbers obtained were sufficiently large to enable meaningful statistical analysis to be undertaken and conclusions drawn regarding the participants.

3.6.4 Data entry and cleaning

All data were entered into Survey Monkey either directly online by the respondent or manually by the researcher. The data were subsequently extracted and uploaded into a SPSS database. All analysis was undertaken using SPSS (v.22) software (Cleophas, 2010). Initially, all data were examined for omissions, inconsistencies, and possible data entry errors. Following cleaning, the data were scrutinised for missing values. It was clear that minimal data were missing. Those data that were missing were missing at random. No values were imputed.

3.6.5 Derivation of variables

Binary, categorical and continuous variables were derived from raw data prior to statistical analysis.

3.6.5.1 *Parent questionnaire*

First, a summary variable identifying the percentage of parents whose child attended each school was derived from information recorded by the researcher. This variable contained three categories (School A, School B, and School C). Question One asking if the child had been to see the school nurse was retained as is with three categories (yes, no, and don't know). Question Two about the visit meeting expectations was also retained as is with three categories (yes, no, and unsure). As very few comments were made by parents who reported that their child's visit to the nurse did not meet their expectations, these data were not analysed. Question Three asking if the parent was happy for their child to see the nurse in future was retained as a binary variable (yes, no). A series of variables were derived to summarise the information contained in the twelve questions relating to the parent's perception of the role of the school nurse. Firstly, each of the 12 variables was retained using the 4-point Likert scale (not important, slightly important, quite important and very important). Secondly, 12 binary variables were created by combining the first two and the second two Likert categories (slightly/not important, quite/very important). Thirdly, a continuous variable was created by adding together the scores for 10 of the 12 statements for each respondent. The statements regarding first aid and hygiene in the school were discarded because they were not seen to be related to the parent's overall perception of the school nurse's role. The continuous variable had a minimum score of 10 and a maximum score of 40.

3.6.5.2 *Student questionnaire*

Firstly, a summary variable identifying the percentage of students who attended each school was derived from information recorded by the researcher. This variable contained three categories school (A, B, and C). Question one of the student questionnaires was retained as is with two categories (male and female). Question two was also retained as is with six categories of school year: seven to twelve inclusive. Question three asking about knowledge of the nurse was retained as a binary variable (yes, no). Five variables were derived to summarise the data contained in Question four regarding the school nurse's role in health education. Each of these five variables (promoting adult sexual health (PASH) program, growth and development, first aid and mental health, and other) had two response categories (yes, no). Twenty-one comments were made by students who reported "other"

regarding the nurse's involvement in their health education. Eight of these comments were found to fit within one of the prescribed variables, while 13 were grouped into a new variable called "health promotion". Question five which asked if it was good that the nurse had been involved in the student's health education was retained as a binary variable (yes, no). Question six asking if the student had been to see the school nurse was retained as a binary variable (yes, no).

If the answer to Question six was "No" the student was directed to Section A which had two questions. Six variables were derived to summarise information in Question seven in Section A asking the student why they had not been to see the school nurse (no reason to go, too shy, too busy, worried the nurse might tell mum, dad or teacher, too embarrassed, and other). Each of these variables had two possible responses (yes, no). A series of variables were derived to summarise the information contained in the seven questions asking students about the school nurse role. Firstly, seven categorical variables, each with four response categories, were derived for each of the seven questions (not important, slightly important, quite important, and very important). Secondly, seven binary variables were created by combining the first two and the second two Likert categories (slightly/not important, quite/very important). Thirdly, a continuous variable was created by adding together the scores for five of the seven statements for each respondent. The statements regarding enough time for the visit and privacy were discarded because they were not seen to be related to the theme of compassionate care. The continuous variable, named "Compassion" had a minimum score of five and a maximum score of 20.

If the answer to Question six was "Yes" that the student had been to see the School Nurse they were directed to Section B which had nine questions. Question nine regarding the student's awareness of the school nurse was retained as is with five variables (website, saw the nurse at the clinic, newsletter, parent/teacher informed me, and other). Each variable had two response categories (yes, no). Question 10 was broken down into three separate questions that asked about students' frequency of visits to the nurse in the last, week, month and year. A new variable was derived for each of these questions. It was expected that students would write a number in the space provided. Most did this; however, some chose to leave the question blank if they had not visited in that specific time frame, for example, the last week. Rather

than code these as zero a missing category was created. Therefore, for each variable there were seven categories ranging from missing to five times or more.

In Questions 11 to 14 asking about access to the school nurse there were 48 students who did not respond. Because there was no apparent reason for this non-response, a missing category was created for each of the four variables. Question 11 had four categories (missing, very easy, difficult, and easy). Questions 12, 13, and 14 had three categories (missing, yes, no).

Six variables were derived to summarise information in Question 15 regarding the student's reason for going to see the nurse (first aid treatment, feeling unwell, advice/information, support/talk to someone, sexual health, and other). Each of these variables had two possible responses (yes and no).

A series of variables were derived to summarise the information contained in the seven questions asking students who reported that they had seen the school nurse about the school nurse role in Question 16. Firstly, seven categorical variables, each with four response categories, were derived for each of the seven questions (not important, slightly important, quite important, and very important). Secondly, seven binary variables were created by combining the first two and the second two Likert categories (slightly/not important, quite/very important). Thirdly, a continuous variable was created by adding together the scores for five of the seven statements for each respondent. The statements regarding enough time for the visit and privacy were discarded because they were not seen to be related to the theme of compassionate care. The continuous variable, named "Compassion" had a minimum score of five and a maximum score of 20.

Question seventeen which asked about the outcome of the visit to the nurse contained five separate questions which were coded as five variables. There were between 48 and 50 students who did not respond to each question. Because there was no apparent reason for this non-response, a missing category was created for each of the five variables (missing, yes, no, and not applicable).

3.6.6 Analysis

Frequencies were tabulated for all variables which were then presented in tables and graphs in the results section of the thesis. Bivariate analysis using contingency tables

and Chi-square were used to investigate possible difference for parents and students with regard to a range of outcomes. A p-value of 0.05 was considered statistically significant. The prevalence of parent's perception of aspects of the school nurse role was examined according to the school that their child attended. The prevalence of parent's perception of aspects of the role of the school nurse according to whether or not their child had been to see the school nurse was examined. Lastly, the prevalence of parent's perception of aspects of the role of the school nurse according to whether or not their expectations had been met was examined. With regard to students, firstly the prevalence of their perception of aspects of the role of the school nurse was examined according to the school that they attended. Next, the prevalence of student's perception regarding the level of compassionate care they received was examined according to their gender. Finally, the prevalence of student's perception regarding the level of compassionate care they received was examined according to whether they were in junior or senior secondary school.

With regard the continuous variable that summarised parent's perception of the school nurse role, it was clear from the histogram that these data were normally distributed. This was confirmed by formal tests of skewness and kurtosis. As the data were normally distributed, a T Test was applied to compare the means of parent's perception for those parents whose child had seen the school nurse and those that had not (Moore, 2010). Analysis of Variance (ANOVA) with Bonferoni correction was used to compare mean scores for parent's perception of the school nurse role, firstly according to school (A, B, and C), and secondly according to whether or not the child's visit to the school nurse met their parent's expectations (yes, no, unsure) (Richardson-Tench et al., 2014). For all of these analyses statistical significance was set at $p = 0.05$.

As far as the continuous variable that summarised student's perception of the importance of compassionate care in the school nurse's role, it was clear from the histogram that these data were not normally distributed. This was confirmed by formal tests of skewness and kurtosis. Therefore, non-parametric analysis was performed to examine relationships between schools, gender and year at school as independent variables and the compassion score as the dependent variable. Non-parametric tests were performed using Mann-Whitney U test for comparison with two categories as Mann-Whitney U test is used as the equivalent of the independent

sample t-test when the data is not normally distributed (Cleophas, 2010). The Mann-Whitney U test was applied to compare median compassion scores for gender (male, female) and year at school (junior, senior). The Kruskal-Wallis test which is used for non-parametric analysis of variables with more than two categories, was applied to compare median compassion scores for school attended (A, B, C) (Cleophas, 2010).

3.7 The qualitative component of the study

A description of the qualitative methodology within the mixed methods approach is presented in this section. This section describes the sample selection, instrumentation, method for data collection and management, presenting the data, constant comparison analysis to identify major categories and data integrity and validity.

3.7.1 Focus group sample selection

As the participant sample for the focus groups at each school were slightly different, each school will be presented separately in the next section.

3.7.1.1 School A

The Principal (School A) volunteered the school to be the first school to participate in the study during May 2012 and was completed by June 2012. All parents were invited to participate in the focus groups via the school e-newsletter and a hard copy was displayed at each school's health centre and administration office. The parent focus group (n=3) was held in a quiet room adjacent to the health centre. The pastoral care co-ordinator purposefully selected year 12 students (n=10) to participate in the focus group during form time in a quiet private room in the school library. The pastoral care group which included teachers and allied health (n=10) was invited to participate in the focus group. This was conducted during the pastoral care meeting time in the staff boardroom.

3.7.1.2 School B

School B community commenced qualitative data collection in June 2012 and completed in August 2012. The parent focus group (n=8) was arranged through the deputy Principal and was conducted during a 'Parents and Community' (PNC) meeting time in a meeting room at the school. The deputy Principal purposefully selected year 11 students (n=12) to participate in a student focus group held in a

school class room. All teachers were invited to participate in the teacher focus group via the newsletter, and the deputy Principal was instrumental in facilitating this recruitment. The teacher focus group (n= 4) was conducted in a small meeting room at the school.

3.7.1.3 *School C*

School C commenced qualitative data collection in June 2012 and was completed by at the end of August 2012. The School Principal purposefully invited all parents from the Parents and Community group to participate in the parent focus group. In addition all parents were invited to participate in the focus groups via the school e-newsletter. The parent focus group (n=6) was held in the staff room as part of the agenda of the Parents and Community evening meeting. The Principal purposefully selected year ten students (n=13) to participate in the student focus group held in a school classroom during class time. The pastoral care group which included teachers and allied health (n=4) was invited to participate in the focus group. This was conducted during the pastoral care meeting time in the student services meeting room.

Focus groups were conducted at the three schools including: student focus groups (n=3), parent focus groups (n=3), teacher focus groups (n=3). The number of focus groups conducted in this study is consistent with recommendations of three or four focus groups, depending on the complexity of the study (Holloway, 2010). This study met the requirements for the amount of participants in each focus group; which may be as few as two or three ranging to 8 to 12 (Gibson, 2007; Holloway, 2010; Morgan, 1995). Consistent with qualitative focus group data collection methods for large groups, a note-taker, who was an academic and registered nurse, was present during three of the large focus groups in this study to assist with field notes and draw diagrams (Holloway, 2010). In summary, nine focus groups were held, with student, parent, and teacher groups taking an average of 19, 26 and 27 minutes respectively.

3.7.2 One-on-one interviews sample selection

It is appropriate for focus groups to be used in conjunction with one-on-one interviews to further explore participant's perspectives (Holloway, 2010). In this study the one-on-one interviews were designed as an extension of the focus group, and allowed further exploration and investigation of the concepts and issues that may

have arisen in the focus group discussion. The primary goal of the qualitative researcher is to illicit information from participants to understand their perceptions, feelings, and knowledge, through a purposeful conversation using an interview method (Docherty & Sandelowski, 1999; Holloway, 2010; Seigart et al., 2013).

Qualitative data were collected using one-on-one interviews with key stakeholders. The one-on-one interviews were held at a later date than the focus groups in a quiet, small meeting room at each school. All teachers, parent representatives, School Principals, school psychologists, pastoral care workers, counsellors, and school nurses were invited to participate in the one-on-one interviews. During the focus groups all participants were given the opportunity to participate in a one-on-one interview and an information sheet (Appendix I) was available if they showed interest. A few participants were purposively selected as a result of the rich contribution they made during the focus group. In addition, the school nurse was instrumental in facilitating the recruitment of the majority of one-on-one interviewees. One-on-one interviews were conducted with 18 participants including: parents (n=3), teachers (n=4), nurses (n=8 school A n=2, school B n=3 school C n=3), School Principals (n=1), deputy Principal (n=1), and school counsellors (n=1). The interview guide was the same interview guide used in the focus groups, and the additional one-on-one interview offered to focus group participants provided an opportunity for the participants to elaborate further on these questions. These interviews allowed for further comparison of different perspectives about the school nurse's role. The interviews lasted on average for 17 minutes each, with the longest being 33 minutes and the shortest one being eight minutes.

3.7.3 Consent

The School Principal at each school gave permission for each school to participate in the study (see section 3.4). Active consent was obtained from students, parents, teachers, parent representative, School Principals, and school psychologists, who participated in the focus groups and one-on-one interviews. All participants were given a parent/teacher or student information sheet (Appendix I, J) prior to the commencement of the focus groups. Parents, teachers, nurses, allied health, and students gave written consent at the beginning of the focus group (Appendix K, L) and were informed that they could withdraw from the interview at any time. The Curtin University ethics committee identified parental consent for senior students to

participate in focus groups was not required. Additionally, all Principals had given approval for the years 10, 11, and 12 students to be able to consent as mature minors (Hildebrand et al., under review).

3.7.4 Instrumentation

The initial components of the interview guide were developed after a review of international and national literature and collaboration with key stakeholders. The interview guide aimed to explore stakeholder's perspectives about the role of the school nurse in general and in particular the role of the school nurse in mental health prevention and promotion. Questions for the interview guide for focus groups and one-on-one interviews (Appendix F) were developed by the applicant and her PhD supervisors and were reviewed by a panel of experts from child health nursing, school nursing, and health promotion fields (n=7). The qualitative interview guide was piloted with 10 students and their families known to academic child health staff. Pre-testing is important to ensure questions are relevant, language is appropriate, and to determine if they generate discussion amongst participants (Morgan, 1995).

A semi-structured interview question guide was used to guide the interview, however the researcher was able to modify or extend questions based on the discussion and new themes that began to emerge. To encourage participants to feel at ease and comfortable to share their thoughts, the interview started with an introduction explaining that their opinions are important (Gibson, 2007; Streubert & Carpenter, 1999). To actively encourage group interactions, the group rules which included confidentiality, honesty, speaking and freedom were explained (Smithson, 2000; Webb & Kevern, 2001). Consistent with other studies the interview commenced by providing a short icebreaker that asked participants to identify their name and favourite food (Gibson, 2007; Sonnevile, La Pelle, Taveras, Gillman, & Prosser, 2009). The interview commenced with these questions as it provided an opportunity to develop a rapport with and between participants; when people feel safe within the group they are more likely to contribute to the discussion (Gibson, 2007; Kitzinger, 1994; Morgan, 1995).

Following the icebreaker exercise, participants were asked an open ended question about their thoughts on the role of the school nurse. This provided the participants with an opportunity to talk, and encourage discussion about the nurse's role (Polit &

Beck, 2010; Richardson-Tench et al., 2014). Students became more confident as the interviews progressed showing genuine interest in the topic. Following a discussion about the nurse's role the participants were asked about their perspective on the nurse engaging in teaching mental health literacy. A prompt was used: *For example the nurse running a session on skills to stand up to a bully*". Participants were then asked for their opinion about the nurse providing mental health education, for example: "Students taking control of their own health status". Another prompt was offered: *For example, the nurse may facilitate a session on providing tips on how to be safe on the internet*". Prompt questions were utilized to assist participants to provide rich descriptions of their perspectives (Holloway, 2010).

Following a discussion about the nurse's role in mental health literacy and education the participants were asked: *"What are your thoughts on the nurse facilitating students, teachers and parents to recognise and take appropriate action when a problem first arises?"* Qualitative studies have made use of short vignette or brief description of a situation to stimulate a discussion (Holloway, 2010; Polit & Beck, 2010). The vignette was developed by the author (and her supervisors) after the author's experience in the school nurse role and was tested during the pilot stage of the interview guide. The following vignette identified:

For example the student is stressed at exam time.

In this example do you think the nurse has a role in:

Raising the awareness of risk factors?

Raising awareness about how to access help?

The vignette introduced the concept of the nurse's role in providing proactive and reactive mental health information without using the term mental health in an attempt to reduce any stigma associated with mental health care. In addition the vignette asked the question in the third person which was seen to be a less confronting manner. Specifically the interview aimed to identify the stakeholder's perceptions of the nurse's role in the following areas:

- Assessment, triage and providing counselling;

- Working with other service providers such as the school psychologist and community health professionals;
- An understanding of participants' expectations of school nurse's qualifications and professional development; and
- Factors that may assist to improve assessment and management of mental health issues within schools.

3.7.5 Method of data collection and management

Good qualitative research practice suggests interviews are conducted by the same person and consistent with this recommendation the researcher in this study conducted all focus group and one-on-one interviews (Russell & Olesen, 1995; Windsor, Baranowski, Clark, & Cutter, 1994). The interviewer was the author of this thesis and held expertise in community health and school health nursing, working with adolescents, and conducting interviews and focus groups. Furthermore, other qualitative research studies have found to conduct research with children and adolescents requires sound communication skills an understanding of the developmental age of children who participate in their studies (Docherty & Sandelowski, 1999; Sacks & Westwood, 2003). The knowledge and experience of the researcher attributed toward theoretical sensitivity; where the researcher has awareness and insight of the data and the ability to give meaning to the data (Richardson-Tench et al., 2014).

There is some degree of researcher bias in qualitative studies; however, it is important to recognise researcher and respondent bias during the analysis (Strauss & Corbin, 1998; Streubert & Carpenter, 1999). While the familiarity of the literature and experience of the researcher may increase theoretical sensitivity, the researcher must remain open and alert for potential emergent data and not allow researcher bias to prevent this. Reduced interviewer bias was achieved by presenting findings rich with the inclusion of participant's quotes and commentaries (Streubert & Carpenter, 1999). Additionally, to reduce researcher bias data were coded by the researcher, then reviewed and discussed with the candidates supervisors (Holloway, 2010). All interviews and focus group discussions were conducted and digitally audio recorded and transcribed in full by the researcher. For larger research groups a note taker was present. To enhance accuracy both supervisors listened to the recordings while concurrently reading the corresponding transcript.

3.7.6 Presenting the data

All participants in the one-on-one interviews and focus groups were allocated a pseudonym. Schools used in the focus groups were classified as School, A, B or C. Data are presented with the participant's name, role (for example, teacher) and then school (A, B or C). Therefore all quotes are accompanied with a short participant profile, for example (Mike, parent, School A). Consistent with other qualitative study terminology, this study uses the terms, majority, many, some and few to describe the participant's thoughts, opinions, attitudes and feelings. Qualitative studies look for the meaning in a situation and to produce findings that reflect understanding the whole, similar to holistic nursing, rather than the quantitative approach with rigid research design and precise statistical analyses statistics (Burns, 2003; Strauss & Corbin, 1998).

3.7.7 Constant comparison analysis originating from grounded theory

Data collection, analysis and presentation used a constant comparison analysis approach that originated from grounded theory, which compares individual experiences and group experiences to identify main categories (Strauss & Corbin, 1998). Interviews were digitally audiotaped and transcribed by the researcher in full during the data collection period. Data management of focus group and one-on-one full transcripts was facilitated by QSR NVIVO 10 software package (Nvivo, 2012). Qualitative data computer analysis systems were used in this study to assist to manage, merge and match large amounts of qualitative data transcripts (Richardson-Tench et al., 2014).

NVIVO 10 enabled the researcher to search for salient words and themes within the transcripts to organise the data. The researcher immersed herself in the text looking for meaningful sections naming and coding them to find the implicit meanings within the text (Richardson-Tench et al., 2014). Analysis was completed by coding apparent themes from the transcripts of taped interviews and then categorising these themes. Subsequent interviews were scrutinized for statements that fit with previously developed themes. Significant statements from each stakeholder group were organised into headings from the developed and emergent themes. Data were then organised into each stakeholder group and analysed within that group. The emergent themes were reviewed by research team that comprised of the PhD student and her two supervisors along with the original data for comparison and critique. In an

endeavour to reduce the possibility of biased decisions, triangulation was conducted where the research team collaborated with data collection, coding and analytic decisions (Polit & Beck, 2010). Peer debriefing sessions were also held with the research team during data collection and analysis where the author presented written summaries and discussed findings of the data that had been gathered including emerging themes (Polit & Beck, 2010, p.330).

Data saturation was achieved in this study after all of the focus groups and fourteen interviews had been conducted. At this time, the interview content became repetitive and confirmed prior findings without any additional information (Streubert & Carpenter, 1999). Eight themes and four sub themes emerged from the data to develop the model identifying the framework for school nurse practice. The eight themes included: resources for the school nurse; mental health literacy, information and support; therapeutic communication; assessment; 'triage'; mental health care; general health care; and collaboration and referral. Within the key theme resources for the school nurse, four subthemes emerged: time, professional development, clinic and support.

The additional four one-on-one interviews were held to confirm data saturation. Saturation was confirmed through review by supervisors who both held expertise in the phenomena studied and grounded theory methods (Polit & Beck, 2010). Guidelines for sample sizes of qualitative interviews required to achieve saturation are debated with the concept of saturation being raised as more important than the number of interviews (Mason, 2010). This study meets the suggested guidelines where fifteen interviews is the smallest sample size (Bertaux, 1981). Furthermore, while twenty five interviews are suggested as adequate for some grounded theory studies (Charmaz, 2006) this study also used focus group data and one-on-one interview data to achieve saturation.

3.7.8 Data integrity and validity

The goal of rigour in qualitative research is for the researcher to be thorough when collecting the data, and aim to accurately describe and interpret participant's experiences (Burns, 2003; Holloway, 2010; Streubert & Carpenter, 1999). Additionally, qualitative research rigour refers to thoroughness and competence (Holloway, 2010). The validity and reliability of qualitative research is usually

assessed by evidence of trustworthiness of the methodology (Guba & Lincoln, 1994; Holloway, 2010; Polit & Beck, 2010). To establish trustworthiness this study applied Guba's gold standard of criteria to assess trustworthiness of qualitative studies including: credibility, dependability, confirmability and transferability (Lincoln & Guba, 1985).

Credibility refers to researchers efforts to corroborate findings in the data through strategies such as peer debriefing and audit trails (Polit & Beck, 2010). The researcher in this study engaged in regular, fortnightly peer debriefing sessions to review transcriptions, coding and analyses. Research was compared and discussed with both supervisors, who held expertise to evaluate emerging interpretations (Schneider, 2007). Credibility of these data were achieved by ensuring the interview practice was consistent with good practice for interviewing children and adolescents (Docherty & Sandelowski, 1999; Sacks & Westwood, 2003). In addition to promote credibility, confirmability in this study was achieved by the researcher and the supervisors sharing a transparent audit decision trail that recorded the decisions, sampling, data collection methods, and analysis followed (Schneider, 2007). Furthermore, the inclusion of rich quotes in this study helps to support the findings derived from the data and establish the credibility of emerging themes (Holloway, 2010).

The findings of this study are consistent and accurate; therefore dependable. The context is clearly identified and decision making through and audit trail are clear therefore the study could be repeated in similar circumstances with similar participants (Holloway, 2010). Transferability refers to how this study results will have application and be relevant to different participants in different settings. Transferability also known as fittingness, is similar to generalizability in quantitative studies (Polit & Beck, 2010; Strauss & Corbin, 1998). Transferability in this study was achieved by ensuring thorough detail of the context and participants (Polit & Beck, 2010).

3.8 Ethical Considerations

Ethical approval was obtained from Curtin University's Human Ethics Committee (Approval number HR 12/2012) and the School Principal determined the level of ethics required at each independent school. The researcher informed the school

community about the study and invited parents and staff to participate in the study via the school newsletter (Appendix H). An information letter was provided to each school to accompany the questionnaire (Appendix G). Parents were reassured and informed that the care of their child would not be affected by their decision to participate or not. Following consultation with the School Principals at each of the three schools in the project, each school wished to use the passive opt out option for the administration of student surveys across year's seven to 12. The reasons included; the Principals believed that in their experience the consent forms are difficult to obtain, and, after review of the student survey each Principal in the participating schools believed the material was suitable to warrant the passive opt out option. The researcher discussed passive opt out option with the project supervisors and then sought Curtin University Human Resource Ethics Committee using the required Curtin University ethics amendment form B, which resulted in the passive opt out option being approved. Parents and teachers were invited by email to participate in focus groups or one on one interview. Written informed consent was obtained from all individuals for all focus groups and interviews (Appendices K &L).

The researcher collaborated with teaching staff including the Principal to decide which class and year were to be invited to participate in the focus groups. The students were handed information about the project and an invitation by the teacher in the form class (Appendix J), and the student were given the option to attend. Written informed consent was obtained from all students (Appendix L).

In the event that a participant had a personal concern following the completion of the questionnaire, focus group, or interview, the researcher, who is a Registered Nurse and experienced Community Health Nurse, was able to offer support. In the event of the research process causing distress to any participant there was a strategy in place to refer to appropriate service providers; however, this was not necessary.

3.8.1 De-identification, confidentiality and data storage

Audio recordings (on disc or tape) of the interviews and focus groups were kept in a secure locked filing cabinet in the Nurse Researcher's office at Curtin University which was locked when vacant. Questionnaires that are identified by study number only are also stored in a locked filing cabinet in the Nurse Researcher's Office at Curtin University which was locked when vacant. All electronic files (interview,

focus group, and questionnaire data) were stored on a secure, password protected Curtin University network drive. Only the Principal Investigator, Co-investigator, and Nurse Researcher had access to the data. Once the study has been completed, all data will be securely stored at Curtin University for seven years or until the youngest participant has reached 25 years of age before being destroyed (Western Australian University Sector Disposal Authority, 2013).

No names or personal information were recorded on questionnaires. Names used in focus groups and personal interviews were changed to pseudonyms when data were first transcribed. The consent forms were stored separately to the transcribed data. SPSS data files were stored in password protected computer software in the School of Nursing and Midwifery and Curtin University by the nurse researcher. All information collected was identified by study number only and was accessed only by the researcher. Participants were provided contact details of the research supervisors and the Curtin University Human Ethics Committee for further information or if they had a concern about the research.

3.9 Summary

This Chapter described the qualitative and quantitative methods approach within a mixed concurrent mixed methods design. Data were collected from three independent co-educational secondary schools in metropolitan Perth, Western Australia. Quantitative data were collected from a convenience sample of parents and students and qualitative data were collected from purposive sample of parents, students, teachers, nurses, and allied health staff within the school community.

Quantitative data were collected via self-report questionnaire from students and parents. The questionnaire investigated perceptions of the role of the school health nurse in general and in terms of mental health prevention and promotion. Reliability and validity of the questionnaire was reported. Binary, categorical and continuous variables were derived from raw data prior to statistical analysis. The following variables were created; if the child had been to see the school nurse, about the visit meeting expectations, if the parent was happy for their child to see the nurse in future. A series of variables were derived to summarise the information contained in the twelve questions relating to the parent's perception of the role of the school nurse.

Bivariate analysis using contingency tables and Chi-square were used to investigate possible difference for parents and students with regard to a range of outcomes. The prevalence of parent's perception of aspects of the school nurse role was examined according to the school that their child attended. The prevalence of parent's perception of aspects of the role of the school nurse according to whether or not their child had been to see the school nurse was examined. Lastly, the prevalence of parent's perception of aspects of the role of the school nurse according to whether or not their expectations had been met was examined. As the data were normally distributed, a T Test was applied to compare the means of parent's perception for those parents whose child had seen the school nurse and those that had not (Moore, 2010). Analysis of Variance (ANOVA) with Bonferoni correction was used to compare mean scores for parent's perception of the school nurse role.

Purposive samples of students were also invited to complete a questionnaire about the role of the school health nurse in general and the role with regard to mental health promotion. The students were asked had been to see the school nurse or not. Depending on their responses, students were directed to answer further questions around their expectations of the nurse's role, or about their experience. With regard the continuous variable that summarised student's perception of the importance of compassionate care in the school nurse's role, tests of skewness and kurtosis were applied. Non-parametric analysis was performed to examine relationships between schools, gender and year at school as independent variables and the compassion score as the dependent variable. The Mann-Whitney U test was applied to compare median compassion scores for gender (male, female) and year at school (junior, senior). The Kruskal-Wallis test which is used for non-parametric analysis of variables with more than two categories, was applied to compare median compassion scores for school attended (A, B, C) (Cleophas, 2010).

Constant comparison analysis originating from grounded theory was used in the qualitative methods of this research. Focus groups with students, parents, teachers, and allied health and one-on-one interviews with parents, teachers, nurses and allied health were conducted with a purposive sample of participants to further explore the role of the school nurse and to corroborate the key findings within the quantitative data and develop a framework for nurse's practice. Qualitative data were collected using one-on-one interviews (n=18) with key stakeholders and focus groups data

were collected at the three schools including: student focus groups (n=3), parent focus groups (n=3), teacher focus groups (n=3). The total number of participants included: student focus groups (n=3; n=35), parent focus groups (n=3; n=17), teacher focus groups (n=3; n=18).

The qualitative analysis began with the researcher looking for salient words and themes within the transcripts to organise the data. The researcher then looked for meaningful sections naming and coding them to find the implicit meanings within the text. Analysis was completed by coding apparent themes from the transcripts of taped interviews and then categorising these themes. Subsequent interviews were scrutinized for statements that fit with previously developed themes. Significant statements from each stakeholder group were organised into headings from the developed and emergent themes. Data were then organised into each stakeholder group and analysed within that group. The emergent themes were reviewed by research team with the original data for comparison and critique. Data saturation was achieved in this study after all of the focus groups and fourteen interviews had been conducted. At this time, the interview content became repetitive and confirmed prior findings without any additional information.

Saturation was confirmed through review by supervisors. Eight themes and four sub themes emerged from the data to develop the model identifying the framework for school nurse practice. The eight themes included: resources for the school nurse; mental health literacy, information and support; therapeutic communication; assessment; 'triage'; mental health care; general health care; and collaboration and referral. Within the key theme resources for the school nurse, four subthemes emerged: time, professional development, clinic and support.

4 RESULTS

4.1 Introduction

In chapter four the quantitative and qualitative results of the study are presented. The quantitative results are presented in the first major section. This section begins with parent and student response rates. These results are followed by the parent prevalence rates for parent characteristics, experience, and perception of the school nurse's role. The section concludes with prevalence rates for student's perception of the importance of compassionate care provided by the nurse and the results of the comparison between schools, gender, and year at school as independent variables and the compassion score as the dependent variable. Following the quantitative results, the qualitative results are presented and explained. This section introduces the model of the nurses practice framework that emerged from the qualitative data. A discussion about each theme of the model is then presented with supporting narrative.

QUANTITATIVE RESULTS

4.2 Response rates

The response rates for parents and students who completed the survey administered in three schools are presented in Table 4.1.

Table 4.1
Parent and Student Response rates in schools

Characteristic	Number of Questionnaires returned	Number of Questionnaires Sent out	%
<u>School Parents</u>			
School A	218	393	55
School B	97	300	32
School C	48	466	10
<u>School Students</u>			
School A	346	350	99
School B	291	507	57
School C	110	170	64
<u>Overall</u>			
Parents	363		31
Students	747		72

Table 4.1 shows that for parents the highest response rate was achieved in School A (55%), followed by School B (32%), and School C (10%). For students, the response rate for School A was 99 per cent. For School C the response rate was 64 per cent

and for School B it was 57 per cent. Overall, the response rate for parents was 31 per cent while the response rate for students was 72 per cent.

4.3 Prevalence rates for parent characteristics, experience, and perception of the school nurse role

The prevalence rates for all variables that measured parent characteristics, their experience of the school nurse, and their views on the role of the school nurse were calculated (see Table 4.2, following page). Table 4.2 shows that the greatest proportion of parents who participated in the survey had a child in School A (60%). Twenty seven per cent of parents who participated had a child in School B and 13 per cent had a child in School C. Almost 90 per cent (89%) of parents reported that their child had been to see the school nurse at some time during the time they had been at this school. Nine per cent of parents reported that their child had not been to see the school nurse and two per cent said that they did not know. Of those parents who reported that their child had been to see the nurse, 77 per cent reported that the visit met their expectations, nine per cent said that the visit did not meet their expectations and 14 per cent were unsure. By far the greater majority of these parents (98%) said that they would be happy for their child to see the school nurse in the future.

Table 4.2
Parent characteristics, experience, and perception of school nurse role

Characteristic	% (number)
<u>School</u>	
School A	60 (218)
School B	27 (97)
School C	13 (48)
<u>Child been to see school nurse</u>	
Yes	89 (322)
No	9 (32)
Don't know	2 (9)
<u>Visit meet expectations</u>	
No	9 (33)
Unsure	14 (47)
Yes	77 (267)
<u>Happy for child to see nurse in the future</u>	
Yes	98 (355)
No	2 (7)
<u>Follow up on chronically ill students to prevent absenteeism</u>	
Not Important	9 (34)
Slightly Important	19 (68)
Quite Important	35 (127)
Very Important	37 (134)
<u>Provide health education for students and promote good health habits</u>	
Not Important	2 (8)
Slightly Important	7 (24)
Quite Important	29 (106)
Very Important	62 (225)
<u>Participate in school educational staff meetings</u>	
Not Important	6 (21)
Slightly Important	22 (81)
Quite Important	43 (156)
Very Important	29 (105)
<u>Evaluate students with behavioural problems</u>	
Not Important	20 (73)
Slightly Important	27 (97)
Quite Important	25 (92)
Very Important	28 (101)
<u>Advise/train school educational staff for the management of students with behaviour problems and low academic performance</u>	
Not Important	24 (87)
Slightly Important	27 (100)
Quite Important	26 (93)
Very Important	28 (101)
<u>Follow up on behaviour problems and low academic performance</u>	
Not Important	29 (103)
Slightly Important	27 (98)
Quite Important	22 (81)
Very Important	22 (81)
<u>Evaluate students with low academic performance</u>	
Not Important	32 (116)
Slightly Important	32 (117)
Quite Important	19 (69)
Very Important	17 (61)

Table 4.2 (continued)
Parent characteristics, experience, and perception of school nurse role

Characteristic	% (number)
<u>Provide first aid</u>	
Not Important	1 (4)
Slightly Important	0 (2)
Quite Important	4 (13)
Very Important	95 (344)
<u>Advise teachers and parents on health themes</u>	
Not Important	4 (13)
Slightly Important	12 (45)
Quite Important	39 (143)
Very Important	45 (162)
<u>Evaluate hygiene in the school</u>	
Not Important	2 (7)
Slightly Important	11 (41)
Quite Important	30 (109)
Very Important	57 (206)
<u>Evaluate cases of persistent absenteeism</u>	
Not Important	17 (62)
Slightly Important	26 (93)
Quite Important	30 (110)
Very Important	27 (98)
<u>Help students to improve their quality of life</u>	
Not Important	7 (26)
Slightly Important	15 (55)
Quite Important	33 (120)
Very Important	45 (162)

The remainder of Table 4.2 is dedicated to presenting the prevalence rates for the series of questions that ask about parents' perceptions of the school nurse role. Table 4.2 shows that 37 per cent of parents believed that it is very important and 35 per cent that it is quite important for the school nurse to follow up on chronically ill children to prevent absenteeism. Nine per cent of parents reported that that believed this was not important. As to providing health education to students to promote good health habits, 62 per cent of parents reported that this is very important, while only seven per cent said that it is slightly important and only two per cent that it is not important. Twenty nine percent of parents reported they believe it is very important to provide health education for students and promote good health habits, while 43 per cent reported it is quite important. Six per cent of parents believed it is not important.

Table 4.2 identifies that more than a half of all parents reported that they believe it is either very important (28%) or quite important (25%) to evaluate students with behavioural problems. Twenty per cent of parents believed this is not important. More than one quarter of the parents believed that it is very important (28%) for the

nurse to advise/train school educational staff for the management of students with behaviour problems and low academic performance, while another quarter (25%) suggested it is quite important. Less than a quarter (24%) of all parents said that it is not important. The number of parents who said it is very important or quite important to follow up on behaviour problems and low academic performance was 81 (22%) respectively. However, twenty seven per cent of parents reported they believe it is only slightly important to follow up on behaviour problems and low academic performance and 29 per cent said that it is not important at all.

Sixty one parents (17%) and 69 parents (19%), respectively, reported that it was quite or very important for the nurse to evaluate students with low academic performance. Sixty four per cent of parents said it is either slightly or not important. The great majority of participating parents (95%) reported that they believe the nurse's role included the provision of first aid. Only one per cent believed that it is not important for the nurse to provide first aid. Almost half (45%) of the participating parents said it is very important for the nurse to advise teachers and parents on health themes, while 39 per cent said it is quite important. Four per cent reported that it is not important. As to evaluating hygiene in the school, more than half (57%) of the parents said this is very important and 30 per cent said it is quite important. Only two per cent of parents reported their belief that it is not important to evaluate hygiene in the school.

Ninety-eight parents (27%) reported it is very important for the nurse to evaluate cases of persistent absenteeism and 110 (30%) believe it is quite important. Seventeen per cent of participating parents said it is not important. Lastly, Table 4.2 shows that 45 per cent and 33 per cent of parents, respectively, reported that it is very important or quite important that the nurse helps students with their quality of life, while seven per cent said it is not important.

4.4 Bivariate analyses - parents

4.4.1 Parent's perception of aspects of the role of the school nurse according to the school that their child attended

Table 4.3 presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of parent's perception of aspects of the role of the school nurse according to the school that their child attended.

Table 4.3
Parent's perception of aspects of the role of the school nurse by school

	Parent's perception of the school nurse role	
	Slightly/not Important % (number)	Quite/very Important % (number)
Follow up on chronically ill students		
<u>School</u>		
School A	28 (62)	72 (156)
School B	29 (28)	71 (69)
School C	25 (12)	75 (36)
Provide health education for students		
<u>School</u>		
School A	8 (17)	92 (201)
School B	7 (7)	93 (90)
School C	17 (8)	83 (40)
Participate in school education meetings for staff		
<u>School</u>		
School A		
School B	30 (65)	70 (153)
School C	25 (24)	75 (73)
Evaluate students with behaviour problems		
<u>School</u>		
School A		
School B	50 (110)	50 (108)
School C	44 (43)	56 (54)
Advise/train school staff for management of students with behaviour and low academic performance		
<u>School</u>		
School A	56 (122)	44 (96)
School B	48 (47)	52 (50)
School C	37 (18)	63 (30)
Follow up with behaviour problems and low academic performance		
<u>School</u>		
School A	59 (129)	41 (89)
School B	51 (50)	49 (47)
School C	46 (22)	54 (26)
Evaluate students with low academic performance		
<u>School</u>		
School A	68 (149)	32 (69)
School B	60 (60)	40 (39)
School C	54 (26)	46 (22)
Provide First aid		
<u>School</u>		
School A	1 (1)	99 (217)
School B	3 (3)	97 (94)
School C	4 (2)	96 (46)

Table 4.3 (Continued)
Parent's perception of aspects of the role of the school nurse by school

	Parent's perception of the school nurse role	
	Slightly/not Important % (number)	Quite/very Important %(number)
Advise parents and teachers on health themes		
<u>School</u>		
School A	16 (36)	84 (182)
School B	11 (11)	89 (86)
School C	23 (11)	77 (37)
Evaluate hygiene in the school		
<u>School</u>		
School A	12 (26)	88 (192)
School B	16 (16)	84 (81)
School C	12 (6)	88 (42)
Evaluate cases of persistent absenteeism		
<u>School</u>		
School A	44 (95)	56 (123)
School B	39 (38)	61 (59)
School C	46 (22)	54 (26)
Help students to improve quality of life		
<u>School</u>		
School A	22 (48)	78 (170)
School B	19 (18)	81 (79)
School C	31 (15)	69 (33)

Table 4.3 shows that there was very little difference between parent's perception of the role of the school nurse with regard to the follow up of chronically ill students with approximately three quarters reporting it to be quite or very important (72%, 71%, and 75% respectively). With regard to providing health education for students, 83 per cent of parents whose child attended School C reported it to be quite or very important compared with over 90 per cent in both School A and School B (92% and 93% respectively). This difference was not statistically significant. Again, there was little difference between parent's perceptions of the role of the school nurse with regard to the school nurse participating in school education meetings for staff. Seventy per cent of parents whose child attended Schools A and C reported that they believed this was quite or very important, while 75 per cent of parents from School B said so. As to the evaluation of students with behaviour problems, fewer parents in each school believed that this was quite or very important (50%, 56%, and 65% respectively). The difference in prevalence of 15 percentage points between schools was not statistically significant.

With regard to advising and training school staff for the management of students with behaviour problems and low academic performance, parents at school C believed it was quite or very important (63%) compared with school B and school A (52% and 44%). The difference in prevalence of 19 percentage points was not statistically significant. Parents reported that following up student's behaviour problems and low academic performance is less important than other aspects of the nurse's role, with School A reporting that it is fifty four per cent quite or very important, followed by School B (49%) and School A (41%). This difference was not statistically significant. Again, parents reported another aspect of the nurse's role, to evaluate students with low academic performance, as less important than other roles. School C parents believe it is quite or very important (46%) with a similar difference to school B (40%), compared with School C (32%). The difference in prevalence of 14 percentage points was not statistically significant.

Table 4.3 shows that virtually all parents believed that the nurse's role to provide first aid was the most important of all. Parents reported that they believed this to be quite or most important with little difference between the schools (99%, 97% and 96% respectively). Similarly, advising parents and teachers on health themes was considered to be quite or very important for most parents (84%, 89%, and 77% respectively). The difference in prevalence of 12 percentage points between schools was not statistically significant. With regard to evaluating hygiene in the school, there was no difference in the prevalence of parents who reported that they believed this to be quite or very important according to if they attended School A or School C (88%), and little difference reported compared with School B (84%). Evaluating cases of persistent absenteeism was seen as quite or very important with a difference of less than ten percentage points in prevalence among parents from Schools A (56%), B (61%) and C (54%). With regard to helping students to improve quality of life, School A and B parents reported it to be quite or very important (81% and 78% respectively) compared with 69 per cent in School C. This difference was not statistically significant.

4.4.2 Parent's perception of aspects the role of the school nurse according to whether or not their child had been to see the school nurse

Table 4.4 (see following page) presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of parent's

perception of aspects of the role of the school nurse according to whether or not their child had been to see the school nurse. With regard to the follow up of chronically ill students there was little difference in the prevalence of parents who reported that they believed this to be quite or very important according to whether their child had been to see the school nurse or not (73% and 72% respectively). Providing health education for students was considered to be quite or very important for most parents. A greater proportion of parents whose child had not seen the school nurse said that this was a quite or very important part of the school nurse role (100% compared with 91%). This difference was not statistically significant.

Table 4.4
Parent's perception of aspects of the role of the school nurse/seen nurse

	Parent's perception of the school nurse role	
	Slightly/not Important % (number)	Quite/very Important % (number)
Follow up on chronically ill students		
<u>Been to see nurse</u>		
Yes	27 (87)	73 (235)
No	28 (09)	72 (23)
Provide health education for students		
<u>Been to see nurse</u>		
Yes	9 (30)	91 (292)
No	0 (0)	100 (32)
Participate in school education meetings for staff		
<u>Been to see nurse</u>		
Yes	29 (94)	71 (228)
No	22 (7)	78 (25)
Evaluate students with behaviour problems		
<u>Been to see nurse</u>		
Yes	48 (156)	52 (166)
No	31 (10)	69 (22)
Advise/train school staff for management of students with behaviour and low academic performance		
<u>Been to see nurse</u>		
Yes	53 (169)	47 (153)
No	44 (14)	56 (18)
Follow up with behaviour problems and low academic performance		
<u>Been to see nurse</u>		
Yes	57 (183)	43 (139)
No	47 (15)	53 (17)
Evaluate students with low academic performance		
<u>Been to see nurse</u>		
Yes	65 (210)	35 (112)
No	59 (19)	40 (13)

Table 4.4 (Continued)
Parent's perception of aspects of the role of the school nurse/seen nurse

	Parent's perception of the School nurse Role	
	Slightly/not Important % (number)	Quite/very Important % (number)
Provide First aid		
<u>Been to see nurse</u>		
Yes	2 (5)	98 (317)
No	3 (1)	97 (31)
Advise parents and teachers on health themes		
<u>Been to see nurse</u>		
Yes	16 (53)	84 (269)
No	9 (3)	91 (29)
Evaluate hygiene in the school		
<u>Been to see nurse</u>		
Yes	14 (44)	86 (278)
No	6 (2)	94 (30)
Evaluate cases of persistent absenteeism		
<u>Been to see nurse</u>		
Yes	42 (134)	58 (188)
No	50 (16)	50 (16)
Help students to improve quality of life		
<u>Been to see nurse</u>		
Yes	22 (71)	78 (251)
No	22 (7)	78 (25)

Advising and training school staff for the management of students with behaviour problems and low academic performance was not seen to be as important for parents as many other aspects of the school nurse role, irrespective of whether their child had been to see the school nurse or not (47% and 56% respectively). The difference in prevalence of nine percentage points was not statistically significant. Following up children with behaviour problems and low academic performance was another aspect of the school nurse's role that parent's believed was not as important as others. The difference in prevalence of 10 percentage points between those parents whose child had seen the school nurse or not (43% cf. 53%) was not statistically significant.

There was little difference between parent's perceptions of the role of the school nurse with regard to the school nurse participating in school education meetings for staff. Seventy one per cent of parents whose child had seen the nurse and 78 per cent who had not, reported that they believed participating in school education meetings for staff was quite or very important. With regard to evaluating students with behaviour problems, 69 per cent of parents who reported their child had not seen the

nurse and 52 per cent of parents who reported their child had seen the nurse believed this aspect of the nurse's role to be quite or very important. The difference in prevalence of 18 percentage points was not statistically significant.

Of all aspects of the school nurses role, evaluating students with low academic performance was seen to be least important for all parents. There was little difference in the prevalence of parents who reported that they believed this to be quite or very important according to whether their child had been to see the school nurse or not (35% and 40% respectively). With regard to providing first aid, the virtually all parents believed this to be quite or very important, there was little difference in the prevalence of parents according to whether their child had been to see the school nurse or not (98% and 97% respectively).

Similarly, most parents reported that advising parents and teachers on health themes is considered to be quite or very important, whether their child had seen the nurse (84%) or not (91%). The difference in prevalence of seven percentage points between schools was not statistically significant. Evaluating hygiene in the school was another aspect of the nurse's role that most parent's believed to be quite or very important. The difference in prevalence of eight percentage points between those parents whose child had seen the school nurse or not (86% cf. 94%) was not statistically significant.

Evaluating cases of persistent absenteeism was seen as quite or very important for 58 per cent of parents whose child had seen the nurse and 50 per cent of those who reported that their child had not seen the nurse. This difference was not statistically significant. With regard to helping students to improve quality of life, 78 per cent of parents reported that this was quite or very important irrespective of whether their child had been to see the nurse or not.

4.4.3 Parent's perception of aspects the role of the school nurse according to whether or not their expectations had been met

Table 4.5 (see following page) presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of parent's perception of aspects of the role of the school nurse according to whether or not their expectations had been met. Table 4.5 shows with regard to follow up of chronically ill students 61 per cent of parents who said their child's visit to the nurse did not meet their expectations reported it to be quite or very important compared with over 70 per cent who reported they were unsure or that the visit had met their expectations (75% and 73% respectively). This difference was not statistically significant. There was very little difference between parent's in the three groups with regard to the nurse providing health education for students, with the majority of parents reporting it to be quite or very important (91%, 96%, and 96% respectively). The nurse's participation in education meetings for staff was seen to be quite or very important for over 70 per cent of all parents, with a difference in prevalence of ten percentage points among parents who reported their child's visit had not met their expectations (67%), were unsure (77%) or had met their expectations (71%).

Table 4.5
Parent's perception of aspects of the role of the school nurse/meet expectations

	Parent perception of the school nurse role	
	Slightly/not Important % (number)	Quite/very Important % (number)
Follow up on chronically ill student		
<u>Meet expectations?</u>		
No	39 (13)	61 (20)
Unsure	25 (12)	75 (35)
Yes	27 (71)	73 (196)
Provide health education for students		
<u>Meet expectations</u>		
No	9 (3)	91 (30)
Unsure	4 (2)	96 (45)
Yes	10 (26)	90 (243)
Participate in school education meetings for staff		
<u>Meet expectations</u>		
No	33 (11)	67 (22)
Unsure	23 (11)	77 (36)
Yes	29 (78)	71 (189)
Evaluate students with behaviour problems		
<u>Meet expectations</u>		
No	64 (21)	36 (12) *
Unsure	36 (17)	64 (30)
Yes	48 (129)	52 (138)
Advise/train school staff for management of students with behaviour and low academic performance		
<u>Meet expectations</u>		
No	67 (22)	33 (11)
Unsure	51 (24)	49 (23)
Yes	51 (139)	49 (131)
Follow up with behaviour problems and low academic performance		
<u>Meet expectations</u>		
No	67 (22)	33 (11)
Unsure	45 (21)	55 (26)
Yes	57 (153)	43 (114)
Evaluate students with low academic performance		
<u>Meet expectations</u>		
No	79 (26)	21 (7)
Unsure	55 (26)	45 (21)
Yes	65 (174)	35 (93)
Provide First aid		
<u>Meet expectations</u>		
No	6 (2)	94 (31) *
Unsure	0 (0)	100 (47)
Yes	1 (3)	99 (264)

Table 4.5 (Continued)
Parent's perception of aspects of the role of the school nurse/meet expectations

	Parent perception of the school nurse role?	
	Slightly/not Important % (number)	Quite/very Important % (number)
Advise parents and teachers on health themes		
<u>Meet expectations</u>		
No	24 (8)	76 (25)
Unsure	11 (5)	89 (42)
Yes	16 (43)	84 (224)
Evaluate hygiene in the school		
<u>Meet expectations</u>		
No	15 (5)	85 (28)
Unsure	4 (2)	96 (45)
Yes	14 (38)	86 (229)
Evaluate cases of persistent absenteeism		
<u>Meet expectations</u>		
No	61 (20)	39 (4)
Unsure	40 (19)	60 (28)
Yes	41 (110)	59 (157)
Help students to improve quality of life		
<u>Meet expectations</u>		
No	27 (9)	73 (24)
Unsure	34 (16)	66 (31)
Yes	20 (54)	80 (213)

Chi-square difference in prevalence: * p-value < .05, ** p-value < .01, *** p-value < .001

Over 50 per cent of parents who reported that their child's visit to the nurse met their expectations or they were unsure (64% and 52% respectively) said that the evaluation of students with behaviour problems was quite or very important, whereas only 36 per cent of parents who reported that the visit did not meet their expectations said so. This difference in prevalence was statistically significant with a p value of less than .05.

With regard to advising and training school staff for the management of students with behaviour problems and low academic performance, there was no difference in the prevalence of parents who reported this to be quite or very important irrespective of whether their child saw the nurse and said that their expectations were met or were unsure (49%). Only 33 per cent of parents who said their child's visit did not meet their expectations reported that this was quite or very important, but this difference in prevalence of 16 percentage points was not statistically significant. Following up student's behaviour problems and low academic was not seen to be as important for parents as many other aspects of the school nurse's role. There was a the difference

in prevalence of 22 percentage points among the parents who reported that their child saw the nurse and their expectations were not met (33%), they were unsure (55%), and had met their expectations (43%). The result is not statistically significant.

Table 4.5 shows that the majority of parents believed to evaluate students with low academic performance was the least important of all of the nurse's roles. Over a third of parents who reported that their child's visit to the nurse met their expectations or were unsure (35% and 45% respectively), said the evaluation of students with low academic performance is quite or very important, whereas only 21 per cent of parents who reported that the visit did not meet their expectations. The difference in prevalence of 24 percentage points is not statistically significant. The majority of parents believed that the nurse's role to provide first aid is the most important of all. Parents who reported that their child's visit to the nurse met their expectations or that they were unsure if the visit had met their expectations (99% and 100% respectively) believed this to be quite or most important compared with parents who reported that their expectations were not met (94%). This difference in prevalence was statistically significant with a p value of less than .05.

Over 80 per cent of parents who said their child's visit to the nurse met their expectations or that they were unsure (84% and 89% respectively) said that advising parents and teachers on health themes was quite or very important, whereas 76 per cent of parents who said the visit did not meet their expectations said so. This difference was not statistically significant. With regard to evaluating hygiene in the school, there was little difference between the parents who reported that their child's visit to the nurse met their expectations, and those who reported that it did not meet their expectations (86% and 85%), believed this to be quite or very important visit compared with those parents who were unsure (96%). This difference was not statistically significant.

Table 4.5 shows with regard to evaluating cases of persistent absenteeism, 39 per cent of parents who said their child's visit to the nurse did not meet their expectations reported it to be quite or very important compared with over 50 per cent of the parents who reported they were unsure or that the visit had met their expectations (60% and 59% respectively). This result was not statistically significant. As far as the nurse helping students to improve quality of life, more than two thirds of the parents

in the three groups reported this as quite or very important (73%, 66%, and 80% respectively). The difference in prevalence of 14 percentage points between schools was not statistically significant.

4.4.4 Parent’s perception of the overall role of the school nurse by school, been to see the school nurse, and meet expectations

A histogram of the distribution of the continuous variable that was created to summarise parent’s perceptions of the overall role of the school nurse is presented in Figure 4.1. Figure 4.1 shows that the mean score for 363 parents was 28.2 (Standard deviation = 6.8). The normal curve that is overlaid on the histogram shows pictorially that the scores that ranged from 10 to 40 were approximately normally distributed. This approximation was confirmed by undertaking a test of skewness and kurtosis, which were both acceptable (Skewness= -.152; Kurtosis=-.580).

Figure 4.1
Parent’s overall perception of the school nurse role

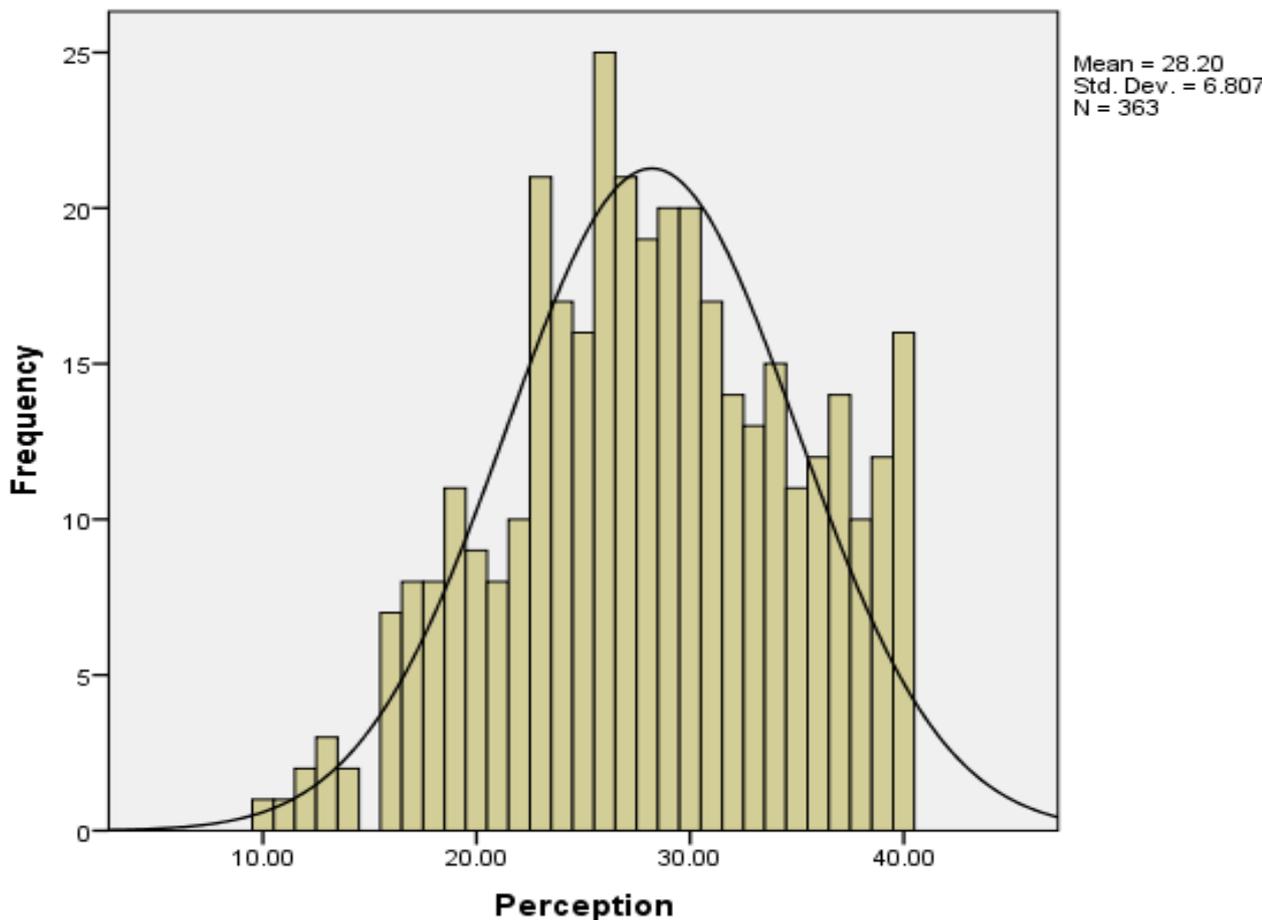


Table 4.6 presents means, standard deviations, F and T statistics where appropriate, and p values for the relationships between overall scores for parent’s perception of

the school nurse role and the schools that children attended, whether or not the children had been to see the school nurse, and whether or not the child's visit met the parents expectations.

Table 4.6
Bivariate analyses of parent's perception of the overall role of the school nurse by school, been to see the school nurse, and meet expectations

	Mean	St. dev.	F or T value	p. Value
School				
School A	27.76	6.64		
School B	28.90	6.24	1:158	.315
School C	28.79	8.44		
Nurse 2				
Yes	28.09	6.78	-1.230	.219
No	29.62	6.17		
Visit meets expectation				
Yes	28.19	6.17	2.437	.089
No	25.78	6.58		
Unsure	29.06	7.11		

Table 4.6 shows that parents whose child attended School B had the highest mean score (28.9) with regard to their overall perception of the school nurse role, followed by School C (28.9) and School A (27.7). This very small difference in overall mean scores between parents whose child attended the three schools was not statistically significant ($f=1.158$; $p= .315$). Table 4.6 also shows that the overall mean scores were very similar (28.09 cf. 29.62) for those parents whose child had been to see the school nurse and those who had not ($t=-1.230$; $p=.219$). Finally, Table 4.6 shows that the mean scores for parents whose child's visit to the school nurse met their expectations and those who were unsure if it did, were very similar (28.19 and 29.06 respectively). These mean scores were higher than the mean score for parents who reported that their child's visit to the school nurse did not meet their expectations, but the difference was not quite statistically significant ($f=2.437$; $p=.089$).

4.5 Prevalence rates for students

4.5.1 Student characteristics, experience, and perception of the school nurse role

The prevalence of students who responded to the survey administered in three schools is presented in Table 4.7 along with student characteristics and their experience and view of the school nurse role.

Table 4.7
Students experience and view of school nurse

Characteristic	% (number)
Demographics	
<u>School</u>	
School A	46 (346)
School B	39 (291)
School C	15 (110)
<u>Student year</u>	
7	11 (83)
8	15 (116)
9	10 (78)
10	19 (138)
11	23 (169)
12	22 (163)
<u>Gender</u>	
Female	77 (578)
Male	23 (169)
Knowledge of and visits to the school nurse	
<u>Know school has a nurse</u>	
Yes	98 (733)
No	2 (14)
<u>Been to see the school nurse</u>	
Yes	82 (610)
No	18 (137)
Female Yes	84 (486)
Male Yes	73 (169)
Been involved in student health education	
<u>Sexual health</u>	
Yes	5 (35)
No	95 (716)
<u>Growth and development</u>	
Yes	9 (66)
No	91 (681)
<u>First Aid</u>	
Yes	35 (264)
No	65 (483)
<u>Mental Health</u>	
Yes	4 (31)
No	96 (717)
<u>Other</u>	
<u>Health promotion</u>	
Yes	2 (13)
No	98 (734)
<u>Good to have nurse involved in health education</u>	
Yes	83 (619)
No	17 (128)

Table 4.7 shows that the greatest proportion of students who participated in the survey were in year 11 (23%) followed by year 12 (22%) and year ten respectively (19%). Year eight students had a 15 per cent response rate whereas years nine and seven had less than 15 per cent, reporting ten per cent and 11 per cent respectively.

The response rate for female students was 77 per cent, while the response rate for male students was 23 per cent.

Student's knowledge of and experience with the school nurse, followed by their perception of the school nurse's role is presented in Table 4.7. By far, the greater majority (98%) of students knew that the school has a nurse and 82 per cent reported that they had been to see the nurse at some time, and that the nurse had been involved in their health education. As far as sexual health education is concerned, only 5 per cent of students reported that the nurse had been involved. Similarly, nine per cent of students reported that the nurse had been involved in their growth and development education. However, more than a third of students (35%) reported that the nurse had been involved in their first aid education.

Table 4.7 shows that 717 (96%) students reported that the nurse had not been involved in their mental health education while 31 (4%) students said the nurse had been involved in their mental health education. The greater majority of students (98%) said the nurse had not been involved in health promotion education. Of all of the students who completed the questionnaire, whether or not they had seen the school nurse or had experienced the nurse participate in their health education, 83 per cent said that it would be good to have the nurse involved in their health education.

4.5.2 Student characteristics, experience, and perception of the school nurse role for students who had not seen the school nurse.

Table 4.8 (see following page) presents the prevalence rates for student characteristics, their experience, and view of the school nurse role for students who did not visit the school nurse. Table 4.8 shows that the greatest reason for not seeing the school nurse was students reporting that they had no reason to go (91%). Virtually all of the students (99%) said they were not too shy to visit the school nurse. The reason for 96 per cent of the students to not visit the nurse was not as a result of the student being too busy. As for not visiting the nurse due to being worried the nurse might tell their parents, only one student (1%) reported this as a reason for not attending. Finally, there were two reasons

Table 4.8
Students experience and view of school nurse

Characteristic	% (number)
Not been to see school nurse	
<u>No reason</u>	
Yes	91 (124)
No	9 (13)
<u>Too shy</u>	
Yes	1 (2)
No	99 (135)
<u>Too busy</u>	
Yes	4 (5)
No	96 (132)
<u>Worried might tell</u>	
Yes	1 (1)
No	99 (136)
<u>Too embarrassed</u>	
Yes	1 (2)
No	99 (135)
<u>Other</u>	
Don't want to be sent home	(1)
Other people say she is not nice	(1)
If you saw the nurse/ importance of	
<u>Nurse will be approachable</u>	
Not Important	8 (10)
Slightly Important	12 (15)
Quite Important	34 (44)
Very Important	46 (58)
<u>Nurse will be caring</u>	
Not Important	4 (5)
Slightly Important	6 (8)
Quite Important	33 (42)
Very Important	57 (72)
<u>Nurse will be able to listen</u>	
Not Important	4 (5)
Slightly Important	5 (6)
Quite Important	42 (54)
Very Important	49 (62)
<u>Feel comfortable with nurse</u>	
Not Important	4 (5)
Slightly Important	11 (14)
Quite Important	29 (36)
Very Important	56 (70)
<u>Nurse gives helpful advice</u>	
Not Important	3 (4)
Slightly Important	7 (9)
Quite Important	40 (51)
Very Important	50 (63)
<u>Enough visit time allocated</u>	
Not Important	4 (5)
Slightly Important	20 (25)
Quite Important	44 (56)
Very Important	32 (40)
<u>Privacy would be maintained</u>	
Not Important	3 (4)
Slightly Important	6 (8)
Quite Important	34 (42)
Very Important	57 (72)

reported by two students as to why they did not see the nurse: “Did not want to be sent home” and secondly, “other people say she is not nice”.

Table 4.8 shows that 46 per cent of students believed it is very important and 34 per cent that it is quite important for the nurse to be approachable. Eight per cent of students reported that that believed this was not important. As for the nurse to be caring, 57 per cent of students reported that this is very important, 33 per cent said that it was quite important and four per cent that it was not important. Forty nine percent of students reported they believe it is very important for the nurse to be able to listen, while 42 per cent reported it is quite important. Four per cent of students believe it is not important.

Table 4.8 identifies that at least half (56%) of the students believe it is very important and 29 per cent, quite important that students feel comfortable with the nurse. Four per cent of students believe this is not important. Half of the students (50%) believe that it is very important for the nurse to give helpful advice and 40 per cent suggested that it is quite important. Three per cent of students said that it is not important for the nurse to give helpful advice.

Forty (32%) students reported it is very important for there to be enough visit time allocated with the nurse and 44 (%) believe it is quite important. Four per cent of participating students said it is not important. Lastly, table 4.8 shows students’ perspectives the importance of privacy to be maintained when students visit the nurse. Fifty seven per cent and thirty four per cent of students respectively reported that it is very important and quite important that privacy would be maintained with the nurse’s visit. Three percent said this is not important.

4.5.3 Student awareness of the service, frequency of visits, access to the nurse and reasons for visiting the school nurse

The prevalence rates for all variables that measured student’s awareness of the service, frequency of visits to the nurse, knowledge about access to the nurse, and reasons for visiting the nurse were calculated and reported in Table 4.9.

Table 4.9
Student's awareness of service, frequency of visits, access to, and reasons for visiting the nurse

Characteristic	% (number)
Awareness of the service	
<u>Website</u>	
Yes	2 (12)
No	98 (598)
<u>Saw health centre</u>	
Yes	49 (299)
No	51 (311)
<u>Newsletter</u>	
Yes	2 (12)
No	98 (598)
<u>Informed</u>	
Yes	50 (304)
No	50 (306)
Frequency of visits	
<u>Last week</u>	
Missing	33 (207)
Zero	56 (343)
One	7 (47)
Two	1 (9)
Three	1 (2)
Four	1 (1)
Five or more	1 (1)
<u>Last month</u>	
Missing	33 (201)
Zero	40 (246)
One	15 (93)
Two	6 (39)
Three	2 (11)
Four	2 (11)
Five or more	2 (9)
<u>Last year</u>	
Missing	28 (169)
Zero	15 (82)
One	21 (131)
Two	13 (80)
Three	8 (51)
Four	4 (28)
Five or more	11 (69)
<u>Easy to find</u>	
Missing	8 (48)
Very Easy	42 (254)
Easy	7 (46)
Difficult	43 (262)
Access to the nurse	
<u>Make an appointment</u>	
Missing	8 (48)
Yes	1 (6)
No	91 (556)
<u>See Nurse</u>	
Missing	8 (48)
Yes	65 (398)
No	27 (164)

Table 4.9 (continued)
Student's awareness of service, frequency of visits, access to, and reasons for visiting the nurse

Characteristic	% (number)
<u>Return</u>	
Missing	8 (48)
Not applicable	47 (289)
Yes	25 (4)
No	20 (124)
Reason for visiting the school nurse (ever)	
<u>First Aid</u>	
Yes	36 (219)
No	64 (391)
<u>Feeling unwell</u>	
Yes	71 (436)
No	29 (174)
<u>Advice information</u>	
Yes	3 (21)
No	97 (589)
<u>Support</u>	
Yes	3 (17)
No	97 (593)
<u>Sexual health</u>	
Yes	1 (7)
No	93 (603)
<u>Take friend /money/lost property</u>	
Yes	1 (4)
No	99 (606)

Table 4.9 shows that a large majority of the students (98%) did not know about the nurse as a result of information available on the website. Forty nine per cent of students knew about the nurse after seeing the health centre. The large majority (98%) of students who had visited the nurse reported that they had not seen the newsletter. Half of the students who had seen the nurse reported that they had been informed about the nurse's presence.

Table 4.9 shows that with regard to how many time students visited the nurse up to 33 per cent of data is missing. Overall, 11 per cent of the students reported that during the last week they had visited the nurse. Seven per cent said that they visited on one occasion while four per cent visited on two or more occasions. Twenty seven per cent of students reported that they visited at least once in the last month. Fifty seven per cent had reported they had one visit in the last year. The remainder of Table 4.9 is dedicated to presenting the prevalence rates for the series of questions that ask students about access to the clinic and the reasons for visiting the school nurse. Table 4.9 shows that for questions relating to clinic access, eight per cent of

data is missing for each of the four questions. Forty nine per cent of students found the clinic very easy or easy to find, while 43 per cent said it was difficult to locate. It was reported by 91 per cent of students that it is not necessary to make an appointment. Sixty five per cent of students reported that they were able to see the nurse when they wanted to, whereas twenty five per cent of students reported that they returned to the clinic for a visit with the nurse. Thirty six per cent of students said they went to visit the nurse for first aid treatment and seventy one per cent went because they were unwell. Three per cent said they went for health information and support respectively. Seven students went for sexual health reasons. Lastly, four students went for the following reasons: to take a friend, get money, and to access lost property.

4.5.4 Student's experience, view of the school nurse role, and action following the visit to the nurse.

Table 4.10 shows the prevalence rates for all variables that measured student's experience, views on the role of the school nurse, and outcome following the student's visit to the school nurse. Table 4.10 shows that more than 80 per cent of all students reported that they believe it is either very important (50%) or quite important (33%) that the nurse will be approachable. Five per cent of students believed this is not important. As for the nurse to be caring, a large majority of students reported that this is quite or very important (58% and 31% respectively). While three per cent of students said that this is not important. More than 80 per cent of students reported for nurse to be able to listen as quite or very important (53% and 32% respectively). Five per cent of students reported this to not be important. As far as for the student to feel comfortable with the nurse, more than 90 per cent of students reported this as quite or very important (59% and 30% respectively).

Table 4.10 identifies that more than 80% of all students reported that they believe it is either very important (52%) or quite important (34%) for the nurse to give helpful advice. Five per cent of students believed this is not important. With regard to there being enough time allocated for the visit three quarters of the students believed that it is very important or quite important (37% and 38% respectively), while eight per cent report this is not important. More than three quarters of the students reported

that it is quite (52%) or very important (26%) for privacy to be maintained when visiting the nurse.

Table 4.10
Student's experience, view of service, and outcome following visit to the school nurse

Characteristic	% (number)
Been to see school nurse/ importance of	
<u>Nurse will be approachable</u>	
Not Important	5 (28)
Slightly Important	12 (67)
Quite Important	33 (187)
Very Important	50 (279)
<u>Nurse will be caring</u>	
Not Important	3 (19)
Slightly Important	8 (43)
Quite Important	31 (172)
Very Important	58 (325)
<u>Nurse will be able to listen</u>	
Not Important	5 (50)
Slightly Important	10 (57)
Quite Important	32 (180)
Very Important	53 (295)
<u>Feel comfortable with nurse</u>	
Not Important	3 (19)
Slightly Important	8 (43)
Quite Important	30 (169)
Very Important	59 (328)
<u>Nurse gives helpful advice</u>	
Not Important	5 (5)
Slightly Important	10 (56)
Quite Important	34 (186)
Very Important	52 (289)
<u>Enough visit time allocated</u>	
Not Important	8 (46)
Slightly Important	17 (94)
Quite Important	38 (214)
Very Important	37 (207)

Table 4.10 (continued)
Student's experience, view of service, and outcome following visit to the school nurse

Characteristic	% (number)
Outcome of visit to the nurse	
<u>Privacy would be maintained</u>	
Not Important	9 (52)
Slightly Important	13 (70)
Quite Important	2 (147)
Very Important	5 (290)
<u>Parents involved</u>	
Missing	8 (49)
NA	4 (24)
Yes	16 (99)
No	72 (438)
<u>Nurse follow up</u>	
Missing	8 (48)
NA	3 (19)
Yes	5 (32)
No	84 (511)
<u>Referred GP</u>	
Missing	8 (50)
NA	6 (38)
Yes	5 (27)
No	81 (495)
<u>Referred outside service</u>	
Missing	8 (50)
NA	4 (23)
Yes	5 (29)
No	83 (508)
<u>Referred school service</u>	
Missing	8 (48)
NA	5 (29)
Yes	4 (24)
No	83 (509)

The remainder of Table 4.10 shows the prevalence rates for the questions that ask students about the outcome of their visit to the nurse. For these questions eight per cent of the data were missing. Of those students who reported that they had seen the nurse at some time: 16 per cent responded that their parents were involved; five per cent that the nurse completed a follow up appointment; and five per cent that they were referred to their general practitioner. Five per cent of these students were referred to service providers outside the school and four per cent were referred to service providers within the school.

4.6 Bivariate analyses - students

4.6.1 Student's perception of aspects the role of the school nurse according to the school that they attended

Table 4.11 presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of student's perception of aspects of the role of the school nurse according to the school that they attended. The majority of students believed that the most important quality of care provision in the nurse's role is for the nurse to be approachable.

Table 4.11
Bivariate analysis of the role of the School Health Nurse

	Clinic experience	
	Slightly/not Important % (number)	Quite/very Important % (number)
Nurse approachable		
<u>School</u>		
School A	4 (13)	96 (299)**
School B	4 (7)	96 (184)
School C	14 (8)	86 (50)
Nurse caring		
<u>School</u>		
School A	10 (30)	90 (281)
School B	11 (21)	89 (170)
School C	19 (11)	81 (46)
Nurse to listen		
<u>School</u>		
School A	16 (50)	84 (262)
School B	13 (24)	87 (167)
School C	19 (11)	81 (46)
Feel comfortable with nurse		
<u>School</u>		
School A	10 (31)	90 (281)
School B	12 (62)	88 (168)
School C	16 (9)	84 (48)
Nurse give helpful advice		
<u>School</u>		
School A	13 (42)	87 (268)
School B	15 (29)	85 (162)
School C	21 (12)	79 (45)
Time available		
<u>School</u>		
School A	22 (70)	78 (242)
School B	29 (29)	71 (137)
School C	26 (15)	74 (42)
Enough Privacy		
<u>School</u>		
School A	18 (57)	82 (254)
School B	25 (48)	75 (143)
School C	30 (17)	70 (40)

Chi-square difference in prevalence: * p-value < .05, ** p-value < .01, *** p-value < .001

Students who reported that they attended school A and B (96% respectively) believed this to be quite or most important compared with students who reported that they attended school C (86%). This difference in prevalence was statistically significant with a p value of less than .01. Table 4.11 shows with regard to the nurse being caring, 81 per cent of students who said they attended school A reported it to be quite or very important compared with students who attended schools B and C (89% and 90% respectively). This difference was not statistically significant. There was very little difference between student's in the three groups with regard to their perception of the nurse being able to listen, with the majority of students reporting it to be quite or very important (81%, 84%, and 87% respectively).

As for students feeling comfortable with the nurse, it was seen to be quite or very important for over 80 per cent of all students, with a difference in prevalence of six percentage points among students who reported they attended school A (84%), school B (90%) or school C (88%). Over 80 per cent of students who attended schools B and C (87% and 85% respectively) said that giving helpful advice was quite or very important, whereas 79 per cent of students who said they went to school A said so. This difference was not statistically significant.

As far as the nurse having available time to help students more than 70 per cent of the students in the three groups reported this as quite or very important (74%, 78%, and 71% respectively). The difference in prevalence of 7 percentage points between schools was not statistically significant. With regard to the nurse's visit being able to provide enough privacy it was seen to be quite or very important for over 70 per cent of all parents, with a difference in prevalence of twelve percentage points among students who reported they attended school A (70%), school B (82%) or school C (75%).

4.6.2 Student's perception of aspects the role of the school nurse according to student's gender

Table 4.12 (see following page) presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of student's perception regarding the level of compassionate care they received according to their gender. Of all the aspects of care the students received at the clinic, the majority of students reported that for the nurse to be approachable was the most important.

Ninety one per cent of male students and 96 per cent of female students reported that they believed it was quite or very important for the nurse to be approachable. This difference in prevalence was statistically significant with a p value of less than .05. Similarly, most male and female students reported that it was very or quite important (83% and 90 % respectively) for the nurse to be caring. This difference in prevalence was statically significant with a p value of less than .05.

Table 4.12
Bivariate analysis of the role of the School Health Nurse

	Compassionate care	
	Slightly/not Important % (number)	Quite/very Important % (number)
Nurse approachable		
<u>Gender</u>	9 (9)	91 (96)*
Male	4 (18)	96 (437)
Female		
Nurse Caring		
<u>Gender</u>	17 (18)	83 (87)*
Male	10 (44)	90 (410)
Female		
Nurse to listen		
<u>Gender</u>	16 (17)	84 (88)
Male	15 (68)	85 (387)
Female		
Feel comfortable with nurse		
<u>Gender</u>	18 (19)	82 (85)**
Male	9 (43)	91 (412)
Female		
Nurse give helpful advice		
<u>Gender</u>	20 (21)	80 (84)
Male	13 (62)	87 (391)
Female		
Time available		
<u>Gender</u>	30 (32)	70 (73)
Male	24 (108)	76 (348)
Female		
Enough privacy		
<u>Gender</u>		
Male	37 (39)	63 (65)
Female	18 (83)	82 (372)

Chi-square difference in prevalence: * p-value < .05, ** p-value < .01, *** p-value < .001

There was little difference between student's perceptions with regard to the nurse being able to listen. Eighty four per cent of male students and 85 per cent of female students reported that they believed this aspect of the nurse's role to be very or quite important. Most students reported that to feel comfortable with the nurse is considered to be quite or very important whether they were male (82%) or female (91%). This difference in prevalence of nine percentage points was statically

significant with a p value of less than .01. With regard to the nurse providing good and helpful advice, 80 per cent of male students and 87 per cent of female students reported this aspect of the nurse's role to be quite or very important. The difference in prevalence of less than 10 percentage points was not statistically significant. There was little difference between student's perceptions of the role of the nurse with regard to having enough time for the visit occasion with the nurse. Seventy per cent of male students and 76 per cent of female students believed that having enough time for the visit with the nurse was quite or very important.

Lastly, table 4.12 shows that for privacy to be maintained at the clinic was considered to be quite or very important irrespective of the student's gender: male students reported 63 per cent, compared with female students reporting 82 per cent. The difference of 19 percentage points was not statistically significant.

4.6.3 Student's perception of aspects the role of the school nurse according to year level at school: junior or senior secondary school

Table 4.13 (see following page) presents the results of bivariate analyses that show differences and statistical significance, if any, in the prevalence of student's perception regarding the level of compassionate care they received according to whether they were in junior or senior secondary school.

Table 4.13
Bivariate analysis of the role of the School Health Nurse

	Compassionate care	
	Slightly/not Important % (number)	Quite/very Important % (number)
Nurse approachable		
<u>Year</u>		
Junior	7 (11)	93 (156)
Senior	4 (17)	96 (377)
Nurse caring		
<u>Year</u>		
Junior	14 (23)	76 (143)
Senior	10 (39)	90 (354)
Nurse will to listen		
<u>Year</u>		
Junior	14 (23)	86 (143)
Senior	16 (62)	84 (332)
Feel comfortable with the nurse		
<u>Year</u>		
Junior	12 (20)	88 (145)
Senior	11 (42)	89 (352)
The nurse give helpful advice		
<u>Year</u>		
Junior	18 (30)	82 (136)
Senior	13 (53)	87 (339)
Time available		
<u>Year</u>		
Junior	29 (49)	71 (118)
Female	23 (91)	77 (303)
Enough Privacy		
<u>Year</u>		
Junior	26 (44)	74 (123)
Senior	20 (78)	80 (392)

Table 4.13 shows with regard to the nurse being approachable there was little difference with the majority of students who reported that they believed this to be quite or very important irrespective of whether they were in junior or senior secondary school (93% and 96% respectively). There was also little difference between student's perceptions of the nurse's role in caring role for students. Eighty six per cent of students in junior secondary school and 90 per cent of students in senior secondary school reported that they believed it was quite or very important for the nurse to be caring.

Again, there was very little difference with regard to the nurse being able to listen. Eighty six per cent of junior secondary school students and 84 per cent of senior secondary school students believed this aspect of the nurse's role to be quite or very important. To feel comfortable with the nurse was considered to be quite or very

important for the majority of students in junior (88%) and secondary school (89%) with minimal difference. Giving good helpful advice was seen to be quite or very important for 82 per cent of junior secondary students and 87 per cent of senior secondary students. The difference in prevalence of five percentage points was not statistically significant. Having enough time with the nurse at the visit time was seen as quite or very important for 71 percent of junior secondary students and 77 per cent of senior secondary school students. This difference was not statistically significant. Lastly Table 13 shows that with regard to privacy to be maintained in the nurse's clinic, 74 per cent of junior secondary school students and 80 per cent of senior secondary school students reported this to be quite or very important.

4.6.4 Student's perception of the overall role of the school nurse by school, gender and year

Presented in Figure 4.2, a histogram of student's perception with regard to composite measure of compassionate care received shows that the distribution was skewed (Skewness=-1.321; Kurtosis=-1.525). Therefore, the median (18.00) is presented rather than the mean and standard deviation.

Figure 4.2

Student's perception of compassion of the school nurse role

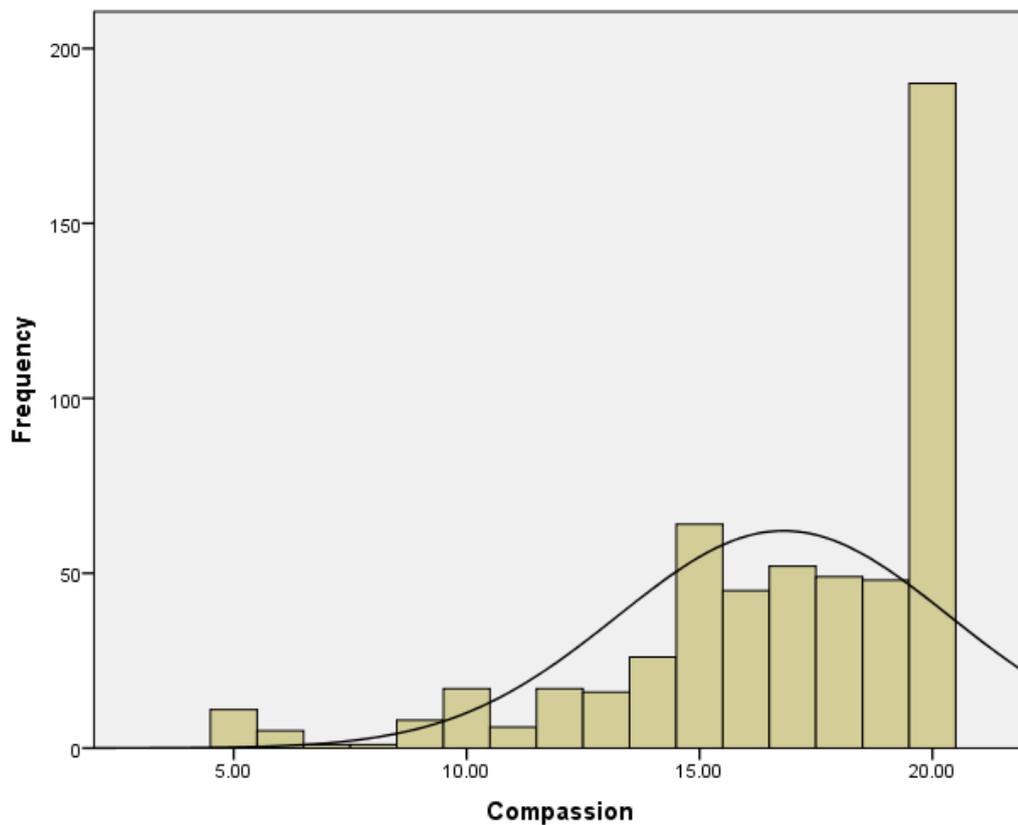


Table 4.14 (see following page) presents median, minimum and maximum values, test results from Mann Whitney and Kruskal Wallis for the relationships between overall scores for student's perception with regard to composite measure of compassionate care received according to, the school attended, gender, and level at school. Table 4.14 shows that with regard to composite measure of compassionate care received, students who attended schools A and B had a slightly higher median score (18 respectively), than School C (17). This difference in overall mean scores

between students who attended the three schools was statistically significant (Kruskal-Wallis=6.479; p= .039). With regard to gender the overall score was different, (17.00 cf. 18.00) this small difference was also statistically significant difference (Mann-Whitney=-2,372; p=.018). Finally, Table 4.14 shows that the median scores for students who were in junior and senior secondary school were the same (18.00 and 18.00 respectively).

Table 4.14
Relationship between schools/gender / year (junior /senior)
Clinic experience (students)

	Median	Min	Max	Mann-Whitney/ Kruskal Wallis Test statistics	p. Value
School					
School A	18.00	5.00	20.00	6:479	.039*
School B	18.00	5.00	20.00		
School C	17.00	5.00	20.00		
Gender					
Male	17.00	5.00	20.00	- 2.372	.018*
Female	18.00	5.00	20.00		
Year2					
Junior	18.00	5.00	20.00	1.337	.181
Senior	18.00	5.00	20.00		

Chi-square difference in prevalence: * p-value < .05, ** p-value < .01, *** p-value < .001

QUALITATIVE RESULTS

4.7 Introduction

As explained in the methods section, consistent with the use of formative evaluation in health promotion research, a program logic model was used to identify the key components of the proposed practice framework. The initial components were developed after a review of literature and collaboration with key stakeholders. The proposed practice framework was then evaluated by asking students, parents, teachers, and other members of three secondary school communities if it was seen to be appropriate for the school community. Through one-on-one interviews and focus groups using a guided interview tool that drew attention to the proposed practice framework (see Appendix E) participants discussed their perceptions about the role of the school nurse. There were eight major themes and four sub-themes that emerged from the data. While the themes in this definitive practice framework were guided by the interview tool that was used, it differed considerably from the framework that was originally proposed in the program logic model. To make it easier for readers to navigate their way through many pages of qualitative findings it was decided to present the definitive school nurse practice framework at the beginning of the section. Figure 4.3 provides a diagrammatic representation of these themes in the model.

The major themes are represented by shaded blocks in the model. The first theme in the framework identifies that the nurse needs resources, such as time, professional development, a clinic, and support, to enable the implementation of the suggested framework. A one-directional arrow points downwards from the block that represents this theme. This shows that school nurses cannot practice without appropriate resources. The second theme recognises the need for mental health literacy across the whole school community. Information and support that is provided to the whole school community may be proactive or reactive and may be provided during general and mental health care. A bi-directional arrows leads from this block to the third theme of therapeutic communication. This theme is a central aspect of the school nurse's role. Another bi-directional arrow leads from the third theme block to the fourth theme that is assessment of both physical and mental health. This theme is another key aspect of the nurse's role. Another arrow goes between therapeutic

communication and assessment to indicate that they are linked and occur simultaneously. Following on from therapeutic communication and assessment is the fifth theme of triage. This theme is placed centrally because it is fundamental to assessment and the provision of appropriate care. Bi-directional arrows indicate that therapeutic communication and assessment both lead to triage and are influenced by it. Triage is linked to the sixth theme, general health care, and the seventh theme, mental health care. General health care and mental health care are also linked by bi-directional arrows to indicate that they are inextricably related. Both of these themes are also linked back by bi-directional arrows to mental health literacy information and support. This shows that information and support may follow from care provided by the school nurse. Following on from general and mental health care is the eighth theme collaboration and referral.

Figure 4.3 Framework for School Nurse Practice



4.8 Resources for the school nurse

4.8.1 Introduction

To start the discussion participants were asked a general question about their perception about the role of the nurse. Sub themes that emerged from the data under the ‘resources’ theme included: time, the clinic, support, and professional development.

4.8.2 Time

Throughout the research it has been identified that the nurse’s role is complex and therefore requires specialised knowledge and skills. Accompanied with large numbers of students in schools (Schools A, B, C) it is not surprising that issues around nurses’ large workload and the time available to manage the workload was identified by a majority of the participants in each school as a barrier for practice. Many of the participants expressed concern regarding the large workload issues challenging nursing resources and suggested targeting this area for further improvement. One quarter of the respondents interviewed, across the three schools, suggested increased nursing (human) resources would improve mental health care at their school.

Over the last ten years School B has increased its size, doubling the number of enrolled students from 550 to 1100, without increasing the number of employed nurses. Denise works independently and is available for 1100 students. Typically, it is a busy clinic with students arriving unexpectedly. As described by Denise some periods in the health clinic are particularly frantic and would benefit from additional nursing resources:

*“Yeah some doubling up time in something called the crisis time, recess to afternoon break can get full on. You can have so many kids in that you can’t move and you’re trying to triage them all and sort them all out, and you can’t talk to somebody who is upset because you have to stick band-aides on other people, if you had two of you in that crisis time, with more room, you can.”
(Nurse Denise School B)*

Many of the students reported a lack of care available from the health centre which is highlighted from the following student comment: *“I’ve gone being upset and before a counselling session has been arranged I feel that, just being honest, that the care*

centre is understaffed. I feel that I am set aside for a little while, until some-one can attend to my problem” (Student focus group School C).

Additionally, many teachers agreed that the nurses’ workload is enormous. One School (School A) has employed two nurses in a job sharing role, rostering a couple of days to enable both nurses to work together. In the event of an emergency the nurse may have to leave the clinic and attend the emergency. At this time the clinic may be left unattended with students waiting for an appointment or for parent to collect them, or lying in the clinic rest beds after treatment. Carol identifies the duty of care required for students and suggests it would be beneficial to increase nursing resources in the school: *“I would always say to have more time, and to have them in on both days, that would be fantastic because my idea would be to have that health centre never...[uncovered]. If there was only one nurse on and they have got the call and they have got to leave. I worry, that to me, there should always be some-one in there” (Pastoral care teacher Carol School A).*

Furthermore, during the research many participants, (nurses, teachers and parents) acknowledged that student issues are complex and take time to assess and manage which is described by the following parent comment: *“You know it could be anything, it might have been something from the day before so um so I suppose they have to do a bit of background, you can’t obviously within that couple of minutes you have to delve into the background of the problem to try to work out to what it is, to help out” (Parent Peter School A).* Subsequently, Nurse Gloria explains that providing mental health care requires development of trust with the students over time. The following comment exemplifies this: *“ It’s a process for kids, it takes a long while for kids to tell you things and you know they’ve got something in their life and they are not going to just spill it, trust is something they have to gain over time” (Nurse Gloria School C).*

Winnie discussed that students come to see the nurse for advice and suggests the provision of mental health care requires time available in an appropriate setting. She proposes additional nursing resources may enable the nurse to be available to provide mental health care:

“It’s almost like we need a separate nurse, a room that you have got, a counselling sort of spot that they can go to. And access to the nurse, you

know things like having a drop in clinic. Even if she said she is available on Monday lunchtime for only senior students that want to drop in to discuss anything about smoking alcohol abuse whatever, and that's available so you don't have to be ill to come and see her or have had an accident they can just get advice and I think that would be really good.” (Teacher Winnie School B)

As a result, a teacher focus group suggested there also needs to be structural support systems in place to enable nurses to provide appropriate mental health care. During a focus group discussion a teacher offers a suggestion for the nurse to be: *“Relieved too from the first aid too, to be able to engage in that [mental health care]” (Teacher focus group School B).*

Similarly, another school, (School C) has recognised the nurse's role is overstretched. After a recent review of the health services team structure the school is employing another resource person, albeit not a school nurse, in a counselling position.

4.8.3 The clinic

Almost half of the participants indicated that the clinic floor plan and space available for the nurse required improvement. Only one school out of the three had an almost perfectly set up health centre. School (A) had a purpose built health centre with a well-equipped treatment room, a spacious office for the nurse to do paperwork, two rest areas and a designated quiet room which provided an appropriate space for a private conversation or counselling. At this school (School A) the only suggestion offered around the clinic was to increase the nurse's time available for student care so the clinic would be attended by nursing staff at all times.

In contrast, almost all nurses, teachers, allied health, student and parent groups explained that the clinic setting at School B and C were unsuitable. Teachers at School C describe the hectic, chaotic scene which can occur in the health centre suggesting a need for space and privacy:

“It's all open where the other kid is bleeding where [the nurse is], talking to the other one coming in [who is] screaming, burnt, it all happens at our school, I am not making it up, yeah. Another one comes in for a drink of water, while the other one is burning, bleeding and mental health. You know what I mean you have got everything happening. And the other one is helping people shave. And you'll see a nurse sitting in a courtyard some-where trying to have a private conversation.” (Teacher focus group School)

At schools (B, C) the triage area is open, without a designated private space for the nurse to have personal conversations with students. Both schools (Schools B, C) have the nurses' desk, treatment area and rest beds in the same room, therefore, the students are able to view all treatment and conversations in these settings. Insightful parents recognise and suggest it is necessary to improve the nurse's work area due to diversity of the student ages and needs. A parent highlights: *"And further to that point you have got, children who are as young as 4 or 5 and 17 year olds [and] they have got vastly different needs"* (Parent focus group School B). Nurse Haley explains the difficulty to provide care at times:

"In this school there needs to be more time and more privacy. Yes our triage is an open area there is no door, the students laying on a bed can hear everything the student is saying to me, so often I just look at a student they are either crying to me or they are looking around or they are not saying anything, I'll say come on lets pop outside, not in winter obviously. And it is a busy school there is 1680 students and 200 staff, there is always some-one walking past, especially for students they don't want to be outside crying or saying something private when there is a lot of people around." (Nurse Hayley School C)

4.8.4 Professional development and qualifications

When considering the skills required by a school nurse, undergraduate and post graduate qualifications, ongoing professional development, interpersonal skills and presentation skills emerged as key themes from the qualitative data analysis. The participants were asked "What does the nurse need to have for knowledge and skills to assess, manage and care for adolescents with mental health issues". Each theme will be discussed with the exception of teaching skills which was discussed in 4.9.6 "mental health information in the classroom".

4.8.4.1 *Nurses' qualifications*

Participants were asked about their understanding of school nurses' qualifications. This included their understanding of the theory of mental health studied during the undergraduate degree. The participants were asked if they were aware "that the school nurse has undertaken education and has qualifications in the area of mental health assessment care and management?" Firstly, data from the qualitative analysis identifying their perceptions about the initial education during the primary degree is presented. Secondly the participants' understanding and opinion of subsequent post

graduate nursing studies in mental health is identified. Finally, results are presented identifying opinions toward nurses' ongoing professional development regarding adolescent mental health care.

4.8.4.2 *Initial qualifications*

The majority of participants indicated they were unaware that the nurse had undertaken theory of mental health assessment, care and management during their degree. All eight nurses interviewed indicated they were aware that mental health was included as a core competent of the undergraduate nursing degree, although *interestingly* two of the school nurses in this study did not have a nursing degree qualification and were enrolled nurses qualified as division two nurses. The six focus groups including parents and teachers consistently indicated they were unaware of the nurse's initial education. The discussion amongst student focus groups (Schools A, B, C) identified their confusion around the nurse's level of initial education. During the one- on- one interviews, six participants identified they were unaware of what mental health training and qualifications the nurses had undertaken. One Principal, Phill was unsure if the nurses at the school were registered or enrolled nurses, asking: "*Could you check?*"(Principal Phill School C).

Some participants with the exception of nurses *assumed* the nurse would have mental health theory embedded in the undergraduate degree. One teacher provides an example of the general responses: "*No, I'm not sure if I am aware that the nurse has more formal training there though I might have assumed they had..., yeah... not sure, yeah*" (Deputy Principal Cliff School B).

Most students who participated in the focus groups were unaware or confused about the school nurse's qualifications. Only one student identified she was aware of nurses having knowledge and skills in mental health care after explaining: "*My next door neighbour's a nurse, yeah*" (Student focus group School B). Students generally felt nurses would have some type of qualification but were unclear about the nature of the extent of their knowledge and skills. Focus group students explained they thought the nurse would have some qualifications:

"I sort of just assumed that she's got a qualification. I assumed that she would know generally what she was doing. Yes, but you don't really know for certain,

like she has mental health qualification or anything like that, so just take it for granted.”(Student focus group School A)

Most participants suggested that the nurse *should* be required to have an initial nursing degree as a primary qualification. A teacher suggests the entry point into school nursing should have: *“Some sort of standard pathway” (Teacher focus group School C)*. Other comments also reflect the feelings of teachers: *“I think there also must be some bare minimums”* and *“Well I would have thought a basic nursing degree, obviously” (Teacher focus group School C.)* However some participants were unsure as to what qualifications were required.

One school (School C) employed two enrolled nurses and a casual registered nurse who worked at the school intermittently. The casual registered nurse was asked “If the nursing role in a school requires the underpinning baseline qualification to be a registered nurse at the minimum?” Nurse Lilly (School C) responded: *“ Yes absolutely but enrolled nurses but I am sure there are, they are more than qualified in what they do, but it’s coming down to the actual registration, and the legal requirements” (Nurse Lilly School C)*. Nurse Lilly was prompted regarding her opinion on further mental health qualifications (after a baseline nursing degree) the area of mental health, which led to Lily commenting: *“Yeah absolutely, you are dealing with kid’s mental health here, yeah” (Nurse Lilly School C)*.

4.8.4.3 *Postgraduate qualifications and study*

Most teachers at School B and School C focus groups also indicated their belief that extra qualifications were advisable and preferable. School A teachers were unaware of nurse’s qualifications but did not elaborate further. Parent examples in the focus group at School C suggest that postgraduate qualifications which include mental health theory are desirable and would be of benefit in the role:

“If they move their role on from being just the go-to person if you feel sick or you have a cut or a cold or whatever, then yeah definitely.” (Parents focus group school C)

“I know there is a [sic] lot of certs in child and adolescent mental health but I didn’t know there was particular ones that would assist nurses. I certainly think it would assist, yes.” (Parents focus group school C)

To demonstrate that there was a consistent view that post graduate studies would be beneficial if not essential to practice nursing within the secondary school setting Lilly's comment provides a good example:

"I think there should be um I am going to shoot myself in the foot there, but I think yeah you should be taking more studies post to be able to work in a scene like this and I wouldn't have said this prior to working there but um, with all the different health mental health issues, definitely, I mean medical goes without talking about, you have to be up to scratch with that but it's the other issues, mental health and there are arrays of kids." (Nurse Lilly School C)

4.8.4.4 Ongoing Professional Development

Participants were asked: "What could assist to improve the management of mental health issues in the school?" Despite the majority of the participants being unaware of the nurse's level of initial and post graduate qualifications around half of participants felt it should be a requirement for the nurse to undertake ongoing professional development (P.D.). Most participants agreed that the nurse needs to be continually updated in the area of mental health to provide expertise in care and management. The majority of nurses acknowledged their professional accountability to maintain P.D. as required by the Nurses Board. Most of the nurses identified that their schools supported them financially and also provided them with time to undertake P.D. The nurses discussed their opinions regarding subject areas for professional development. One nurse highlighted that she would like to be formerly trained to deliver presentations (Nurse Claire School B). Two nurses indicated the need for further ongoing professional development in the area of mental health. Marcia and Haley provide specific examples:

"I am interested in mental health issues maybe a course that would be on the first aid of mental health that would be good just so you are feeling that what you are saying is a bit more correct." (Nurse Marcia School A)

"Absolutely I mean I would be thinking for me at least of a third of the kids I see would be leaning more toward mental health issues and I think for you to recognise that it's a mental health issue not just an issue and you need that training and that knowledge. I think that there are more and more mental health issues, 1 in 4. I think statistically, they are becoming more and more common. I think you need, you have to be trained in knowing how to recognise them and know what to do with them. Know what you can deal with on your own and when you need to refer to some-one else." (Nurse Haley School C)

Two parent focus groups (Schools A and C) identified the need for nurses to be up to date with their knowledge base in the area of mental health by having ongoing professional development. Teachers (Schools A, B and C) made the comparison to their professional education requirements and made an assumption that nurses would also be required to continue with ongoing professional development. Some teachers (School C) specified professional development in the area for mental health care would be appropriate for nurses as well as for themselves. Additionally, a teacher mentioned a specific school program will be introduced in the near future and suggested that it needs to include the school nurse: *“Well I guess I think once our program kicks in a bit bigger, what is the name of the program that [someone] mentioned, smart something? But I think once we have our professional development in that, I think of course she needs to be included, with all that”* (Teacher Winnie School B).

4.8.5 Nurses Support/Supervision

One quarter of the participants including: parents, teachers and nurses believed that the nurse should have a level of support and or supervision. It was highlighted that the nurses’ role is challenging, and at times emotionally draining and professionally isolating. Participants from all three schools generally agreed there were no formal frameworks in place, and therefore, further improvement to provide support for the nurse was necessary.

Nurses have identified a dearth of support available after a crisis and their reluctance to seek support with professionals within the school. Nurse Jan (School A) provides insight into the nurses role when she described a tragic experience. Without guidelines for where to access support, Jan explained that after the incident she rang to debrief:

“My sister rang the counsellor, and the counsellor came to see me, but it wasn’t an automatic thing. It wasn’t an automatic thing. ‘Oh we have had a traumatic incident; oh we had better go and see how the nurse is.’ I guess we..., I..., have to learn how to ask for help I am a very a private person I guess and I am very, what is the word, I wouldn’t go and seek help.”(Nurse Jan School A)

This example highlights the potential impact of confronting situations which are accompanied with professional isolation. Another nurse (Hayley School C) described

that while she recognises the need to seek professional support she felt vulnerable in accessing this support. Furthermore, she is also aware of her professional accountability when sharing confidential information. Hayley explains: *“As in supervision or debriefing [the other nurse] and I only support each other, I think it is a trust issue as well. We know that we can say whatever to each other and it won’t go to any-one else, also due to confidentiality you have to be careful that who you are talking to so obviously we know each other we are sticking to our confidentiality”* (Nurse Hayley School C).

In addition to the nurses, there was a consistent theme amongst the teachers who discussed their concerns around the nurses’ professional isolation and lack of support within their role: *“I would say in again they are an isolated professional in an environment where nursing is not the core business of their employer”* (Teacher focus group School). While another teacher described the nurse’s role as: *“They kind of are a little bit separate”* (Teacher focus group School A). Teachers also recognised that nurses’ were dealing with complex situations. Teachers suggested that supervision is prudent to promote nursing best practice and to provide an avenue for support for nurses. Practical suggestions were offered such as; having breaks as well as an outlet to debrief and to *“Have like a mentor but just someone on campus in the community who they can talk to... or a counsellor”* (Teacher Jenny School A).

Furthermore, it was suggested that professional support should be included within the nurses’ position description. One recommendation was for nurses to belong to regular professional nurses networking meeting, for example:

“What I am suggesting is it should be written into their role. They should be hooked into a regular network of other school nurses, where they are required to meet monthly for support for professional development. To discuss whatever it is, I think that needs to be written in not just to keep their skills up but to give them you know professional support to maintain their sanity, to have an outlet to discuss all the issues that go on, ..., they need to be able to have an outlet with like-minded professionals who are in a similar position where they have to draw on all their own experience.” (Teacher focus group School C)

Lastly, some teachers believe that lack of supervision occurs within the school whereby the requirement for staff support (overall) is unrecognised: *“That support in terms of mentoring and debriefing, I’m not sure that any of us get it either. But it is*

not an unusual thing if the nurses aren't getting it either. It's not something that is part of..., but systemically, no, but that is not unique to the position of the nurses" (Teacher focus group School A). In order to achieve improvement in the level of support and supervision available for nurses, there needs to be an awareness of the requirement and a culture which promotes access to this support.

4.8.6 Summary

Resources are required to facilitate implementation of the suggested framework for school nurse practice. To enable the nurse to provide effective general and mental health care requires the resource of available time in an appropriate setting such as a clinic with space and privacy. Furthermore, the nurse needs to be appropriately qualified for the role with access to ongoing professional development. Additionally, it has been identified that the nurse needs professional support to practice effectively in the school setting.

4.9 Mental health literacy: proactive information and support

4.9.1 Introduction

While the term mental health literacy was not used by students, parents, or teachers in interviews or focus groups, there was a great deal of discussion regarding the concept. It is used in the model because it appropriately describes aspects of the nurse's role in providing health information with the whole school community, including information about mental health. It became evident that the promotion of mental health literacy within the school community by the school nurse may be proactive or reactive. A proactive approach refers to the nurse's role in providing health information within the school community in the absence of any specific health concern. A reactive approach refers to the nurse's role in providing information and support in response to a need identified by an individual or group within the school community. The following section focuses on participants' views with regard to the nurse proactively facilitating mental health literacy. The nurse's role with regard to providing information and support where there is an identified need is presented in section 4.13.

To begin the discussion about how participants perceived the nurses role in proactively developing/facilitating mental health literacy in the school they were asked: "What are your thoughts on the nurse engaging in 'teaching' mental health

literacy i.e. that is, skills and knowledge for good mental health?” Many participants required the further prompt: “For example the nurse running a session on bullying and discussing skills to stand up to a bully”. Despite using the term “running a session” some respondents interpreted this question as teaching in a classroom situation, whereas others interpreted this as one-on-one teaching. Teaching in a classroom setting will be explored in detail in section 4.9.4.

Initially some participants did not understand the question or the terminology and the prompt were used. As the prompt centred on the topic of bullying, some participants stated that “*teachers manage this issue with programs*” therefore, the participants were encouraged to consider other aspects of mental health literacy. However, as the interview progressed to include the term mental health and questions around mental health care, some participants sought clarification, became uneasy, and the shift around their expectations of the nurse varied. The majority of participants from the individual interviews and focus groups (n=23) were receptive to the nurse facilitating mental health literacy in the school. The significance of the topic was respected by all of the participants. Due to differences between parents, teachers, nurses, students, and other staff opinions of each group will be identified and discussed separately in the following section.

4.9.2 Participants’ perceptions of the nurse’s role facilitating mental health literacy

4.9.2.1 *Parents*

Participants from all parent focus groups were positive about the nurse’s involvement in facilitating mental health literacy in the school. Parent focus group (School B) identified that students need to have a heightened awareness about mental health issues and the terminology associated with mental health problems and explained that it could help them with knowledge and strategies for later in life. This concept is explained in the following example where a parent suggests mental health literacy begins at “*Senior school and even university they have already got a package of strategies,...like a tool kit*” (Parent focus group School B).

Some parents in the focus group at School C suggested that the nurse could engage in the planning and facilitation of class programmes and it would be beneficial if he/she was able to teach: “*I think it is great if the nurse knows classroom strategies as well. We are very lucky here at school, but I think it would have to depend on what the*

nurse was like” (Parent focus group School C). Similarly, parents from focus groups A and B suggested as long as the nurse had the appropriate education and training she/he should be involved in facilitating mental health literacy. The group participant statements provide an example:

“Heck go for it...Anything that teaches kids to stand up for a bully...I guess that the nurse must have the appropriate training in that area?” (Parent focus group School B)

Other positive views emerged from data from parent groups supporting the role for the nurse engaging in facilitating mental health literacy. Interestingly, two parents (Peter and Cindy) raised the issue of students accessing incorrect information on-line and suggested the student would get evidence based information from the nurse: *“I think they need to be aware definitely, on the medical side about googling things including not to take things as gospel as they can be pretty dangerous, pretty scary, you know self-diagnosing. So you need a nurse to definitely make them aware on the things on there, yeah.” (Parent Cindy School A)*

Parent Peter (School A) acknowledges that teenagers spend time on the internet and that there are potential dangers in accessing incorrect information. Peter identifies that education can be accessed from the nurse in schools:

“Obviously it has become a little bit more important especially in regard to the internet, there is a lot more people self-diagnosing and things like that and I suppose that is where a lot of the problems lie, with nurses in kind of in general doesn’t matter whether it’s at a school or hospital or anything like that but no so I don’t have a problem with it at all. No, as long as once again, they have a good understanding of what the problems are with regards to mental health so ah I’m sure... Yeah, as long as they are more than willing to help out, the more the merrier I feel.” (Parent Peter School A)

Parents also made suggestions as to how nurses could work with other staff to proactively address relevant mental health issues:

“If there is a number of eating disorders or something like that that the students present with, that the school nurse might initiate some proactive programme to put into the pastoral care system so that they talk about that maybe get a guest speaker similar with drugs or sexual promiscuity or something like that and bullying and use these statistics to be proactive throughout the school.” (Parent focus group School C)

Two one-on-one interviews, both with parents from School A, identified the need for and their acceptance of the nurse teaching mental health literacy one-on-one and/or in a class setting. While Cindy suggests there is a place for both universal classroom based strategies and more targeted (or indicted) strategies with students who bully, Jasmine suggests a more targeted one-on-one approach:

“Yeah, yeah I do especially in an environment like this, we’ve got boarding and just day students yeah I think that would be good. Um, I think if it’s to do with bullying then one to one, bullies yes, then one to one. The classroom as well in a general sense but also one-to-one.” (Parent Cindy School A)

“I think it’s valuable, I think that education is valuable full stop. Whether or not a nurse is qualified to run that education session would be my concern. At the same time though, possibly, it should be targeted to those girls are victims on a one on one basis rather than in a class, cause I think in a class basis because girls it just goes over the top of their head, in one ear and out the other because it doesn’t really affect me. So I think in that respect it would be better if there is perceived issue, then that would be a better with one-on one.” (Parent Jasmine School A)

4.9.2.2 Students

In their discussion about mental health literacy, unlike parents and teachers, students were not as forthcoming. Students from all focus groups felt the nurse would be appropriate to facilitate mental health literacy, provided she was qualified. Students perceived a need for mental health literacy education and suggested the nurse was appropriate to provide this:

“Guess that she would know, (sic) that would be fine if she was qualified, yes... Mental health stuff would be good to talk about though. Like there is not much information at school at the moment about that sort of stuff so it might be helpful thank- you.” (Student focus group School A).

4.9.2.3 Teachers

Four of the six individual teachers interviewed and two teacher focus groups were positive about the nurse’s involvement in facilitating mental health literacy. Cliff was open to the suggestion that the nurse could assist with class room lessons and made some practical suggestions. Cliff had recently been to a pastoral care conference where he was surprised to learn the leading cause of death among 15 to 24 year olds in Australia is youth suicide. The same conference suggested that the greatest way to access these kids is digitally. Cliff raised the question, *“How does the school set*

something that allows these kids to get in and get the help and resources and stuff that they need?” Furthermore, Cliff identified the importance of creative education and considering the use of information technology because: “At the conference it was highlighted they are not going to come to us being teachers and not even school nurses, not even doctors, so we’ve got to get to these kids in other ways” (Deputy Principal Cliff School B).

When Cliff was asked if he could see a role for the nurse in working with teaching staff to raise awareness of resources provided by organisations such as Beyond Blue, Butterfly and Headspace he was very receptive: *“That would be perfect that is exactly the role I want to see them playing, so they can help, so they could help guide us as to ...what resources are there are to put up, there and you know to be part of ongoing management group” (Deputy Principal Cliff School B).*

Both Phill and Cliff suggest students benefit from a range of experiences potentially offered by the nurse in her role. The involvement of the nurse in a whole school perspective is also highlighted by Phill when he describes the nurse also providing professional development opportunities for teachers:

“Some of our nurses have already given courses to some of our teaching staff and it’s not just first aid they have got their cert 4 the other one is going for her cert 4 in training and assessment so it gives them the training and qualifications, they can take class groups of kids I am really open to that, I am not caught in what I think is an old model of that you have to have a teaching qualification whenever you have got a group of kids... I think teaching schools in future schools will be using the skills of every-one on staff more and more.”(Principal Phill School C)

“I think it would be, it’s nice to [hear] other voices and I also like empowering people beyond the teaching staff that are part of our community life, whether they be gardeners or school nurses to librarians but getting them in front of the kids I think, having them more aware so I think I would be more supportive yeah of something like that.”(Deputy Principal Cliff School B)

Teacher focus group (Schools A, C) accepted the nurse providing mental health literacy education in the class room on the proviso that nurses had appropriate facilitation skills and updated contemporary subject knowledge. This is reflected in the following teacher’s comments: *“Certainly if the nurse has the skills to run that session and has done some training....and had P.D. in that then I would see that as*

fine” (Teacher focus group School C). Another teacher (School A) explained that at the school where she had worked in the past did not have a school psychologist and therefore, by default, teaching mental health literacy fell on the nurse. She proposed it was appropriate that this role was undertaken by the nurse: “*Depend[ing] on the experience of the nurse and how much time that nurse has too, provide for the individual*” (Teacher focus group School A).

Reservations existed with a few teachers who were concerned that the nurse would be able to deliver the session in a class independently. However the teachers suggested that having the nurse as a guest speaker supported by the teacher would be acceptable: “*I don’t like the idea of a school nurse being a teacher..... No very much that one, but running a one-of, like a guest speaker*” (Teacher focus group School C). The idea around nurses delivering a teaching session in the classroom is discussed in more detail in section 4.9.4.

Of all participants within the research, including focus groups or individuals, only four participants (all teachers) raised concerns about the nurse being engaged in teaching mental health literacy. The issues related to how well the nurse was trained in mental health and the scope of their role as school nurse, for example: “*Because to me, the role of the nurse is for those other things that we have already discussed, rather than the mental health.*” (Teacher focus group School A).

Although almost all teachers considered the nurse to be in an ideal position to collaborate with the facilitation of mental health literacy this view was not shared by all teachers. Alice (Teacher School A) expresses her contrasting belief that she feels the nurse needs to be seen separately from the teaching staff. Alice states the nurse should not be associated in a teaching role as this can lead to confusion in roles and blurred boundaries.

“I’d rather not see her do that I actually believe that the girls need to see the nurse as some-one whose some-one they can go to that is completely divorced from their school day, and I think that is quite important that they can go over there and she is not a teacher, she is not a disciplinarian, she is not on anyone that I have to be worried about what I tell stuff to and same goes with our counsellors. They don’t have a teaching role and I see that. Once you have a teaching role, and you are in a classroom with a student you have a duty of care to do some discipline if need be, (sic) and sometimes that can interfere with an open honest relationship and I see that we have structures

and procedures in this school that gives the girls avenues to talk.” (Teacher Alice School A)

Unlike Schools B and C, School A was well resourced with specialist team staff in the area of mental health including: counsellors, psychologists and pastoral care staff permanently employed and available daily at the school. The pastoral care teacher indicated she was open to review the concept as a collaborative approach to ensure there was no overlap in curriculum however, she did explain that in her opinion, it already works well: *“I think probably from my perspective it would be better for our members, our other members from the pastoral care team who actually know the girls a bit better and the year group and know the dynamics within the year group a bit better.” (Teacher Carol School A)*. A similar view was expressed by a colleague at the same school stating that the school has specialist staff and nurses do not have teaching degrees and: *“We actually do have specialist people who are trained in that field and I have done a lot of PD in that field and so has X so has our college counsellor.” (Teacher Alice School A)*

It was apparent to the researcher that while these teachers had expressed there was an option for a collaborative approach to be considered, it was evident they believed they already had expertise available in the area of mental health literacy provision. This view held by the teachers may be as a result of “territory guarding”.

4.9.2.4 Nurses

The prevalence of mental health issues and the need for mental health literacy was highlighted by the nurses. Sondra agrees that mental health issues are prevalent; and are not well addressed: *“There are so many mental health issues that they encounter it’s just [that they] aren’t discussed in general from sexuality to depression, eating disorders.... yes all those things” (Nurse Sondra School B)*. Another nurse, Marcia also acknowledges the prevalence of mental health issues and her perspective on engaging in teaching. Marcia identifies that she usually works in a one-on-one or small group setting informally at the nurse’s clinic:

“I think that is really well needed, as we try to do that as much as possible with every person we see to educate and to let the girls know, that they are in charge of themselves and that all times if they are not feeling safe to give them strategies, and we would always for the bullying one for example, we would always tell them they would never need to be alone there, and always

to seek out to a caring adult which is what they will find at the health centre. And education I didn't say in the first question, and education is also a key point what happens here, whenever possible, ranging from just health and day to day living issues, to body image issues, and just coping mechanisms day to day, cause some girls don't get that from home and that's just something that you could talk about for a lot of the time, is the busy parent, the role of the parent is changing, I see that a lot, we are acting as if, doing a lot that mum would not have time to do, that is happening more and more.”(Nurse Marcia School A)

Nurse Jan from School A agrees with her colleague that her provision of education occurs at the individual level. Although Jan has been invited to the classroom for the delivery of general health education sessions she indicated in this school the concept of bullying (provided within the question prompt example) is addressed with other specialist staff:

“That is really interesting because um I feel one-on-one we educate every day, all day every day. We don't do any formal classroom teaching. I have been invited into the classroom about different topics at different times and I quite enjoy those opportunities um we have 2 very good psychologists, counsellors and that tends to be more their role than our role dealing with bullying. They are more, every-day, which is their role.”(Nurse Jan School A)

In one school (School C) the nurses had a greater profile managing care around mental health issues than in the other schools. School C provided an opportunity for the nurse to engage in teaching mental health literacy in the classroom. The reasons for this inclusion may have been attributed to the following: firstly, this school did not provide *any* medications therefore this aspect of care was not available nor was it the primary focus. Secondly, this school was in a lower socio-economic group (compared to the other schools in this study) and the school community had a heightened awareness of mental health issues in comparison to the other schools. However, at each school, the nurses identified that facilitating mental health literacy was of significant importance and added that the nurse required appropriate skills. Nurse Haley from School C provides an example:

“We do general talks on puberty and hygiene and touch on a bit of emotional from a physical nursing point of view and moods that you might feel at that time, um I think to train in any resiliency in mental health, self-esteem. I've done mental health training but also we are lucky to get offered a lot of professional...So I think it's great if nurses can do professional development

in mental health self-esteem, resiliency all those things, and deliver talks, sometimes I think it has more input than more with the kids than a teacher because a teacher teaches them all the time. Some-one different coming in, I think they take a lot of notice of we are never a disciplinarian we are always a pastoral role so I think that kids would gain a lot from hearing from the nurse.”(Nurse Hayley School C)

Unlike Haley (School C) who was invited to participate in classroom education, Denise, (School B) who was trained in mental health nursing has not yet been encouraged to participate in classroom education. Denise reiterates her colleague’s claim that skills and knowledge for good mental health are required and expressed her willingness to engage in teaching mental health literacy: “*Yeah, definitely. I’d love to do something like that*” (Nurse Denise School B).

The nurse is seen to be an appropriate as a resource person for the whole school and available to provide information for groups and in an individual context. The interview guide (see Appendix E) used the terminology “education” as this language was deemed to be more familiar to the participant. Throughout this section the respondents may refer to the term education, within the narrative however this may be considered in the context of the nurse providing information. However, in primary health care nurses work with people, not on them, and nurses provide a vehicle to empower people by providing information and support, for this reason the model identifies the theme as “Information and Support”. This section will identify participant’s perspectives on the nurse providing general information and support and mental health information and support in classroom and individual settings.

4.9.3 Individual general health information and support

Almost all participants agreed that it was appropriate for the nurse to offer one-on-one “general health education”. Not surprisingly *all* of the nurses agreed that general health education was not only part of their role but integral to their practice. Nurses were comfortable and confident talking about their delivery of education. During the interviews, issues such as personal hygiene education and healthy eating were raised as topics of education commonly addressed, for example:

“Um that’s a constant every child that walks through the door, um even if it is simple as washing hands, and blowing your nose but that a frequent every child that walks through you’re giving health education, yeah.” (Nurse Gloria School C)

“Health education, Oh we definitely do that. It’s hard we see on average we see, about 40 students a day..... We do a lot of one-on-one education. A lot of teachers will ask me to talk to kids about hygiene if there is really poor hygiene and it’s embarrassing so you do that one-on-one.” (Nurse Haley School C)

Similarly, other participants positively highlighted the nurses’ role in one-on-one general health education. Health education content also included: *“Terms of like (sic) health eating all that sort of thing definitely” (Parent Cindy School A)*. Furthermore, teachers and parents provided examples whereby the nurse provided general growth and development education which is highlighted by Winnie:

“I had an incident a couple of years ago a young lady had her first period and was totally unaware of it and didn’t even know what was happening and the nurse was just brilliant about it. And it was confidential it was one-on-one and it was not embarrassing to her, it was fantastic.” (Teacher Winnie School B)

It was clear during the interviews that participants considered the nurse to be an appropriate person to provide general health education and this was illustrated through a range of scenarios. This was true for the whole school community and was reinforced by students: *“Yes that a lot of things happen one-on-one at this school and that it’s really helpful getting the tutor, more effective” (Student focus group School B)*. Another student group also expressed that they were comfortable with the nurse providing general health education with the proviso: *“That you shouldn’t make it like that’s what you have to do but it should be something you want to go to if you want to.” (Student focus group School A)*

4.9.4 General health information and support in the class room

In addition to general health education occurring in an individual context, all schools provided examples of the nurse providing general health education in the classroom. One school provided an example of the nurse providing health education to the girls on the topic of menstruation: *“I mean we get the nurse to come in and speak to the girls and then they will come up when it happens to them and the nurse will say ...what you need to do. Well that is part of educating” (Teacher focus group School B)*. Some nurses provided examples of sessions they had facilitated with parents and students. Jan (Nurse School A) has given sessions in the classroom on health education during early childhood studies, including the topic of safety in the home.

This education included topics such as safety with medications, hot irons, and swimming pool safety. During camp the nurse has also presented information on bush first aid and safety in the wild. Jan was also invited by students into an English class to speak about sexual health including the topic of how to use a condom. Jan explained that although she has not participated in any classroom sessions on mental health education; she has addressed this in a one-on-one setting. However, Jan believes that students need mental health skills, knowledge and resource education for their future and that this would sit within her scope of practice:

“Formal in a classroom I quite like, I quite like being in the classroom.... I quite like answering the questions that the kids ask you, honestly. So if I was asked to go and talk about their mental wellbeing that would be really interesting actually, really interesting. I see that as our biggest role every day. That you have to engage with whoever comes, for whatever reason and explain to them how you see their situation to be, and the most appropriate way to deal with whatever presents, be it mental or physical, and how they can they are going they can manage themselves.” (Nurse Jan School A)

4.9.5 Moving beyond general education to mental health education

Similar to Nurse Jan believing that general health education is the biggest role every day and that education may include mental health education, Nurse Claire (School B) feels that it is a “*natural part of the role*” when she provides opportunistic education. Claire also provides education which moves beyond general health education. Claire talks about an example whereby a teen requires health education in a one-one one context to manage body odour.

“Could be just simply using deodorant and the kid comes in and you know, that they are not that they haven’t developed in their knowledge of having to use a deodorant, or recognise, that they need to something as simple as that. Quite happy to say I think you need to have a deodorant at school and after sport and when you come to school, just sort of give them a heads up on how and I’ll even say to them, you might not notice that you’ve got some body odour but your friends might and that might be the difference with you fitting in with your friends and not. Do you know what I mean? For them to see why they need to step up their hygiene or what they need to do for their own health and overall blending and what not?” (Nurse Claire School B)

This example highlights the complex nature of health issues and highlights that an issue that may be initially considered general health education may also be strongly associated with mental health education. This example provided an opportunity

whereby the nurse is considering the impact of the body odour on friendships. The nurse has also created the opportunity to discuss if there has been difference in the student's friendships and also any potential subsequent impact on his/her self-esteem. Similarly, another example by a different nurse reflects how a lack of eating breakfast leads to both general and mental health education:

“Um yeah I do that [provide education] always so if they have come in and haven't eaten breakfast, or if they come in after recess and they haven't eaten breakfast or lunch, then I feel it is a duty of care yeah to give that how important it is whether they take it on or not.” Nurse Lilly School C)

It was clear that the participant felt the need to provide education around eating for physical health reasons. However, the nurse also expressed concern that there are many students attending the school who come from lower socio-economic families where there is a lack of food available and from families where parents may not always be home at meal times, especially breakfast time. Nurse Lilly explained further that in the instance of missed breakfast the conversation between the nurse and student would be explored further, considering aspects such as underlying mental health issues with the student or in their family. The aforementioned examples demonstrate that general health education may often lead to mental health education. The student may present with a physical issue which may be a manifestation of a greater issue. This context will be explored further in 4.10 where physical and mental health assessments are discussed.

4.9.6 Mental health education in the class room: positive perspectives

The theme mental health education was considered in the context of both classroom and one-on-one education. All participants were asked “What are your thoughts in the nurse engaging in teaching mental health education?” That is, students taking control of their own health status? A prompt was given to most participants being: “At the session the nurse may assist in providing tips on how to be safe on the internet”. Because this often resulted in a response about internet safety being a class education curriculum requirement of teachers, it was often necessary to explain that the question was not limited to this context and another example of managing stress was offered. An example of the question further explained was given to Parent focus group (School B);

“Just to widen and rather than make it so narrow on that specific example, mental health education could encompass, education such as the nurse running a classroom presentation on how to manage stress, or nausea at exam time or anxiety, you know that overwhelming feeling. So just as an example, at another school there is a nurse who runs a meditation session, so the kids are aware of her profile as a nurse but, also she is engaged with them at that level so mental health education, so could I get a perspective from that point of view?” (Interviewer)

4.9.6.1 Nurses

Overall, the eight nurses interviewed were positive about engaging in providing mental health information in the class setting. Nurses being at the frontline of care, believed they had insight into the contemporary issues being experienced by adolescents. Additionally, they believed that proactive information could be provided in the classroom by them: *“Yes definitely I think it is very important to continually educate in all areas especially mental health. Because of that age group and they’re so vulnerable” (Nurse Sondra School B)*. During information sharing about mental health the opportunity is there to provide resource information: *“Definitely, definitely and the resources they can access.” (Nurse Gloria School C)*

Haley explains again, as highlighted in the health literacy review that the nurse needs to be skilled and is appropriately placed to conduct this education. Haley believes the nurse is linking practical experience with theoretical knowledge, and evidence based practice into the delivery of education:

“As long as the nurse has trained in mental health and done mental health PDs [Professional Development] they are definitely the right person to be doing mental health. I mean that we can also when we are delivering a talk, use what we have from the care centre. So if students have come in with certain issues we can bring them in and educational session because we know what is happening to kids we know what they are being bullied about or what their mental health issues are, we can tweak our talk to cover those areas because if it is one student it is happening to it is others as well, definitely.”(Nurse Hayley School C)

Furthermore, Marcia explains that at her school (School A) sharing of mental health information happens informally in groups at the clinic. Marcia provides an example where the nurse provides an opportunity to proactively discuss wellbeing:

“Yeah I think Yeah we do a lot of health promotion and health education and sometimes I can, can be a group sometimes they come in at a lunch time, sometimes they come in, just to be social and a lot of them do usually they will come in a pack of 5 and cause they say, ‘Oh I’d like to talk about um my friend here has not had any lunch’.. And we talk about how it is important to eat correctly and we might talk about other things socially what is going on and lack of sleep and that brings about other issues in your body, things that we do it in a friendly manner I find that is they are most receptive to that.”
(Nurse Marcia School A)

Throughout the interviews it emerged that the practice of nurses engaging in classroom mental health information sessions was occurring infrequently at School C but was not practiced in A or B schools. The interviews with all of the nurses suggest their willingness and perceptions that they are appropriate to deliver this information. Denise explains that her skills are not often utilized. This frustration is evident in the comment by Denise:

“I’m a registered psychiatric nurse and a registered general nurse... and that’s not utilized at all here. So, the only things that are utilized here are the general nurse skills, but generally as a general nurse you have that ability to chat and have a connection with people so you do that anyway. But I think you could stretch that even further especially with the older kids.”(Nurse Denise School B)

When discussing the role, Denise cites the barriers which she believes have prevented her from using those skills:

“Um, I think yeah you can, during your nurse training you do a lot of teaching, when you come qualified you do a lot of teaching. You’ve got a lot of student nurses coming through so, you’re not a teacher nurse but you do teach your skills so when I think teachers are very possessive and over what they do and they’re the teacher and they need to sort it out but I think you need to utilize those people who have those skills as well who might not be called teachers but you could use them for specific stuff to they’re into they’re knowledge base for.” (Nurse Denise School B)

The nurse’s role in providing information and collaboration with other staff will be discussed in more detail in section 4.23.3.

4.9.6.2 Students

The majority of students from all three schools were positive overall about the nurse engaging in facilitating mental health education in the classroom setting. The

students also felt the nurse was knowledgeable, credible and appropriate to provide education on the mental health issues and care. This is reflected in the comments of Student focus group (School C):

“Um, it could be good because... maybe some people don’t know about, that sort of stuff.”

*“Some people might find it easier too, talking [to] a nurse, besides their parents and that and friends, because the nurse has more knowledge maybe.”
(Student focus group School C)*

Despite the positive response about nurses facilitating mental health education in the classroom, there were some considerations suggested by a few students. At School B a student questioned the nurse having the qualifications to teach in the classroom. A year twelve student suggested that they could be given an option whether to come to the nurse conducting a session on mental health education in the classroom:

“I don’t think it should be compulsory... you know sometimes when they come into the class and everyone’s got to listen, you know, not everyone might not be too comfortable.”(Student focus group School A)

4.9.6.3 Teachers and Parents

As reflected in the comments below the parent focus groups collectively believe that the mental health education needs to be in partnership with other key leaders such as the teachers, pastoral care, and counsellors.

“I’m inclined to agree, it would be a partnership between teaching staff and possibly another expert [in the] school, yep and a school psychologist or whatever they are from outside...a bit of a team effort.”(Parent focus group School A)

“In my mind it should be embedded in curriculum in classroom practice not just in the curriculum but every day.” (Parent focus group School B)

To facilitate this partnership in education delivery parents suggested mental health education could be provided by the nurse as a guest speaker with a teacher present. School C Parent Focus group provides some examples: *“Just like my colleagues say (Mrs X) teachers would need to be present in the classroom” (Parent focus group School C)*. The following example identifies the nurse working collaboratively in this way: *“They do facilitate that, having a guest speaker come in, groups regarding cyber safety, drugs” (Parent focus group School C)*.

Generally, it was agreed the nurse should provide education using a collaborative approach. Vanessa provides a good example:

“Yes, again, I think if I support with other people, we have a pastoral care team and I think she would be part of the team, not doing it totally on her own, or his own but I think would be part in conjunction, with other perhaps classroom programs. She would be part of that with myself [sic] and other leaders in the school.” Pastoral Care Vanessa School B)

Carol suggests it needs to be clarified, who is already involved, and what information is being addressed:

“In regard to the nature of what it was that would be discussed and how it would be discussed, um because as you would be aware we do have girls who have got some mental health issues, and they are under the care of our counsellors here or outside counsellors, so I would need to find out more to be honest about the nature of what would be discussed and how ...I would have an open mind to it just, yeah, things I would need to check we are not crossing any boundaries. I would need to check with the counsellors our psychologist to see whether or not it would be an appropriate thing to do, based on their level of expertise and knowledge of mental health.”(Carol Teacher School A)

Working collaboratively is also discussed further in section 4.14.3.

4.9.7 Mental health education in the class room: maintaining trust

While it was seen appropriate that the nurse be involved in a collaborative manner in some class sessions it was also deemed important that the nurse maintain the role of confidant. Parents reinforced the importance of maintaining trust and highlighted the unique role of the nurse in the school community:

“I think the point that was made before, is the nurses role not becoming confused with that of a classroom teacher, because they play such a key role being a go to person, they say they have a got a headache they want to talk to someone, not a teacher, so I think that has implications for what we are talking about in terms of the presentation, how it is done, and the context in which it is given, rather than a straight classroom scenario. So I agree with where this idea goes but I think that other factor is a key factor that they are such a person with whom the kids confide, that is critical that we protect that.” (Parent focus group School B)

However, it was also acknowledged by parents and teachers that involvement in a class setting not only adds to the learning experience but is also likely to enhance further rapport with the students:

“Oh I have no problems at all. Yes if they can add to something we are already doing or not doing then I think it is a fantastic idea and it helps them interact with the wider school community then if something does go wrong with kids or a staff member I think they are much more likely to have the confidence to go and have a talk to the nurse.” (Principal Phill, School C)

“Yes I do think the nurse should play a role in like mental health at the school, and the community, the more they interact with each child, or they are seen as a health person the more it develops the trust with the individual child”(Parent focus group School B).

Similarly, Winnie cites the nurse as a valuable resource person in providing classroom education. The nature of the nurse is described here which would be conducive to developing that trust, which is critical to enable the adolescents to come and talk with the nurse:

“Oh I think it is wonderful.” Yeah why not, you know sometimes the kid needs another voice, another person that they don’t see, as their teacher or as the chaplain you know they are used to seeing all those people, but the nurse comes and she is very lovely and very warm and very nurturing the kids are very open with her, brilliant at helping with those sorts of things.”(Teacher Winnie School B)

Another teacher in the teacher focus group (School B) was passionate and supportive about the nurse providing mental health education in the classroom. She emphasizes that it can be a catalyst to access the help in the health centre once the nurse has heightened the awareness of her profile:

“I think that is a good thing for them to do. Give them the training. If they deliver lessons on that it could well be then that the students feel they are approachable to discuss further issues so it’s almost that a declaration that I am here I know about this and then the doors is open and they can go there rather than us going straight to the counselling rooms or whatever, it’s just another opportunity and if they have got the skills then I think that is fantastic.” (Teacher focus group School B)

4.9.8 Mental health education in the class room: concerns

Most participants felt the school nurse should be encouraged to participate in classroom activities as a guest speaker. However, there was less agreement on more formal roles as an educator. It was generally agreed amongst the participants that the nurse has a classroom teaching role providing that she/he has the skills and training, up to date with content and it occurs in collaboration with curricula. In seven of the

interviews and six of the focus groups, the participants focussed on the term “teaching” and discussed their opinions on the nurse teaching mental health education in the classroom. Interestingly, the term teaching was not debated in the area of general health education. Participants spoke about *general* health education in classroom presentations without any concerns. However, when the subject matter was around mental health, the participants considered the nurses teaching role in two domains: firstly as a presenter and secondly as a credible source of mental health knowledge. The nurses’ ability to manage a classroom setting was also considered by some participants and the impact on student nurse relationship was also raised as an area of concern.

While it has been recognised that bringing in the nurse into the classroom can facilitate positive relationships and improve awareness of the nursing role, others expressed views that the nurse student relationship could be compromised. Pastoral care providers and teachers considered there could be a possible negative relationship consequence with nurses providing both mental health literacy and mental health education within the class room setting. The researcher could feel the element of concern with some of the participants stating that they didn’t want the nurses’ level of trust with the students to be compromised: *“My concern goes for the nurse student relationship, and the teacher student relationship can be quite different” (Teacher focus group School C).*

Some participants also expressed concern around nurses lacking classroom management strategies. Teacher focus groups (Schools B and C) suggested there can be situations where classroom management skills are required: *“There is a potential for a different relationship occur then may or may not be appropriate or the opportunity might arise with some sort of incident or something to occur” (Teacher focus group School C).* Furthermore, participants spoke of teaching qualifications being a requirement *OR* having a teacher present:

“Even a small group I still have a bit of a concern about it. If they have got teaching qualifications then that is fine, then you know they have got those situations to manage young people. So, I think it is the management the young students rather than what they are delivering. So, if they have got the expertise to deliver that subject that is fine, but I would still want a teacher or somebody with the expertise with managing situations, classroom situations” (Teacher focus group School B).

4.9.8.1 Nurse's presentation skills and subject matter knowledge

Students suggested the nurse was appropriate to facilitate mental health literacy in a classroom setting. Nurses from two of the schools had facilitated classroom based presentations focusing on general health matters. However, when asked about *mental health education student focus group (School B)* asked: *“Are they qualified to do that? Is that part of their degree?”*(*Student focus group School B*) and similarly, School A students also insightfully asked: *“Guess that she would know, that would be fine if she was qualified, Yes”* (*Student focus group School A*). Given that the students had accepted the nurse's presentations in other health subjects it was interpreted by the researcher the students were inquiring about the nurse's level of knowledge on the content.

Consistent with the following comment consideration around the nurse's content knowledge was also raised by some of the teachers: *“But unless that is kept up to date there is a real danger in presenting information that was accurate”* (*Teacher focus group School C*). Other teachers suggested if the nurse had presentation skills and content knowledge, the nurse was appropriate person to deliver this education. This is reflected in the following comments:

“Yes, I think if the nurse has got the skills to do that... and is a good communicator, and is aware of all of the issues relating to the school environment which they probably do because they deal with a lot of the kids who walk in who are the victims of bullying with one form or another... So yes I do, I, (sic) I would probably put a proviso with that, (sic) that, I think they need, further training beyond their initial nurse qualification, to do that.” (*Pastoral care Vanessa School B*)

“I think if they are up to date it is good to have it, a different voice than the teachers ...and if they are qualified and trained and know everything, then it is definitely a good way to go about it.” (*Teacher focus group School C*)

Interestingly, section 4.10.3 and 4.10.5 of this thesis which explores participant's understanding of the nurse's level of knowledge in assessment, care and management of mental health issues identifies that participants are unaware of the nurse's skills and knowledge. Despite a lack of understanding one participant suggests if the nurse has the skills and knowledge it would be accepted, however: *“With mental health not every nurse is going to be able to deliver a session on mental health so they need to*

have had training and had P. D. or that, then I think that is fine” (Teacher focus group School B) .

Additionally, one nurse echoed this suggestion acknowledging the need for her to access professional development around teaching classroom due to her lack of confidence and absence of classroom presentation skills. Claire has expressed: *“I think they [teachers] have been trained to educate, whereas I don’t feel I have been trained to educate, in a class room.....it requires the planning and the delivery by a trained educator. And, I think again, it needs to be delivered well” (Nurse Claire School B)*. This comment suggests there needs to be support and training for the nurse to be competent in the delivery of classroom presentations.

4.9.8.2 Individual mental health information and support: positive perspectives

Almost all nurses, teachers, allied health, parents, and students agreed the school nurse played an important role in providing opportunistic *general* one-on-one information. However, the nurse’s role providing one-on-one *mental* health information was debated with different groups presenting a range of perceptions. Many of the participants were positive that the nurse was an appropriate person to provide one-on-one *mental* health education. The comments by a parent explain: *“That hearing from another voice can be really valuable, and that as the nurse seen as a separate entity, as far as they are not a teacher...and there is that, safety, trust and support” (Parent focus group School B)*. This example provides an insight into some of the general thoughts of the participants, that school nurses played an important role in providing one-on-one mental health education.

Some participants felt school nurses were accessible, had opportunity to build rapport with students and had the skills to provide sound mental health education. School C parent focus group recognised that the nurse was someone the student could approach and she could refer students as required: *“Someone is telling her in confidence because they don’t feel like they can tell anybody else and they can be referred on again” (Parent focus group School C)*. Another participant reflected that seeing the nurse would have been helpful for her daughter who needed support:

“Cause I know with my daughter I just found recently she came home and just broke down and that is unusual for her and she said to me I didn’t want to tell you about it, cause [sic] I know you feel a lot of stress at the moment

and she didn't tell anybody. So having some-one like that at school [that might have been helpful]. Yeah, and the nurse was quite concerned if she presented or if it was at a higher level what you talked about, the amber light, the nurse would then in fact tell the parent and then make a referral, possibly.” (Parent focus group School B)

In some cases school nurses were able to build a rapport with students and may be better able to pick up on mental health issues than parents. A parent reflected that there may be circumstances where parents might not have the time to appropriately listen to their child. In this situation the child may then turn to the nurse at the health centre who will take note, and *“If your parents are not listening to you some-one has got to listen to you. I think that student ought to have that one-on-one” (Parent focus group School C)*. Parents acknowledged they are busy and seeing the nurse provides the adolescents with an avenue for appropriate support and education: *“They don't want to burden mum and dad because they have enough on their plate, they don't follow it up and then let it explode.” (Parent focus group School B)*.

Many parents accepted the nurse could provide the student with the mental health information in a one-on-one context when they came to see her in the clinic. Another parent described a scenario whereby the adolescent could see the nurse without other students being aware, therefore privacy could be respected: *“[They] don't want to tell home because they will contact the school, other kids will see like all of that” (Parent focus group School B)*.

School B Parent Focus group findings are consistent with other parent focus group opinions and suggest there is a need for mental health information due to a lack of knowledge and skills within the family, and to provide reassurance. Suggestions were made that the nurse provided education on mental health issues such as how to recognise stress and strategies to manage stress. The following examples from the Parent focus group (School B) provide support for these opinions:

“And some families have a lot of knowledge and other families not so, so work with the children that have particular needs, having the nurse there to provide the family with an additional source of support for the family.” (Parent focus group School B)

“Even recognising the signs of stress. We teach quite young children and just recognising and this certain physical signs might mean you have a little

bit of stress happening and that might be what it is you know.” (Parent focus group School B)

Some teachers were of the opinion that it is appropriate for the nurse to provide one-on-one mental health education. A teacher included the proviso that the nurse requires the education to do so: “*Ok, then, Ok I’m alright with that*” (Teacher focus group School A). It was also suggested by the teacher focus group (School A) that if one-on-one mental health education is to be provided by the nurse; there must be collaboration and the nurses’ role is to be clarified:

“It’s a question with the nurse working in within a pastoral care plan in place. Or a component in that plan to do that one-on-one we have certainly had that health education in the past, for a particular issue, it sort of depends on how those roles are divvied up for that particular student.” (Teacher focus group School A)

The majority of the nurses believe that the provision of individual mental health information and support is a large part of their role and that it takes time to provide this effectively. The aforementioned example suggests collaboration, meeting to discuss information content and expectations around roles. Furthermore, to provide the information, all takes resource time. This is portrayed in Haley’s comment:

“Absolutely, and mental health issues aren’t 5 minutes as you know,some kids need to be able to go into a room with you for up to an hour.” (Nurse Hayley School A)

4.9.9 Individual mental health information and support: concerns

Despite the majority of participants suggesting the school nurse plays an essential role in opportunistic one-on-one physical and mental health education, an allied health staff and teaching staff (n=3) were hesitant about the extent of the one-on-one mental health information delivered by the school health nurse. Their concern for this role was largely around the type of advice the nurse was providing and the need to refer to a more specialised health professional. For example, Teacher Alice (School A) suggested mental health issues should be referred to the school psychologist:

“If she felt that child was at risk if she didn’t have a one-on-one conversation, I would be very happy with her to continue a conversation. It would depend on what the nature was that the child presented with because we have two psychologists on campus if it is a mental health and wellbeing issue, she would be best to refer it on, and If she was a health issue she was

sick you would be expecting she would be ringing the parents as well at the same time, as well as offering advice. For example, like anorexia, that's a minefield to enter discussions with. I think entering further discussions with the girl without knowing the history, and sometimes history is kept in different places within the college, [therefore] some phone calls [are required]." (Teacher Alice School A)

Alice's school did have a very well-resourced health service so in this case this would be a reasonable expectation. However, Alice's comment suggested that despite the excellent resources, there is little interaction between the different allied health staff. Carol, Alice's colleague reiterated this concept, noting her preference was for the nurse to provide health promotion information or follow up advice. However, a serious mental health issue such as an eating disorder was best to be referred on. Despite the initial reservation, it also appears that Alice recognised that the nurse has a role to play with individual mental health information and support before referral:

"Fine, I think fine minor simple advice can never go astray, I think that is part of administering panadol or asking the child to lay down for an hour to rest. And yes a little of when you leave here A, B, C, D and you may find your days a little bit better. But it would be very much at her discretion at what end of the spectrum the advice was needed, and if it was just something simple, like drinking plenty of water and get a good night's sleep tonight that's very wise. [And, liaison and collaboration] with pastoral care team would be a wise approach."(Pastoral care teacher Alice School A)

Similar to the teaching staff suggestion that collaboration is integral to practice, it was also apparent that many parents considered collaboration between the nurse and parents regarding individual mental health information to be an important role of the nurse. Parents at school B were quite positive overall around mental health education being delivered by the nurse in a one-on-one context. However, there was clearly a lack of parental understanding around ethical issues surrounding the nurses' scope of practice and confidentiality concerning the context of a mature minor. Some parents suggested they would prefer that the nurse communicate and gain consent from a parent if this information and support was required. Parents also suggested that they would like to be aware of and given the choice when referrals were required:

"Yes and having the option I wouldn't want my child having a one-on-one without my knowledge at all, like I wouldn't feel comfortable with that. I

would as an option, as a parent, I would want to be contacted by the nurse and have that as an option.” (Parent focus group School B)

“That’s when you are looking for the referral, at a low level perhaps, it is coming from the nurse but once it got to an amber light, you want it passed on and you want to know about it.” (Parent focus group School B)

Similarly, some teachers were unaware of the nurses’ scope of practice in the context of individual mental health information and support. The lack of understanding around consent and confidentiality was also raised amongst teachers. Some Teachers (School C) were clearly undecided if the nurse is appropriate to deliver information and support around mental health issues to a student individually. During the interviews it came to light that some teachers were unaware that the nurse as health professional is qualified and knowledgeable enough to provide mental health information. Concerns were raised questioning, *“Is that the nurse’s role?”(Teacher focus group School C).*

“I don’t know why but my first instinct is I don’t like it, the one-on-one bit is an issue.”(Teacher focus group School C)

Additionally, a teacher lacks understanding around the nurse’s scope and role regarding what the nurse is able to offer and how much parental consent is required for sharing of information to occur:

“I have seen all sorts of kids come in here with various issues and it is a tricky one, how much they educate and the issues that nurses need to keep in mind in schools, ...they are dealing with kids they are not dealing with adults they don’t have the full consent they don’t have any right to do anything more than to make sure the kid is safe, and they have to take into account the role of the parent and every time and that (sic). If nurses don’t have that at the forefront of their mind then I have got concerns as well.” (Teacher focus group School C)

In following exchange the teacher (Teacher focus group School C) believed that individual mental health information and support was also influenced by the nurses understanding of the law, ethics and the nurses’ duty of care while working within the context of a Catholic school.

“Sexual education is the stuff I think about when I hear that question. What do they get informed about by this nurse? And do the parents know they are getting informed about that? Are they happy they are getting informed about?”

All those sorts of things which I think they need to be, and even just we are a Catholic school and they just need to be aware about those sorts of things, about you, know the sorts of things they tell them about. I think contraception and all those sorts of things. Obviously the role school nurse.” (Teacher focus group School C)

4.9.10 Summary

The first section focused on the communities’ perception of the nurses’ role in promoting mental health literacy within the whole school. While the majority of the participants from the individual interviews and focus groups were receptive to the idea of the nurse facilitating mental health literacy incorporated as a whole school approach it was apparent that there needs to be clarity around whole school expectations of the nurse and how this would be operationalised. In addition to the nurse’s role facilitating mental health literacy within the school the role is broadened from awareness to action. The nurse’s role providing general and mental health information and support will be examined in the next section.

The second section focused on the community’s perception of the school nurses’ role in facilitating mental health literacy. The majority of the school community believe that mental health literacy education is critical. From the evidence it is apparent that some nurses are engaging in facilitating mental health literacy and are willing to do so. It was obvious that the nurse was widely accepted to provide general health information and support in the classroom and in a one-on-one context. The nurse is accepted as a valuable professional with knowledge and expertise in the area of general health matters. During the interviews around general health the discussions flowed easily, without controversy, however, there was some carefulness with opinions around the nurse’s role providing mental health information and support.

Most participants felt the school nurse should be encouraged to participate in classroom activities as a guest speaker. To facilitate this partnership in education delivery has been suggested by teachers and parents that mental health information could be provided by the nurse as a guest speaker with a teacher present. It was further suggested this information is developed collaboratively and that there needs to be consideration given to the unique role of the nurse. The nursing role needs to encompass building trust within the nurse student relationship. Parent focus groups suggest there is a need for mental health information due to a lack of knowledge

within the family, and to provide reassurance. Some participants felt school nurses were accessible, had opportunity to build rapport with students and had the skills to provide sound mental health information.

Some participants expressed concerns about the nurse providing mental health information and support. This concern was largely around the type of advice the nurse was providing and the need to refer to a more specialised health professional. Some teachers were unaware that the nurse as health professional is qualified and knowledgeable enough to provide mental health information. Furthermore, some participant's lacked understanding that general and mental health issues have a reciprocal relationship and are not always exclusively independent. Similarly, within the theme assessment it is identified that general and mental health are inextricably linked. This concept will be examined in the next section.

4.10 Assessment physical and mental health

4.10.1 Introduction

Assessment was a key theme that emerged from the meanings identified during data analysis and is described as physical and mental health assessment. When discussing the role of the nurse the majority of participants perceived that the nurse's role included assessment. To explore this further, participants were asked "What would be your expectations of the nurse undertaking screening?" The purpose of this question was to generate participants' thoughts on the depth of nurse's assessment. Screening was used as a term to encourage the participant's to consider their belief of nurse's assessment to include both physical and mental health. The outcome of the two questions led to the concept of assessment being viewed as a preliminary assessment, and secondly, as a comprehensive assessment. Participant's views separated the level of the nurse's assessment where some considered an initial assessment as more of a general physical health problem and the comprehensive assessment included consideration of mental health status. This section will firstly explore the concept of a preliminary assessment (or initial assessment) in nurse's practice. Secondly, participants' opinions including reservations and support for the nurse conducting a comprehensive assessment will be discussed.

4.10.2 Initial physical assessment

Over one third of participants, representing student, parent, teacher, and nurse groups, communicated their belief that a general assessment role is undertaken by the nurse. Without exception, the groups identified that the nurse has sound assessment skills to determine if first aid is required. As one parent explained to the nurse: *“Make[s] the decision if the child needs to go home during the day or like (sic) if an ambulance needs to be called ”* (Parent focus group School B). Many participants indicated that nurses were able to assess whether the student was well enough to remain at school. Many teachers indicated that they relied on the nurse’s assessment skills and judgement with confidence:

“They also act at the next level if a child’s says they need to go home if they feel unwell or sick then you can send them to the nurse just to get that verified and she will often make the phone call and things to check that is a good response, rather than the child making the decision themselves or us having to make that decision whether they need to. In fact we don’t allow them to go home unless the nurse has said.” (Teacher focus group School B)

Furthermore, it was apparent that teachers believed the nurse not only held expertise in deciding whether the child should remain at school, but also if a further medical opinion or treatment was required: *“I think it is a mixture of assessing students who for whatever reason aren’t in class and giving the care they need to get them into class as soon as possible, or get them home with the opportunity to get them further medical attention for that degree yeah”* (Teacher focus group School C). The following extract provides evidence that during care the nurse has scope within her role to conduct a more comprehensive assessment.

“[If] they have got ill during the course of the day and her job is to really identify what they need or what support they need, um (sic) or whether they need further medical treatment or whether they need to go home or what the source of their distress is.” (Pastoral Care Vanessa School B)

4.10.3 Comprehensive/ Mental health assessment

The aforementioned example subtly identifies that the nurse does more than an initial general physical health assessment where it is warranted. During the interview the questions progressed to include the concept of a comprehensive assessment which incorporated an assessment beyond general physical health to include mental health assessment. It is also important to note, the interview question guide did not formerly

ask the participants about a “mental health” assessment. The reason for this deliberate omission was to discreetly include the concept of mental health without causing alarm to participants, as it is suggested there remains a stigma concerning mental health issues. Therefore, the question enquires about the student’s health status. However, the prompt includes a headache scenario, to encourage consideration that the scenario may be indicative of a student presenting with a mental health issue or area of concern. For this purpose the participants were asked for their perceptions of the nurse undertaking a comprehensive assessment.

4.10.4 Mental health assessment reservations

A few teachers suggested that the nurse’s assessment should be contained to an initial assessment: *“Probably at a very basic level yeah”* (Teacher focus group School C). There was also a suggestion it would be unnecessary to conduct a comprehensive assessment on all the children who present: *“There is no point to do a thorough, a full screen on everyone or every little thing”* (Teacher focus group School C).

Some teachers suggested that the initial assessment could include assessment at a basic level and *“Then looking, depending on what presents”* (Teacher focus group School C). While another suggests how the assessment could extend: *“I think just as little bit of investigation yes,[...]..it might be by asking innocently a little bit about it, they might be able to fix it, but probably not to be a full medical diagnosis, no”* (Principal Phill School C). A participant reflected: *“No I don’t think they qualify to diagnose on any student”* (Teacher focus group School C). As nurses are not qualified to diagnose a health condition, it seems the foundation of these comments are due to a lack of understanding of the nurse’s role, and a lack of awareness of the duty of care required of the nurse. Another teacher reveals her uncertainty about a comprehensive assessment based on her lack of undertaking of the nurse’s scope of practice: *“Oh only a few quick questions maybe don’t want to delve into that don’t think it is their responsibility as such”* (Teacher Jenny School A).

4.10.5 Recognition of the nurse’s role in mental health assessment

4.10.5.1 Teachers

While some participants felt it was not the school nurse’s role to conduct comprehensive assessments, three quarters of participants indicated that the

comprehensive assessment of the student health status was part of the nurse's role. As the different groups; teachers, nurses, parents, and students held slightly unique views, opinions will be presented in specific groups. It has been already identified that a few teachers cited the assessment should remain at initial stages while most other teachers, (Schools: A, B and C) agree that there may be circumstances where the nurse is required to conduct a comprehensive health assessment. This is supported by the suggestion that *"We have got sensible school nurses who recognise that this kid comes in here every other day with a headache; let's do a proper screen here."* (Teacher focus group School C). It was apparent to the researcher that teachers were respectful of the nurse's ability to determine the complexity of the assessment required:

"I think definitely. I think they do it automatically and I think as long as they find something deeper than dehydration than you know, have you eaten or had something to drink today, then they forward that information on."(Teacher school C)

4.10.5.2 Nurses

All eight nurses believed that they undertake comprehensive assessments of student's health status within their work. Nurse Claire (School B) and Nurse Lilly (School C) describe the assessment as an integral part of their work prior to treatment;

"Yes most definitely. The screening is like any nursing role you take a history and then you do identify what precursor's physical or I guess psychological if you could before commencing any treatment or before progressing to the next stage." (Nurse Claire School B)

"Yes, absolutely I think um starting from the basics of, are they eating? To, up to um how long the headache has been, yeah, just from a general nurses point of view of screening a medical condition when a patient first presents." (Nurse Lilly School C)

Haley interprets the prompt scenario with perhaps a deeper meaning and gives an example whereby she describes an example of a comprehensive assessment considering the student's mental health status:

"Definitely you get to know students' well. 'Josh have you been wearing your glasses?' 'No miss'. 'Have you drunk water today?' 'No'. So you will do the standard, you know the regulars because they haven't drunk water because

they have just done sport and they are not wearing their glasses. If it is a student that you haven't seen before and they have got a headache we will do the 'Have you drank water?' 'Have you eaten?' 'Try to lie down'. Definitely, if it was coming frequent, or you can go off I just use my instincts a lot, something is not right I will just find a quiet space just me and them and say you know, headaches are caused from other things. 'Have you got any stress?' 'Have you got any issues at school, or home?' 'How are you going with your homework?' Just a general talk and then it will come out usually, if there is something there." (Nurse Haley School C)

While all nurses agree that they undertake comprehensive assessments critical to their role, at the same time Sondra provides an example which reflects the complexities in doing the assessment. Sondra explains that if there is something at home contributing to headaches it is sometimes difficult to access the information: *"Sometimes I think that the boundaries that are in place are a bit hard to, ... to get past those boundaries to find out what is going on in the home and what is going on with the child"* (Nurse Sondra school B). There are barriers within the nurse's role including: access to information and collaboration which will be discussed further in section 4.23.

4.10.5.3 Pastoral care staff

The aforementioned headache scenario is one which may require a comprehensive assessment and Haley provided a sound example of how the assessment interview may be initiated. The interview progressed from basic questions related to activities of daily living to more sensitive questions encouraging discourse around sensitive matters. Not surprisingly, to be able to recognise the need for, and undertake a comprehensive assessment requires the nurse to have both sound knowledge and skills in mental health assessment. Pastoral care staff (School A and C) describe the nurse's primary role is to treat the headache, and there may be circumstances where it is appropriate for the nurse to discern and conduct a comprehensive assessment as required. This comprehensive assessment would include an assessment for mental health issues as illustrated further in Alice's comment:

"If there was a child who was presenting on a frequent basis, and she [the nurse] had cause for concern I would suggest it was within her duty statement actually to look deeper actually, if she thought it was probably more than just a headache" (Pastoral care Alice School A).

In further discussion Carol reiterates the belief it is appropriate for the nurse to make a comprehensive assessment including: *“A gentle enquiry... [and] I hope there would be some probing”* (Pastoral care School A). Pastoral care staff demonstrates understanding of the complexity of a situation whereby the student may present with a simple matter which disguises a greater issue. The following comment acknowledges the complexity of the nurse’s role and significance in the relationship where the student may be given an opportunity to reveal deeper issues:

“I think if they talk to the student and the student reveals other things, about that, have you had a lot of headaches, headaches in the past. I think those are the sort of routine questions that anyone involved in nursing would do, then, if that leads to a revelation about something else I think they shouldn’t just leave it there, they should talk to that student definitely and find out what is the cause of it.” (Pastoral Care teacher Alice School A)

4.10.5.4 Parents

The role of the nurse to conduct comprehensive assessments was also highlighted by some parents. Parents identified it was within the nurse’s role to: *“Look after daily health issues, as well as mental and emotional issues on behalf of the girls”* (Parent focus group School A). Parents acknowledged the importance and unique position of the role describing the nurse as: *“a person of safety.”* Furthermore, a comprehensive assessment involves a therapeutic relationship whereby effective communication will encourage students to talk about their concerns. Parents spoke about the context in which the nurse works and the sensitivity required of the nurse. A student may disclose underlying issues to the nurse as one parent described:

“...Somebody that they can turn to a tummy ache might mask things like um bullying, or somebody upsetting class so um [sic]school nurse will ascertain, it may be a physical symptom as a result of some emotional issue so I think that is really important.” (Parent focus group School C)

Parents continued to communicate that skilled assessment needs to be accompanied with accompanied with effective communication: *“I think it is important for the nurse to be able to relate to the student speak to them about their symptoms and then get down to their main cause of what it is”* (Parent focus group School C).

Additionally, when discussing the nurse’s role in comprehensive assessment another parent responded:

“Where a nurse is, can be non-judgemental, can be just a nurturer rather than take on that disciplinary role. So it might make it easier for students to disclose the fears that they have and certainly our nurses note the time the students might come in and they might say, they might look up the student time-table and see that they have come in every maths period and when, or, if they have got assessment or something like that due and then they may refer that information on to somebody else.” (Parent focus group School C)

4.10.5.5 Students

Finally, it is critically important to consider the students’ perceptions regarding the nurse conducting a comprehensive health assessment. Overall, the three student groups were positive in their response. One student explained there may be situations where further medical assistance is necessary: *“I think it depends how serious it is.... If it’s something like quite serious, she should refer you to like a doctor or something” (Student focus group School A)*. While another student within the focus group insightfully explains that the nurse’s assessment may go beyond the scope of first aid. The student explains her perception that it can be helpful to speak with the nurse:

“Because it’s nothing negative, the cause, something, that she can’t, it might just be giving you anything, get rid of the headache might not always be helpful because of what is going on, so it helps to talk about it.” (Student focus group School B)

The aforementioned student’s perspective that a nursing assessment is beyond first aid is congruent with the literature. Literature identifies that a nursing assessment considers context of the whole person within their environment. A nursing assessment will consider the primary health care principles and social determinants of health which impact on the student *and their* family. A nurse would consider the presenting health issue, how this impacts on the student’s quality of life, and how they are going to manage beyond the consultation when they leave and what information and support do they need?

4.10.6 Summary

Many of the participants, representing student, parent, teacher, and nurse groups, identified that a general assessment role is undertaken by the nurse. Without exception, the groups identified that the nurse has sound assessment skills to determine the need for first aid. There was concern around the level of assessment

due to a lack of understanding of nurse's scope of practice leading some participants to mistakenly believe that a comprehensive assessment leads to a diagnosis. A few participants voiced concern about the time required and available for the nurse to conduct a comprehensive assessment, while some reported their belief that it was not the nurse's responsibility. However, three quarters of participants agreed with the nurse conducting a comprehensive assessment recognising that physical and mental health are inextricably related; a student may present with a simple matter which disguises a greater issue. Parents focussed on the importance of the relationship between the student and the nurse. Parents appropriately identified the importance of effective communication and therapeutic relationship to enable a thorough assessment.

Following an assessment there is an opportunity for the nurse to respond promptly to early onset manifestations of mental health issues but also to engage proactively and alert parents and teachers when there is a potential cause for concern regarding a student's mental health status. The next section discusses the nurse's role in providing therapeutic communication which is central to all aspects of nursing care. For the nurse to practice successfully in each of the aforementioned key themes nurses need to communicate effectively.

4.11 Therapeutic communication

4.11.1 Introduction

During the research participants were asked open ended questions around their perception of the nurse's role. Many participants spoke throughout the research about the nurse having a unique situation to care for students in a sensitive way using appropriate interpersonal skills. The first section within the theme therapeutic communication will discuss participant's perspectives about the nurse's interpersonal skills. Furthermore, the participants were asked about the nurse using counselling skills and engaging in individual counselling. During the interviews at the first school it soon became apparent that questions centred on the concept of the nurse providing counselling conjured emotional responses and was a contentious issue. It was necessary to differentiate between basic and advanced counselling skills. A statement was offered in most instances to assist the participants to understand the context of one-on-one counselling: "And by that, I mean basic counselling skills; a

student might come in tears and your expectation of the nurse may be to provide basic counselling practice such as asking open ended questions, to use good listening and communication skills, and also, to be empathic which are basic counselling skills?" The intent of the question was to identify the participants' perception regarding nurse's role in offering and providing individual care, through effective communication. Secondly, this section will explore the participant's perceptions of the nurse's role offering basic counselling.

4.11.2 Interpersonal skills

4.11.2.1 *Nurses*

Accompanied with theoretical knowledge, the nurse is required to have sound interpersonal skills. During the interviews one third of participants suggested sound interpersonal skills are a quality required of the nurse. The nurse is required to be available and also to be able to listen non-judgementally, and offer support. Nurse Haley at School C recognises the impact of sound interpersonal skills required in the role which is reflected in the following comment:

"I think we are lucky here that our students and I have been....., I started the care centre 10 years ago, and it took a long time for students to see that we are more than just a sick bay. We have a lot of kids self-refer. I have a lot of kids come and say I've heard I can trust you, I've heard I can talk to you, I've heard you helped my friend so that self-referral is our biggest promotion. So obviously....., the more you are out there and the more kids see you, your knowledge, your skills, your compassion, they're the ones that refer." (Nurse Haley School C)

Another nurse discussed the importance of the ability to provide compassionate care. Marcia provides an example:

"I think that the role of the school nurse is just to be some-one, an advocate for the girls in times when they're not feeling 100%. Um knowing that they can come here and it's a safe place and it can be confidential. We won't judge them and we will treat them as if they are own children or someone we care about, and refer on if we feel it is something we can't manage and also keep the parents in the loop, um keep the parents informed as to what is needed and if we were going to refer on." (Nurse Marcia School A)

Without exception, each nurse held the opinion that therapeutic communication is an integral part of practice within the role of the school nurse. Nurses were positive

about their ability to provide basic counselling skills and the exchange offered by Nurse Sondra provides a typical example of nurses' views:

"I think that being a nurse, [counselling] kind of comes with the whole role in general. If you don't have that, then, personally I don't think you're a very good nurse because you have to have, [sic] you have empathy and to have basic counselling skills, to be able to deal with students and patients in general. So, I think it is an essential part of the role" (Nurse Sondra School B).

Nurses were easily conversant discussing scenarios and providing examples where they were required to counsel students. Nurse Gloria explained she would assess the situation and then provide counselling if appropriate: *"It will depend on the significance of the situation, sometimes I can do it on the spot...., if it's an, ah..... (sic) situation, they've had a fight with a friend or, something like that" (Nurse Gloria School C).* Nurses, Marcia and Claire (Schools A and B) explain that counselling in a one-on-one situation works well. They cite the unique role of the nurse; to have a professional relationship with the student while being able to offer support and information simultaneously. *"We have a lovely rapport with the students and I guess we offer advice that makes them comfortable, and certainly we have knowledge that we can share with them" (Nurse Claire school B).*

However, while it is suggested by the nurses they are able to provide basic counselling, all emphasised that they are aware of their limitations. Nurses refer the student onto an appropriate service provider when they believe that counselling is beyond their scope of practice. Jan talked about an example where she provides some basic counselling and then suggests a referral:

"There is a divide and a limit to our...[skills]..., I might have a student come to see me and you have a talk to them about what their problem is and you might say that the most appropriate person to see is your GP or your school counsellor or an outside counsellor. So there is limits to our area of expertise I guess and so we have to recognise our limits and be referred to professionals you know, people where they need to be." (Nurse Jan School A)

4.11.2.2 Teachers

Across the interviews, teachers also recognise that central to the role of the nurse is the ability to provide compassionate care. Additionally, nurses are in a unique position to be able to provide compassion within their role and that nurses are able to

discern the type of care required: *“We do have the ones that want the shoulder and talk and so I think that is good, yeah. I do think that it is good in many ways and the matter in fact lady [nurse] is more than capable of being compassionate and understanding, she is very good at switching that on when need[ed]”* (Pastoral care teacher Alice School A). Carol describes the care provided by nurses where physical care is accompanied with emotional care by nurturing the students: *“Not just medical ailments, they might go there as a refuge, like they are having a bad day. So I see the role of the school nurse as someone who dispenses medical advice and medical care as needed but also as being some-one to care and nurture the girls at this college”* (Pastoral care teacher Carol School A).

Phill reiterates this claim recognising that nurses do more than physical care. Nurses are able to provide support for a student *“Who has experienced some trauma or even some-one settling, an incident at home or in a classroom. They feel they can go over and talk to people there”* (Principal Phill School C).

Similarly, the majority of teachers (involved in focus groups and one-on-one interviews from all schools) were positive towards the nurse to providing counselling. Winnie’s comment reflects the feelings of many teachers: *“Well, apart from the obvious medical assistance that she gives I know that I have used her sometimes as a counsellor, some-one to just give some tender loving care (TLC) to the kids who need some TLC and some time out to calm down, so she really is 2 fold for us”* (Teacher Winnie School B).

One teacher acknowledged that during counselling nurses are in a position to support students with mental health issues. Counselling skills act as a catalyst to encourage students to feel comfortable to communicate the issues: *“I think it’s good. If she doesn’t do that [counselling], you will never get deeper than just a cut, or just a headache”* (Teacher focus group School B). Similarly, teachers (School C) identified that nurses have a counselling role when providing care: *“Um, I think it’s a bit like what was on first aid on cuts and things like that with mental first aid they can just quickly listen, and then refer them if need be”* (Teacher focus group School C).

Additionally, other teachers (School B and C) recognised that the nurse is able to provide the basic counselling then make a judgement, triage, then refer the issue to internal and external service providers:

“I would think that the 2 go hand in hand..., well there are some sorts of counselling..., in fact I [sic] nurses almost act as triage to our social worker and counselling. They come in and the kids know them..., they are familiar with both of our nurses who are, who have very good interpersonal skills and the idea is we get it right most of the time, but then they make a decision about whether it needs immediate, urgent, immediate or whether it can wait..., who they are going to direct it to, whether the parents can be told, all those kinds of things.” (Principal Phill School C)

4.11.2.3 Parents

Parents consistently agreed (Parent focus groups Schools: A, B, C) it was appropriate for the nurse to provide individual counselling. Parents identified the support the school nurse offers. Quite insightfully, a parent cited the importance of the period of adolescent development and *“If not having that grounding at home, school is the next best place for them” (Parent focus group School C)*. Parents discussed a range of reasons why the nurse is an appropriate resource person to offer counselling services and identified the nurse as a safe person with whom adolescents can confide: *“I think that would work really well, um..., because it’s an extra safe, it’s another safe person within the school context so they know it’s a safe” (Parent focus group School B)*. The participants also discussed that the nurse acts as another resource person available for the adolescents: *“To talk to [the nurse] when the teacher’s often rushed off her feet when she has got 25 kids to counsel” (Parent focus group School B)*. Furthermore, they explained the nurse is needed for counselling at that school (School B) as they have limited counsellor resources. Furthermore, the nurse is able to provide both; a necessary resource, as well able to provide a therapeutic relationship:

“And it would be wonderful to have some-one else to like take some of that load so not just of just the teachers but also off the chaplain. It’s a part of living isn’t it being, having time that you can have a relationship, and you just vent or talk or let out, and just get over this sort of thing, they [adolescents] need people, sometimes they are more comfortable with the chaplain, or maybe they are just more comfortable with the nurse, yeah, they just make that connection with some-one.” (Parent focus group School B)

Another parent suggested that a nurse is able to assess a student comprehensively as the nurse has the ability to ask questions in an appropriate setting and in a sensitive manner:

“I sometimes, I almost get worried to not send a child to the health centre if they are complaining in-case I am wrong. And that is why it is so good to know we have got expertise, staff who can who are in that room, and ask those probing questions you cannot always ask, in a class room or, [because] you don’t always have the time, in the classroom when you have the other students, or the privacy to spend the time then when it’s needed, Its best they need to be looked at then, not wait to lunchtime.”(Parent focus group School B)

Only one parent who offered a proviso to the nurse providing counselling: *“If they are qualified to provide that counselling, sure” (Parent Jasmine School A)*. This reinforces the findings of this study which suggest that the knowledge, skills and expertise of the nurse are unknown to the parents.

4.11.2.4 Pastoral Care workers

As is reflected in the comment by Vanessa a lack of understanding about nurses qualifications was also reflected among some staff: *“I’m not sure on the counselling one, I’m not sure on some nurses would have counselling skills, and some wouldn’t, and it would depend on their training I think” (Pastoral Care Vanessa School B)*. However, Pastoral Care Vanessa is open to the idea of nurses providing counselling, providing nurses have the appropriate skills. Pastoral care Alice and Carol (School A) are clear in their belief that the nurse is appropriate to provide counselling:

“Yes definitely, some-one a shoulder to cry on to tell what the problem is and if it’s something very minor,..... But if the child was presenting on a weekly basis,...Mum and dad had a fight and they were stressed out, but I would think that the nurse would be referring that on.” (Pastoral care Alice School A)

4.11.2.5 Students

Also, many students (School A, B, C) accepted the nurse providing counselling to students. For example the comments by these students provide realistic examples:

“If you tie it back in with the exam stress, it’s just a break from stress having a conversation with another person.” (Student focus group School B)

“If she helps to talk to someone..., what’s been going on and stuff, just like, to get it off your chest and stuff, and then if they listen and understand then..., and it helps you as well, cause you understand if they understand (sic).”(Student focus group School B)

However, some students (School A) had divided opinions about the nurse providing counselling. Some students believe that it is appropriate for the nurse to provide basic counselling: *“Yes they should have those skills to be able to you know..., to calm them down a bit and solve, and help them..., you know with the superficial things like the basic”* (Student focus group School A). Another student identified she would agree for the nurse to counsel the student, provided that she has the expertise to do so: *“As long as she is qualified to do that as well”* (Student focus group School A).

In addition, some students (School A) continued to view the nurse in the stereotypical first aid role and would prefer to see the nurse for physical ailments rather than discuss personal issues: *“I personally wouldn’t want to talk to the nurse. I think of the nurse as someone like you have cut your arm you know you go and have it stitched up kind of thing”* (Student focus group School A). The preference to speak with another service provider may have been associated with this school being well resourced with fulltime psychologists. One of the students identified: *“Because our school does have a lot of like staff..., like we do have specific people for that. So we all know that, you know if you have that type of problem, you would go there, you wouldn’t just immediately think of the nurse, because there is actually someone that we have for that specific reason”* (Student focus group School A).

4.11.3 Concern about the nurse’s role providing counselling

Overall, participants accepted counselling to be part of the nurse’s role. There was one exception, an allied health worker (Teacher focus group School C) who spoke passionately and assertively stating to use the word counselling when describing the nurse’s role would be dangerous. The participant spoke about her dislike for the term “counselling skills” (in nurses’ practice) and suggested not to use this term. She suggested an alternative term, “active listening”. The participant held the belief that nurses are not skilled to provide counselling, however, she elaborated on her opinion that nurses are able to provide good listening and empathy:

“I would describe the behaviour, rather than put the term counselling on it because it is not. And I would hate to see that word used in any role description for nurses.....Because it opens up a minefield and a lot of potential dangers come out when people think they are doing something that they are not skilled to do. But, nurses in their roles do have, they need to have

good active listening skills and empathy and all those things and that is what makes them good nurses.” (Teachers focus group School C)

This opinion again reinforces a lack of awareness regarding the nurses skills and expertise and furthermore, the requirements of basic counselling skills which has been reflected throughout this study. This example also reflects an example of professional territory guarding.

4.11.4 Summary

All participants identified the nurse requires sound interpersonal skills to provide therapeutic communication. The term counselling is not appropriate as it can be misunderstood leading participants to consider the skills required may be beyond the nurse’s scope rather than the actual intent which is to use basic interpersonal skills in practice. It is agreed that the nurse uses basic skills such as: empathy, listening, reflection, open ended questioning in a non-judgemental, supportive and compassionate approach. The framework presents the element therapeutic communication which includes the aforementioned skills which are essential to assess student health issues and to provide care. The nurse provides the next element of care, ‘triage’ prior to providing general and mental health care. These elements will be discussed in the following section.

4.12 Triage/general and mental health care

4.12.1 Introduction

Triages, general and mental health care, are key themes that emerged from the qualitative data analysis. These themes are not mutually exclusive and there maybe interplay between them. A nurse’s work may involve attending responsibilities in multiple domains simultaneously. For the purpose of explaining the themes within the model each theme will be discussed separately.

4.12.2 General health care

When asked their perceptions of the nurse’s role 17 of the 27 respondents initially cited first aid. As articulated in section 4.10 during the course of the nurse conducting assessments the nurse may also be required to provide treatment and care. Without exception, respondents identified that the nurse was expected to provide general first aid treatment as required and many examples of this type of treatment

were discussed. The comments *“It’s pretty much what they are there for,”* (Student focus group School B) and *“Yes, definitely, yes definitely both roles; treatment and referral”* (Parent Cindy School A) are typical of the expectation of participants that the nurse should provide first aid which is covered by general health care in the model.

Interestingly, during initial conversations around the nurse’s role in general, four nurses and a parent group (School C) identified the concept of the nurse providing mental health care without any prompts. Some parents demonstrated awareness that the nurse provides mental health care by recognising that the nurses role is more complex than for *just* the provision of general first aid or general care: *“A lot of students actually go to her just to have a chat, so they are not just there for medical emergencies it is like a care centre, so they are there for them physically and emotionally”* (Parent focus group School C).

4.12.3 Triage

The model includes the theme “triage” which is defined as: “a process of prioritising clients based on the urgency of their health needs” (Kralik & Van Loon, 2011, p.197). To establish what participants expected of the nurse engaging in treatment they were asked the following question: What would your expectations of the nurse undertaking triage, giving immediate aid or referring the student to other health professionals? The following prompt was given on most occasions:

Prompt: Headache example,

Do you think that the nurse should provide treatment?

What about the nurse making a referral for example to the GP or any other service provider?

The prompt was related to a headache, to encourage participants to consider the question more deeply than from a purely physical perspective. The participants were asked to consider the nurses role in triage, prioritising students, however, most students focussed on the nurse’s role in providing general and mental health care. Most participants considered the context to be different from an emergency first aid situation and therefore considered the possibility of a mental health issue requiring care or treatment. The diverse range of participants identified the respondent’s

perception that the nurse is presented with, and required, to address mental health issues which may not initially present as an obvious mental health issue.

4.12.4 Mental health care

4.12.4.1 *Nurses*

Not surprisingly, nurses held clear and definite views in their responses concerning their practice. Nurses at the three schools undisputedly claimed that their provision of care requires a holistic approach: *“The role is to provide that medical care when kids need it or um unwell or even psychological; all aspects of nursing”* (Nurse Sondra School B). Nurses were able to reflect on their practice, recalling examples incited by the headache prompt scenario. Lilly identifies that mental health issues requiring mental health care are becoming increasingly prevalent within their work. As acknowledged in this statement the broader socio-ecological influences are commonly present when mental health issues are discussed:

“Since working at the school I have realised [there is] first aid but there is also the mental health issues, the problems at home, the socio-economic problems, as well and that is huge.” (Nurse Lilly School C)

Furthermore, care of mental health issues is an integral part of practice. Once the nurse has made an assessment the nurse will prioritise the nature of the issue and then provide any necessary care. The treatment plan may fall within the scope of the nurse’s ability or extend beyond the nurses scope which will then result in a referral. Many of the nurses provided examples where they described how they would care for a student who presented with a headache, possibly a symptom of a mental health issue. The next quote demonstrates the typical process of assessment, care and referral after a student has presented with a headache:

“Yes the instant reaction isn’t to just give them some panadol and send them out the door. The instant reaction is to ask them: ‘Why do they have a headache?’ And to go through a 24 hour history to get to where they are and yes to get them some strategies for better management. I guess their own health is what we are after; and to refer if it is recurrent, or if it is the start of behaviour or whatever. Yes, call whoever is appropriate, be it the parent or the counsellor or whoever we need to call.” (Nurse Jan School A)

In the same way, Sondra (School B) described how she would provide care for a general headache with basic nursing care and then continue to assess and care for any

underlying issue. Sondra described how she would talk to the student, support the student within her scope of practice and make necessary referrals with the counsellor, GP, or psychologist. Hayley describes how pastoral care is embedded within her care practise in the headache scenario:

In our role to look at is there something more going on? Has the student been coming in a lot? Does there seem like there is more to the story? And then when they chat to them further, or we may realise to refer straight to the counsellor, if it seems to be a bullying issue or something that seems to be discipline more than pastoral, we will call the year co-ordinator. So yeah , we are the first point in call so first aid sickness [and we provide] a lot of pastoral care too” (Nurse Hayley School C).

4.12.4.2 Teachers

For some teachers the concept of the nurse engaging in general care, including mental health care was regarded as part of [the nurses] practice however the expectations of extent of the mental health care a nurse should provide was varied. A few teachers provided more superficial expectations of the nurse’s role in mental health care, with a focus more on referral and in some cases listening. One teacher expressed the belief that the nurse’s: *“Main role in the school is that first immediate triage, to assess what is going on and then make that decision if something is for further referral” (Teacher focus group School C).* The following quote establishes that the Principal demonstrates awareness and respects the nurse’s broad comprehensive role, which includes mental health care:

“It’s not just about kids who are physically sick, you know, who have hurt their ankle or need a band aid it’s also about kids who are mentally ill but that is not what I mean, people who have experienced some trauma or even some-one settling, an incident at home or in a classroom they feel they can go over and talk people there so it’s worked out much more effectively as a holistic centre.” (Principal Phill School C)

Although some teachers felt the nurses’ role included immediate triage, followed by referral; a few other teachers identified tighter boundaries around mental health care provision to be offered by the nurse. Deputy Principal Cliff suggested that there needs to be a balance in terms of the care where: *“On one hand I would like to see them just treating the headache and no more, and I wouldn’t like to go the other extreme, to probe invasively but somewhere in the middle there, it’s exactly their role” (Deputy Principal Cliff School B).* A few teachers acknowledged the nurse’s

role is to provide the initial mental health first aid. They specified that the nurse could implement strategies such as listening. These boundaries which suggest the nurse could provide initial first aid mental health care and then refer on as s/he [the nurse] assessed as requiring further expertise are described in the following discourse:

“Um, I think it’s a bit like what was on first aid on cuts and things like that with mental first aid they can just quickly listen and then refer them if need be, that is all it should be.” (Teacher focus group School C)

“It’s a bit like when you said cut, I like the idea, if there is a cut they can put a Band-Aid over it then they do. If there is a cut that needs stitches, then it goes to social worker or pastoral care worker and if it is a cut that needs hospital then social worker, pastoral care worker, then takes them somewhere else. I like that analogy.” (Teacher focus group School C)

On the other hand, Alice (Pastoral Care teacher School A) reiterates these opinions and further explains her perspective; she sees the nurse also providing a pastoral care approach within the context of mental health care. Alice identifies the nurse as an appropriate person to provide this care within the nursing role. Alice explains how the nurse would follow up on a referral if the nurse deems necessary:

“I think our health nurses serve the purpose that it’s a little bit pastoral as well, as offering medical help so they can go and talk to someone, and they can get some panadol and they perhaps maybe can get fifteen minutes or a couple of hours sitting quietly, before they are returned to class. I would see too ...sometimes it is entirely a pastoral role where the girls go over there and talk, and then from there they are referred to the college counsellors, to x and I, if the nurse deems it is not really medical or something psychological that the nurse should not really be dealing with.” (Alice pastoral care teacher School A)

These findings suggest the nurse’s practice within this research included examples exemplifying actions required for mental health care. Further examples offered by the nurses explained the brief interventions they are providing within their care. Haley explains that she is also dealing with a lot of mental health issues which require pastoral care. Haley explains how she will assess the situation and also will encourage the adolescent to access professional help and to encourage self-help strategies at her school: *“We have a system that we have worked out if we feel a student needs to talk to a counsellor, we will email the counsellor and the year co-*

ordinator with what we know or what we think might be happening, we [also] have a self-referral box where we say to the student you can pop a referral in yourself.” (Nurse Haley School C)

To encourage adolescents to take responsibility and use the self-referral box demonstrates the nurse is recognising the adolescent’s stage of development of transition from being a child to an adolescent. The nurse is empowering the adolescent by encouraging them to get appropriate professional help and, to encourage self-help strategies. Claire highlights the point that adolescents are at the stage of development where they want to have some control of decisions. Claire described the importance of listening non-judgementally:

“Certainly if it is an older student it would be a conversation I would have with the student and I would give them the options you know. And the options would be ‘I think you need some-one to talk to about the build-up and the stress that you have got,’ and I would ask them who they would be happy to talk to. They might be happy to talk to their form teacher or it might be the head of house, or they might feel happy just to talk to their parents, or they might want to talk to some-one more qualified, like the school psyche and I would actually give them all of the options and a little bit of choice.” (Nurse Claire School B)

Claire’s example includes the concept of partnership between the nurse and the student as central to care planning.

4.12.4.3 Students

The girls at School A were particularly articulate and held definite views. It is interesting to note that as mature minors, the students (School A) identified that they would like to be involved in their care and informed of any referral: *“Maybe, like talk to the student about it first, so if they are happy to see what’s up” (Student focus group School A)*. Student’s opinions demonstrated they want a partnership approach with management of mental health care issues.

Furthermore, some students expressed that while they understand the nurse has ability to manage student mental health issues, they are also aware that management may warrant further expertise. All student focus groups highlighted positive views about the nurse referring and collaborating with other service providers. During the interviews the students spoke of the nurse first assisting the student with the health

issue or crisis at the health centre and then referring the student if the nurse assessed this as necessary: *“Yeah, I think they should like take the, (sic) to relieve the immediate problem but then if it is like persisting, like if it is something deeper, then, they should pass it on”* (Student focus group School A). Another student insightfully proposed that the scope of the problem may extend beyond the nurses role and this situation would warrant a referral: *“Well the nurse kind of deals with something they have the qualifications for but if it’s they reach a point where it’s, then they refer it”* (Student focus group School A).

4.12.5 Summary

Generally participants identified their belief that one of the nurse’s main roles in the school is firstly immediate triage, to assess what is going on and then make that decision if something is for further referral. Without exception, respondents identified that the nurse was expected to provide general first aid treatment. However, the nurse’s role to deliver mental health care remained controversial. Nurses identified that provision of mental health care is increasing and embedded in their practice. Some teachers and parents clearly articulated that nurses provide more than just general first aid: acknowledging the nurse is there for students physically and emotionally. A few other teachers identified tighter boundaries around mental health care provision. Some teachers in a well-resourced school felt the nurse was too busy with other health issues to refer students for mental health concerns however they had an option of referring mental health issues to other care providers always on site. There were a few participants who expressed uncertainty around nurse’s role and level of expertise to provide mental health care. The next section will review the nurse’s role of providing information and support during and after general and mental health care.

4.13 Mental health literacy: reactive information and support

4.13.1 Introduction

Within the research question: *To identify if the proposed framework seen to be of benefit to various stakeholders, young people, parents and the school community?* The nurses’ role in recognising problems and taking action is explored. Participants were asked about their thoughts about the nurse facilitating students, teachers, and parents to recognise and take appropriate action when a problem first arises. The

theme which has emerged from the data is presented in the model as information and support. The provision of information and support may be *reactive* following an assessment. The model depicts a cyclic process where there is interplay between the themes acknowledging that nurse's practice does not occur in a linear way. In the instance where a problem has been identified and the nurse provides general health care, with, or without mental health care, additional information and support may be offered to the student, teachers, and family. The nurse's role with regard to providing reactive information and support where there is an identified need is presented in the following section.

4.13.2 Participant's views and examples

4.13.2.1 *Nurses*

Without exception, it was identified during the interviews across the parent, student, teacher, and nurse community groups that the nurse has an important role in the raising awareness of risk factors and how to access help. All eight nurses from the three schools believed that they assist parents, teachers, and students to recognise stress behaviours and assist with strategies to manage these. Sondra provides an example within her work where she believes it is important to liaise with the parents, informing them about the stress that adolescents may experience:

“I think also it is more important to get the parents more involved with like um because I don't think that parents are aware of the stress that kids are experiencing at school cause (sic) they have done before but like I said, everyone's different. I think getting the parents definitely involved is really important.” (Nurse Sondra School B)

Furthermore, as the nurse is often the primary point of contact when school children feel unwell, the nurse will not only assess the problem but take action and inform both parents and teachers. One nurse explains how she advocated for the student in providing information to the teachers regarding stress management:

“ I've got one this week who is at the point, he can't sit in the classroom, his anxiety is so bad he will vomit he won't eat, two deputies ,one really trying to get him into the classroom at all costs, the other one why can't he do it somewhere else? So different people deal thing differently I will always go into bat for the student I will always use the knowledge I have about anxiety and stress and the physical effects it can have on the body as well as mental and that student knew straight away, just came straight to me, saying I can't do

this so I did a little bit of relaxation with him, a little bit of just calming him down, a little bit of relaxation, let's go together to the deputy and discuss this, [I] took him over there, found him a different place to sit and we all chipped in covering the time to supervise him.” (Nurse Haley School C)

The nurses spoke passionately recalling examples where it was appropriate for the nurse to engage in conversations with parents, alerting parents to their concerns. Haley, a nurse with many years of experience in her school reflected on her practice explaining that she would call a parent and have a chat about their child who had come into the health centre with symptoms of anxiety or stress. Haley would also provide the parents with resource information. Haley explains;

“I will have a chat ‘What have you noticed at home?’ You know I will tell them what I have noticed and then I will if I feel it is necessary talk about different options a parent has. ‘Are you aware that doctors can see students, and are you aware that we have two school counsellors, and are you aware of the on-line resources?’ I have pamphlets I give out I have a great book on panic and anxiety which I photocopy and give to kids I tell the parent that I have given them that book and say can you look at it together. So yeah definitely, because it affects home and school.” (Nurse Haley School C)

The school nurse may provide an access point for students to be detected if they are experiencing a mental health issue. During the interviews many participants described a common occurrence where a student would present either unintentionally or intentionally with another health issue. As one of the teachers at School A succinctly comments: *“A lot of the girls might not be aware that they are stressed, it might present as a headache or a stomach ache and again it's the nurse that is responsible, for passing that on” (Teacher focus group School A).*

It was also recognised by the pastoral care staff in the following exchange that the student may present to the nurse with a medical ailment which is a manifestation of a greater issue. Alice explains that the nurse may *“Be the first port of call for stress related stuff and at that point the even if the girls aren't recognising it as stress at that stage, which some of them don't recognise the symptoms” (Alice Pastoral care teacher School A).* Furthermore, Alice suggests part of the nurses role is to *“Feedback what she sees the girls going through so we can make sure that we are properly engaging in practices within the main school that are working toward reducing the things” (Alice Pastoral care teacher School A).* Alice proposed that the

nurse should let teachers know and raise awareness with parents and to also provide written information such as pamphlets.

Nurse Claire (School B) reiterated this claim highlighting that the nurse is often the “*first point in contact.*” Furthermore, at her school it is recognised that the nurse’s role includes raising awareness of risk factors, and how to access help:

“The form teacher and housemaster or whatever and generally they refer them to me, they’ll come and they will get time out and we have some discussion and some de-stress, but most definitely the role of the nurse would be to identify where the stress is, how they can distress, and then to engage the parents or to engage some help, either by the teachers or the psyche. Most definitely the referral is, it happens straight away, there is definitely follow up straight away with that.”(Nurse Claire School B)

Similarly, at School A it is apparent that students also require assistance to increase awareness about mental health risk factors and how to access help. Nurses Jan and Marcia reported that up to 50 per cent of the visits to the nurse are related to mental health issues. The following example provides an example of how Nurse Marcia contributes toward raising awareness of stress management and offering strategies to the students in her school:

“If we picked up some-one with stress and that happens a lot, girls come down quite stressed, very stressed, very emotional. Or a friend will bring them out with acting out in other areas the girls would say she is acting really weird, but it turns out that she is really stressed, in those cases we talk to them and we um give them strategies and just get them back to knowing that they just have to do their best, and there are ways of coping and that you don’t have to do it alone and we would always again talk to the school counsellor, and maybe sometimes change their schedules around.” (Nurse Marcia School A)

Marcia’s recount provided an example of the nurse working together with the student and counsellor. Jan (School A) also acknowledges that the school nurse is an ideal person in frontline care to recognise and take appropriate action when a problem first arises. Jan also acknowledges that her practice includes working with students, parents, counselling staff, and teachers. She acknowledges that a collaborative approach at her school is preferred.

“Sometimes I speak to parents but I probably would speak to the counsellor and liaise with her that way. That is the direction I would take is liaising with

the counsellor and she liaises with the appropriate teachers. Oh, sometimes I would speak to parents you'd be a bit careful, you have to be careful with that, yes.” (Nurse Jan School A)

4.13.2.2 Teachers

As discussed in the aforementioned example where *nurses* acknowledge the need to collaborate with the school community, teachers also raised collaboration as a critical point. Overall, the teachers were positive about the nurse's expertise. Cliff had no hesitation in stating the nurse's role was to recognise and take appropriate action when a problem first arises: “*Yeah, yeah I do, no, absolutely*” (*Deputy Principal Cliff School B*). A Teacher reiterates this claim saying: “*I think that happens a lot here I think they do that really well*” (*Teacher focus group School C*). The following quote stands out because another experienced teacher Winnie reaffirms the opinion that the nurse has the skills and expertise to make a judgement and determine what action and strategies are required:

“Yes, absolutely and I think coming from a medical perspective, or professional, especially, makes the parents a lot more comfortable coming from her, from them say than from a teacher cause we are not really qualified to make those sorts of calls.” (Teacher Winnie School B)

Interestingly, all teacher focus groups support the nurse recognising and taking appropriate action when problems first occur, however, they all cite that collaboration with school staff is essential. The following comment provides an examples of working together described by the teachers: “*We work very collaboratively with the nurse in that in sometimes if we are not available it might be that they'll go to the nurse, and there is a real overlap, when we are discussing those, certainly under the heading of stress*” (*Teacher focus group School A*).

In the aforementioned examples it is obvious the nurse is able to respond promptly to early onset manifestations of mental health issues but also to engage proactively and alert parents and teachers when there is a potential cause for concern regarding a student's mental health status:

“I think they can pick that up as part of their professional learning, they should be able to pick that up and they should pass that on to the teachers and say, hey, just keep an eye out for this kid. I think this might be the case they might be wrong they might be right but once they are aware, their

parents are aware and there is some help where they can go.” (Teacher focus group School C)

Similarly, another teacher suggests when the nurse identifies a problem, it is appropriate to liaise with the teacher, collaboratively work together on strategies which nurse can then reinforce: *“Probably at this stage gets us involved first, the nurse then is able to support or reinforce” (Teacher focus group School A)*. Central to the teachers’ opinions is the nurse engaging in collaboration which will be further discussed in section 4.14.

4.13.2.3 Students

All student focus groups believed that it is appropriate for the nurse to facilitate students, teachers, and parents to recognise and take appropriate action when a problem first arises. Overall the students were engaging and interested in the topic, giving their opinions without hesitation. Some showed greater enthusiasm and confidence as the interview progressed. As described in the following examples a few students spoke excitedly about the need to facilitate parent’s awareness:

“Mainly parents..., educate the parents so they can select different students they can because if you teach the students at one point in time and then you teach the parents they might pick it up differently.” (Student focus group School B)

“Realistically it’s got to be the parents and the students that pick up on the stress as teachers don’t spend nearly as much time with you when they’ve got more people to, worry about, yeah lot more differently.” (Student focus group School B)

The question required further clarification for some students. To explore this dimension further the students were then asked, *“OK, what about if the nurse, just for an example ran a session with the teachers on raising awareness of these things. Do you think that would be a good idea?” (Interviewee)*. A positive response was elicited, *“Yeah, raising the awareness of the stress in teens” (Student focus group School B)*. Interestingly, this perceived need is congruent with examples identified and supported by the nurses earlier.

Additionally, the majority of students (School B) suggested they would find it helpful to be given advice regarding how to access help. They explained their rationale: *“Cause, for the kids know to where to go” (Student focus group School B)*.

While at another school (School A) some students suggested that they would not normally see this as the nurse's role, nor would they would go to her with stress at exam time. While a few students indicated that they would go to see the counsellor; a few also identified that the nurse could be an appropriate person to see: *"I think she has just as much as a role as the people who do, do at now, who is it? Who is the? Head of head of education or something at our school does it cause (sic) I reckon she [the nurse] could do it just as much as anyone else"* (Student focus group School A).

4.13.2.4 Parents

Across the three parent focus groups the response was positive, identifying that the nurse should facilitate students' parents and teachers to recognise and take appropriate action when a problem first arises. Parent focus group (School C) provides an example of this:

"See when I think of our nurses it is a partnership, so yes. But I suppose it would depend on the community that has been established and how a particular school sees the school nurse, but to me our school nurses are part of our teaching staff so yes." (Parent focus group School C)

Peter discussed the prevalence of stress as an important issue which needs to be brought to the school community's attention and managed. He reiterates that the nurse has a role in a mental health promotion initiative to raise this awareness:

"Um I think so, definitely because doing a little bit of Occ health (sic) and safety because obviously stress is a big thing these days in everybody's lifestyles, so that kind of falls under a medical condition, so you know it's definitely part of what they do, so yeah I believe they understand and I am all for the nurse actually helping out wherever they can and whoever they speak too." (Parent Peter School A)

Within the parent focus group a parent (who also held a teaching position at the school) provided an example of practice between the nurse and teacher recognising and taking action as a problem first arose:

"Yeah I had an incident similar, a young child going to the health centre quite frequently, and recently and quite repetitive saying and that same time of day and there were records and I asked the health nurse saying, to zoom in on this saying what is the pattern, I am seeing a pattern here, and discussed it, so that communication added to the health of that child, whether it was

real or physical issue or whether it was something deeper than that.” (Parent focus group School B)

4.13.3 Lack of understanding about the nurse’s role: Concerns

Despite the majority of parents positively encouraging nurses to facilitate students, teachers and parents to recognise and take appropriate action when a problem first arises, there were also a few parent queries. Some parents raised questions about the nurse’s responsibility of confidentiality, and the community’s lack of awareness about the nurse operating in this context. The following exchange identifies questions raised within a parent focus group:

“And perhaps it is raising that question whether or not in terms of the role of the nurse for the teaching staff there are a set of parameters, but I am not convinced the school community would know, what the parameters the school nurse operates?” (Parent focus group School B)

It was apparent to the researcher that some parents also demonstrate a lack of understanding of the nurse’s role. Jasmine explains: *“I am not sure that I perceive it’s my perception that that is the school nurses role, I think it is [...] to react rather than pro-act if you like. So I think if there is an issue with that particular student” (Parent Jasmine School A)*. The parent explains that she understands a school nurse will see a student who is suffering from exam anxiety, and that the school nurse should definitely be involved in managing that issue with the parents, student and the staff of the school. However, Jasmine explains she is unaware if the nurse is involved with any proactive management. Finally, Jasmine gave consideration regarding the nurses’ potential within the role and concluded: *“I think if that was made part of the school nurses role, that would be fine....It is important if the girls know that if they have an issue they know that the school nurse is available to them, for them to talk to about it” (Parent Jasmine School A)*.

Similarly, other parents also demonstrated a lack of understanding regarding the nurse’s role working in this context, citing that it may cause a conflict of interest concerning confidentiality. During the focus group interview a parent spoke about concern for the privacy: *“I think there is a role there, but you have a medical role, and so there are times when you might be crossing boundaries, with the child’s privacy as well that is a real risk” (Parent focus group School B)*.

Further discussion on this topic led the parent focus group to become animated. The parents offered multiple contributions when they discussed how they perceived the nurses role when involved in student scenario which may be classified as “confidential”. There was clearly a lack of understanding amongst the parents, around the nurse’s duty of care, professional and ethical requirements when working with adolescents in the school setting. This example highlights the lack of understanding around the role and the complexity of issues which arise during the nurse’s care:

“I mean we are talking about adolescents they have got other issues, they’ve got mental health there will be mental health, sexual health issues, I don’t see how, if you are seen as really collaborative between staff, parents, and students don’t you also see losing the trust of some of those kids who really need to see that they are going to be dealt with in absolute privacy? (Parent focus group School B)

It is clearly apparent that for the nurse to successfully work within a framework which involves recognising problems and taking action, a collaborative effort is required. Furthermore, a greater awareness and clarity around the nurse’s role is also required. Nurses need to promote their role and to communicate this clearly to the community in which they work. This example highlights a suggestion offered by one teacher explaining how the nurse can promote the understanding around her duty of care:

“And if you are up front with the children from the beginning and if you say there is a chance I’m going to have to take that further than just me, that other people are going to need to know then the children know where they stand to start with” (Parent focus group School B).

While all the teacher focus groups agreed that the nurse should have a role within the care plan once a problem was recognised they also suggested further collaboration with other staff while making care plans and role clarity within the care plan. This was reinforced by the example from a teacher (School A) who explained that often a student will have presented in class showing anxiety before they attend the nurse. In this case the counsellors would have been involved; however, nurses have often been involved in general medical care plans:

“[At] the health centre we have had the nurse deal with, come up with a plan for girls who have had medical ailments in times of exams or stressful

situations. For example for a girl who left now who had epilepsy, so they came up with a plan they advised staff what to do in case these sorts of things happened.” (Pastoral Care teacher Carol School C)

Additionally, it was suggested by a colleague that mental health care plans could also be addressed in a comprehensive approach with the school nurse to be included in the care plan: *We might come up with a plan attacking it from a physical and other supports and we will work collaboratively” (Teacher focus group School A).* Whereas Nurse Claire stated at the school where she works there is an *“Informal mental health plan between some teachers who were aware the nurse would see a student who needed to chill out and have some rest and TLC” (Nurse Claire School B.)*

Another teacher proposed that while she acknowledged the nurse in the process, teachers need to be the staff member who contacts the parents, and to remain the primary point of contact: *“Generally though I prefer that the contact from parents comes through the head of house, only because then you are across the issues, you need to have a primary point of contact, so that you have got one person who has got a whole picture in most situations and then you can bring the nurse in” (Teacher focus group School B).* Clearly, role clarity needs to be reviewed in this instance.

4.13.4 Difficulties and barriers in the nurse’s role to provide information and support

Finally, despite most of the focus group and one-on-one participants acknowledging it is appropriate for the nurse to facilitate students, teachers, and parents to recognise and take appropriate action when a problem first arises, this is not always fostered. Denise disclosed that there are barriers and cites the difficulties, including a lack of access to information:

“I think the nurse should have a role. We don’t have the role, I think, I mean for example I have just been, had access literally to student who have ongoing counselling issues and this sort of stuff. I knew nothing about that. You are very limited on what you can access on the computer you will flash it up and it will say, access restrictions or whatever but there is nothing else” (Nurse Denise School B).

Denise is a nurse with qualifications in mental health nursing and until the implementation of this project; the school was unaware of her expertise in mental health nursing. Denise expressed her frustration that felt was not encouraged and

there were barriers prohibiting her to raise awareness of risk factors with the students, teachers, and parents. Denise explained: *“Teachers have their own profession but we are a professional body too I think they kind of forget that. We have commitments and confidentiality issues too and that kind of stuff, HELLO.”*(Nurse Denise School B)

Denise felt that the reason she was not provided with access to information about counselling (occurring with the students) was due to perceived potential breaches of confidentiality on the nurse’s behalf. Denise also expressed she believed the parents would welcome the nurse as a health professional being involved in these issues. After engaging in this research project in School B, there has been an increased awareness in the understanding of the nurse’s skills and expertise and a subsequently a review of multidisciplinary meetings has occurred. It is envisaged that nurse’s involvement will be encouraged for collaborative care at the school. The following comments exemplify this:

Yeah, we’ve got meetings set up now and that’s really exciting. I think it does open up people’s eyes you know too, because (sic) we do get forgotten. It’s just go see nursy (sic) ...and then, hang on nursy can do more than stick ban aides on grazed knees” (Nurse Denise School B).

4.13.5 Summary

Following the nurse’s assessment, and during the provision of care it was identified by all groups that the nurse has an important role in the raising awareness of risk factors and also, in how to access help. All nurses from the three schools and most participants believed that nurses assist parents, teachers, and students to recognise stress behaviours and assist with strategies to manage these. Examples have been provided where the nurse provides information, reassurance and strategies to parents, teachers, and students. Information may be presented proactively and as a reactive strategy to support the whole school. Some participants demonstrated a lack of understanding regarding the nurse’s role working in this context, citing that it may cause a conflict of interest concerning confidentiality. Barriers excluding the nurse from collaborating have been highlighted that the nurse’s role needs to be defined more clearly.

4.14 Referral and collaboration

4.14.1 Introduction

Participants were asked early in the interviews about their perception about the school nurses role in general. One third of participants identified that the nurse was responsible for making referrals. Referral emerged as a key theme within the data and is represented in the model.

4.14.2 Referral

Participants spoke about the nurse making referrals to parents, teachers, and allied health such as counsellors and wider community service providers, such as General Practitioners (GPs). Participants were asked: What about the nurse making a referral for example to the GP or any other service provider? Later on the participants were asked: What are your thought on the nurse working with other service providers such as the school psychologist and community health professionals? Without exception each of the respondents acknowledged it is critical for nurses to refer and that they work collaboratively with other service providers:

“I think it is essential, absolutely essential.” (Parent Jasmine School A)

“Oh I think that’s a hugely important role with the counsellors especially.” (Teacher Jenny School A)

4.14.2.1 *Parents*

All three schools in this study had access to multidisciplinary team staff including counsellors, social workers, pastoral care staff and psychologists, although one school (School A) was better resourced than others. Each health discipline has unique areas of expertise and it is suggested they collaborate to manage student health and wellbeing issues. Peter explains that the nurse may provide background information and assist colleagues to understand a specific situation:

“Yeah, no I totally agree with it, you know especially in this day and age, where a lot of people have to be multi-skilled so she can help out or you know the psychologist needs her side of the story and you know she is actually asking for some information, from her and I think it’s more than acceptable.”(Parent Peter School A)

Some parents indicated that they wanted to be included and involved in the referral process. In section 4.13 “reactive information and support” it was evident that some

parents do not understand the context in which the nurse works, expecting nurses to inform the parents of the consultation and outcome of the student's visit to the nurse. A parent explained that parents have limited time in the day with their children and some adolescents may prefer to talk to the nurse: *"They don't often actually often want to tell you, what is going on, where as they will tell some-one that's not personally involved"* (Parent focus group School B). Some parents indicated it would be beneficial for the nurse to talk with the parent but also they believed nurses needed parent permission to refer:

"So if she [the nurse] could sort of, like consult with mum, obviously she can't do the direct referral, so she has other options, you know, but obviously she has got to go through the parents to make the referral type thing." (Parent focus group School B)

"If it is an emergency, obviously immediately, but for counselling or that kind of referral it would have to go through parent's guardians or whoever." (Parent focus group School B)

It is apparent from the discourse that some parents were not aware of the nurse's duty of care, code of ethics, confidentiality and law which governs nurse's practice. A family partnership approach may be appropriate and communication with parents would be facilitated, however, there are circumstances where parental consent is not required when the student is deemed a mature minor and wants the visit to remain confidential. Some teachers were also confused about the nurse's role in making referrals. While most teachers were confident for nurses to make the assessment and referral there was also confusion about what the nurse does:

"Well I think especially if it is not a medical thing that going to a GP a nurse has probably got more authority to make that decision. I guess if they have training, mental health training that they would probably be able to refer on to a counsellor as well." (Teacher focus group School B)

During this exchange the teacher cites the nurse can "probably" make a referral, when making referrals is part of nurse's core business. Clearly, there is a need to make the nurse's role more transparent and understood.

4.14.2.2 Nurses

Nurses collaborate with other health professionals to provide care for the students. Lilly compared the nursing role in schools to working in a hospital and explained

that nurses in schools have less collegial support with minimal health service staff available to consult with. Most nurses identified the professional support and a wider expert perspective which may be achieved through a multidisciplinary approach. The following comments exemplify this:

“Yeah I think it is good to have back up, sometimes you can feel as a nurse like in the hospital scene you have got so much support around you but in the school scene you are just that nurse and every-one thinks that you can just do it all, so to have some of the back-up of the professional is great. I think the multidisciplinary team working together is important because, then you can look at all areas together and then you can come at a good outcome in the end.” (Nurse Lilly School C)

The practice of referral included options at schools and also within the broader community. Gloria explains how she liaises with students, parents and teachers in the school setting:

“Sometimes after several questions we can figure out the trigger it might be a stressful situation for example, so then I can either refer back to the teacher and say when its manifesting, or refer back to the parent and tell them that I think that this is a pattern that is occurring, or refer onto another health professional.” (Nurse Gloria School C)

Without exception, all nurses were aware of their scope of practice and identified that there were circumstances where expert opinion, and/ or treatment from another health professional are required. Haley explains that she is aware of her limitations and scope of practice and when to seek expertise and refer: *“To never do more of our role is, but we will definitely refer” (Nurse Haley School C).*

There are occasions where school nurses collaborate with and refer to outside agencies and health professionals. Nurse Gloria explained that School C has a really large migrant population and some families did not know how to access resources and were also “time poor” after working long hours. In these circumstances it is of paramount importance to get to know service providers in the local community. This can be illustrated further in the following exchange:

“You often have got kids who are taking care of little brothers and sister so its them that I am dealing with, not the parents, so we have got to know the local G.Ps around here, quite well, so that I can ring up... and I’ll do it that

way if I can't get the parents to refer them to a further health professional” (Nurse Gloria School C).

4.14.3 Collaboration

During the interviews participants spoke about collaboration being a two way process and the need for feedback following a referral. Collaboration emerged as a key theme and is represented in the model. The collaborative process is one that occurs throughout the framework for practice throughout the continuum from mental health literacy requirements, information and support, assessment, care, triage, and referral. Claire explains the process she follows: “[The] referral goes to the parents and it also goes back to the teachers and feedback will go back to the teachers as well, regarding that student and then their wellness” (Nurse Claire School B). Similarly, other participants spoke about communication channels needing to occur both ways: “I sometimes ring the nurse when I know and I have heard of the student that is common to the health centre. I sometimes ring through because that is where health information may have been divulged. It’s a two way referral process and two way feedback” (Pastoral care teacher Alice School A). A further example is offered by Carol who is in favour of a collaborative approach: “Yes, absolutely, they are part of our pastoral care team” (Pastoral care teacher Carol School A).

4.14.4 Challenges with collaboration

Although the schools have differently structured health services and ways of working, all nurses felt somewhat excluded. The degree of exclusion varied between schools. Despite the need for a collaborative working partnership, the working arrangements were sometimes adhoc and informal. Nurse Claire spoke about her frustration at being excluded from the student at risk meetings, also known in other settings as student services or student welfare meetings:

“From a professional perspective the lack of referral feedback is also disappointing, I make a referral through to a staff member who then does all the appointments and that, I actually do. I guess they have a meeting at risk students who have either been referred because of behaviour or academic or psychological occurrences so anybody who I see in my room who I think is a concern I refer to that co-ordinator and then it’s taken to the meeting, and then if they feel that they need to be referred to the psychologist, they’ll do that referral. I don’t get any feedback.” (Nurse Claire School B)

This example shows a lack of understanding of a whole school approach with the nurse describing feelings of being undervalued and to some extent, disrespected. Suggestions are made to heighten awareness in the school community regarding the nurse's role in section 4.15. The example also provides insight into how a student's care may be potentially unnoticed by the nurse due to a lack of communication. Teachers cited a confidential nature of the conversation as the reason for not sharing information. The following examples provide insight into how teachers perceive the need to withhold information:

“Unless it is in breach in confidentiality and Psychologist X and psychologist X don't even share it with the rest of the team.” (Teacher focus group School A)

“And that does often happen here with Psychologist X and psychologist X see girls that it's highly confidential and it's not discussed unless it needs to be.” (Teacher focus group School A)

A teacher suggested that the nurse collaborate before referring. It was proposed that if the nurse's concern was centred on a student mental health issue the nurse needs to establish a comprehensive understanding of the student's situation prior to calling parents. Teachers explained they may hold information about the family's circumstances which is unknown to the nurse. To gain information via effective communication and partnership with the teaching staff was recommended:

“I think it would probably need to be in partnership with the head of house though in this situation because it could well be that the underlying issue could relate to the family, the home situation which we might be aware of, and the nurse might not necessarily be aware of, and if she was to contact home to say they are really stressed you need to do this, we recommend that you do this, that could really open a can of worms and can cause a real problem.” (Teacher focus group School B)

Discourse from the participants highlight the need for role clarity and responsibilities within the multidisciplinary team. These findings suggest a need for greater clarity of the nurse's role as a member of the multidisciplinary team with some participants suggesting information may be confidential. The nurse is often uninformed of interactions with allied health (counselling or psychologist staff), while some teachers suggest that the nurse communicates any student mental health concerns to the teaching staff prior to calling parents.

Furthermore, while most teachers believe that the nurse is an appropriate person to provide initial mental health care, at School A, (where they are well resourced with onsite full time counsellors and psychologist staff), teachers suggest that they would not refer to the nurse for mental health issues because the nurse is too busy with other matters: *“Here I don’t think I would refer a student to the nurse for mental health things at the health centre because I know that they are already under pressure, with the normal things” (Teacher focus group School A)*. They further explained that the nurse was an appropriate person to deliver the care if:

“They were familiar with that student and they know that student because the nurse has been liaising with or (psychologist X) has told us that this student is comfortable seeing that person as a point of contact, that’s fine, but I wouldn’t send someone down to the nurse just for mental, no, no” (School A teacher focus group).

Nurses at two different schools (A and B) identify challenges faced with referral and collaboration due to workload issues and availability and structure of meetings. Jan explains how her large workload impacted on effective service delivery: *“The system fell down last term because of busyness of the college, yesterday I got an email about that and I must pursue that and get back to that, because that is really important” (Nurse Jan School A)*. Additionally, Nurse Claire explains that the current working system at her school is not conducive to a collaborative approach:

“I think currently that liaison is not that well established here at the school. Well, they are visiting psychologists so they have appointment times about once a week and quite honestly I have never been introduced to them and I have never sat and talked to them. Yeah so they come in, they sign, they go up to their room, up in one of the school blocks and then they see their students which are appointed.” (Nurse Claire School B)

4.14.5 Collaboration: student services meetings

Most participants agreed that collaboration with parents, teachers, and multidisciplinary staff, is an integral part of the nurse’s role. At most schools student services meetings provide an opportunity where school staff meet together and collaboratively discuss student welfare, and plan strategies to achieve goals for student care.

While it is evident that school services team meetings are important, in each school (Schools A, B, C) there was general consensus amongst the participants (with the

exception of the student groups) that improvement is required regarding nurses' level of attendance and inclusion at the student services meetings. Each school identified specific areas for improvement regarding the nurse's role within the student services meeting. One school (School B) excluded the nurse from the student service meeting. Claire cites exclusion as a barrier prohibiting her from engaging in an opportunity for collaborative practice:

"It's a very closed little group and while we have tried to make some in roads to get a foot in the door there, it has come to a bit of a barrier. Certainly, greater collaboration and communication and involvement in that way would be really helpful" (Nurse Claire School B).

Furthermore, pastoral care Vanessa suggested the nurse should be at the student service meeting as the nurses' role is integral to the provision of information sharing regarding adolescent mental health issues:

"Given that the kids often front first to the school nurse, you know that is why she should be in that loop, you know, so that is something that is on the cards, let's put it that way, I think we are almost at that point..., because of that point of contact, I think that would be a point of improvement." [to have the nurse at the meeting] (Pastoral care teacher Vanessa School B)

However, Cliff suggested they will invite the nurse to attend in the future: *"We have started talking to her, last year we mentioned that we would like to bring her in, as part of the team so yeah we are, she is not able to make the meetings physically, but we liaise with her and we do see her as an integral part of the team..., the meetings have shifted this year so it will change this year (Deputy Principal Cliff School B).*

Also, while Nurse Jan believed it was important to attend the student services meeting, timetable and workload barriers prevented her (School A) from being unable to attend the student services meeting as the student services team had not always scheduled the meetings when she was able to attend. Pastoral Care teacher Carol offers an explanation citing scheduling difficulties with multiple staff:

"Yes, the nurse should come but the nature of the job means that she misses meetings. In the ideal world she would be once a fortnight at our meeting. Well I hope it would be, but there are so many other people to accommodate with that meeting so I am not sure that it has ended up that way. She is probably a 50/50 attendance." (Pastoral care teacher Carol School A)

Similarly, School C also identified that student service meetings required improvement, and proposed that a review was planned. The review would aim to clarify the purpose and structure of the meetings as it was explained: *“The structure is very loose at the moment and poorly defined but that is being rectified in the next term or two”* (Teacher focus group School C).

4.14.6 Summary

The majority of participants identified the nurse has a role to provide referral when necessary. Student’s opinions demonstrated they want a partnership approach with management of mental health care issues and referral. Some parents wanted to be included in this process and a teacher was unaware that nurses could make referrals making this another role to be clarified. There was a general consensus that the nurse engage in collaborative practice. Interestingly, while the nurses provided examples of collaborative work with the nurse engaging and sharing information, it was not always reciprocated. Nurses cited examples with frustration where they were excluded from student services meetings due to reasons of potential “conflict of confidentiality”. The role of the nurse and service providers within the student services “team meeting” requires clarity around expectations.

4.15 Suggestions made by participants to heighten awareness of the nurse’s role in the school community

4.15.1 Introduction

In this final section a theme that was evident throughout the qualitative data collection process will be highlighted. The theme is very much related to comments that were made about the various aspects of the proposed framework that formed the basis of the interview and focus group questions, but it is not specific to the model (see Figure 4.3) that evolved through the research process. Students, parents, teachers, and allied health professionals uniformly expressed their view that there was a lack of clarity about the nurse’s role in their school community. The section presents suggestions that were made by participants regarding strategies for school nurse’s to improve their profile.

4.15.2 Suggestions to heighten awareness

Overall, there was a general consensus amongst participants that the nurses' role needs to be clarified. Following clarification of the nurses' role, information needs to be communicated to the school community. One parent group suggested that aspects of the role are unknown to students: *"How many children know that they can go there and actually talk to her they don't have to feel ill before they go there?"* (Parent focus group School B). Some participants expressed confusion around the nurse providing pastoral care in the role. When participants were asked about the suggestions for improvement for assessment and management of mental health issues in the school, they suggested that the pastoral care role of the nurse needed to be more clearly defined:

"I guess within this school the first issue would be what role they play within the pastoral team, dealing with those issues, because we have quite a comprehensive pastoral team, and I know in some settings the school nurse is kind of the conduit and they kind of go out from there and the system is quite different, they still have a role to play and it's dependent on how those roles are divvied up." (Teacher focus group School A)

Additionally, nurse Denise also expressed confusion with the provision of pastoral care within her role: *"Yes I think it could be the nurses role, it isn't here, but other people there are lots of other people with little bits of it but it's nobody's main role and that's where the confusion comes up."* (Nurse Denise School B).

Following the discussions concerning the lack of awareness of the nurse's role many teachers and parents were also keen to suggest strategies to improve the school community's level of understanding. Suggested improvements included: education for parents about the nurse's role. Parents explained: *"They might not really realise what happens how nurses work in the school environment but I think education to parents would be a really, really helpful thing"* (Parent focus group School A). While another parent group suggested that the nurse: *"Could do a bit more to lift her profile, in terms of what she offers"* (Parent focus group School B).

To encourage the nurse to "lift her profile" the following suggestions were made: conduct health presentations in the classroom, contribute to the newsletter, put a Wikki up and provide handy web links, and also collaborate with the staff "team" to promote community awareness of the nurses' role. A teacher focus group provides an

example how the nurses profile can be enhanced through collaboration with school staff to provide information within the school community:

“And I also think it’s the educating the community, that when we come together as a team, we are not there, it’s like when we invite parents, a lot of parents can be intimidated by coming into the school and sitting in, and the head is there, and the nurse is there and the meeting is really a team effort cause every-one has something valuable. So we can put it together to help the child [and] the parents [to] have knowledge. The nurse will have knowledge, the form teacher and whoever else is there ...they all come together to help that child, that is a team collaborative effort. It is not to judge it is not to say some-one is wrong it is to say this is the issue what can we do to help this kid? (Teacher focus group School B)

Furthermore, it was suggested for the nurse to come into the classroom and provide health education. This occasion would create an opportunity to provide of information and simultaneously potential heightening of the nurses’ profile:

“If they deliver lessons on that it could well be then that the students feel they are approachable to discuss further issues so it’s almost that a declaration that I am here I know about this and then the doors is open and they can go there rather than us going straight to the counselling rooms or whatever, it’s just another opportunity and if they have got the skills then I think that is fantastic.” (Teacher focus group School B)

Also, nurses recognised the need to consciously raise their profile including the awareness of their scope of practice. When Claire was asked how she thought the school could improve assessment and management of mental health issues she explained the need to create an understanding and awareness of the health centre being an area which was welcoming and conducive to conduct a private conversation. Claire explained: *“So... I guess it is me putting it out there a bit more, establish more of a well-being area, than just a first aid treatment room, and I guess that would be nice of where to take it too..., is actually a sanctuary or a well-being place” (Nurse Claire School B).*

Additionally, a teacher proposed the nurse needs to market herself as available and approachable: *“Going to the senior school so they can just walk in quickly and go and have a quick chat and that she is seen as a face that is familiar around the senior students” (Teacher Winnie School B).*

4.15.3 Summary

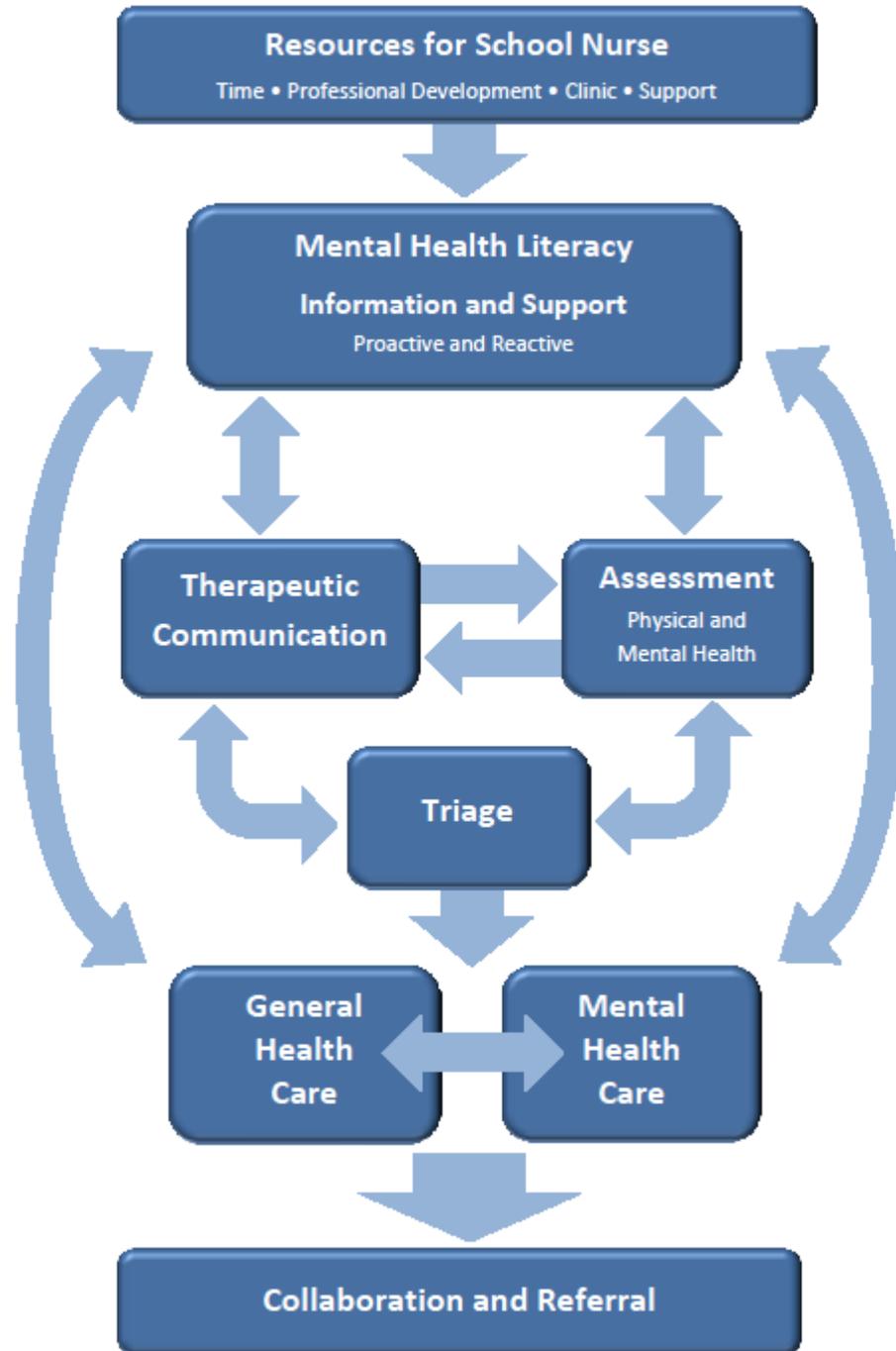
Teachers, students, parents and school staff, including nurses and allied health workers were asked about their perceptions of the school nurse's role. Following the focus group and one-on-one interviews with participants, this chapter has identified and discussed the eight themes and four sub themes that emerged from the data to develop the model identifying the framework for school nurse practice. The eight themes included: resources for the school nurse; mental health literacy, information and support; therapeutic communication; assessment; triage; mental health care; general health care; and collaboration and referral. Within the key theme "resources for the school nurse", four subthemes emerged: time, professional development, clinic and support. This chapter has also provided participants suggestions for strategies to heighten the awareness and understanding of the nurse's role to successfully implement the framework and therefore improve adolescent mental health promotion in secondary schools.

5 DISCUSSION

5.1 Introduction

The model figure 5.1 (see following page) was first presented in the qualitative results chapter (chapter four) of this thesis. The model will be used to guide the integration of both qualitative and quantitative findings and the discussion. This chapter begins with a summary of the key findings. A discussion follows in which the findings are related to international literature that focuses on the nurse's role in providing healthcare in secondary schools. This section includes the school nurses role in the current Australian context of the Health Promoting Schools Framework. The third section highlights the significance of the practice framework that has been developed in the current study and discusses how it may be operationalised in Australian schools. The strengths and limitations of this study are presented in the fourth section, followed by recommendations, and the conclusion.

Figure 5.1 Framework for School Nurse Practice



5.2 Summary of key findings

While most of the key findings that resulted from the surveys are summarised in conjunction with the qualitative findings, there were additional findings that were not directly related to the framework.

5.2.1 Survey results not related to framework

Most parents reported that their child had been to see the school nurse, that they were happy for them to do so, and that the visit met their expectations. There were no differences between schools regarding the parent's perception of the school nurse role. Eighty-two per cent of students reported that they had been to see the school nurse and 11 per cent reported that they had attended in the last week. Eighty-three per cent reported that they thought it was important for the nurse to be approachable, 89 per cent that she should be caring, 85 per cent that she should be able to listen, 89 per cent that they should feel comfortable, and 86 per cent that the nurse should give helpful advice. With regard the composite measure of student's perception of the overall role of the school nurse, the median score of 18 indicated that there was strong agreement that the nurse should be compassionate.

5.2.2 Key integrated findings

All stakeholders discussed that it was important for the school nurse to have appropriate resources and sufficient time to see students (see Figure 5.1). Within the resources framework model that was used to guide the research, the nurse, herself, is seen to be a resource for the school community. In this regard, her level of knowledge and expertise as evidenced by her qualifications and experience, were questioned by all stakeholders, including students. This was an issue for some nurses who felt that they lacked appropriate preparation for the role.

While the term mental health literacy was not used by students, parents, or teachers in interviews or focus groups, there was a great deal of discussion regarding the concept. This term is used in the model (see Figure 5.1) because it appropriately describes aspects of the nurse's role in providing health information with the whole school community, including information about mental health. It became evident that the promotion of mental health literacy within the school community by the school nurse may be proactive or reactive.

Another major theme that evolved through the qualitative analysis (see Figure 5.1) was labelled 'information and support', and was both 'proactive' and 'reactive'. With regard to proactive information and support, the majority of interview and focus group participants were in favour of the nurse providing general information and support for the students in the classroom setting and on an individual basis.

The nurse's role in providing reactive 'mental health information and support' generated concern and caution from some interview and focus group participants. The concern was about the type of advice the nurse was providing and whether it was within the nurse's scope of practice to refer to a more specialised health professional. Some teachers were unaware that nurses undertake a significant component of mental health care in their undergraduate degree and are qualified on registration to work in mental health settings and give mental health information.

The general opinion identified amongst all participants is that the nurse requires sound interpersonal skills to provide therapeutic communication (see Figure 5.1). The term counselling is not appropriate as it can be misunderstood leading participants to consider the skills required may be beyond the nurse's scope rather than the actual intent which is to use basic interpersonal skills in practice.

Parents appropriately identified the importance of effective communication and therapeutic relationship to enable a thorough assessment. Virtually all of the survey respondents expressed a belief that physical assessment is an integral part of the nurse's role and that the nurse should have sound assessment skills to determine if first aid is required. Three quarters of interview and focus group participants found it to be very important for the nurse to assess adolescent mental health status after recognising that physical and mental health are inextricably related. However, there were some reservations held by teachers and parents associated with a lack of understanding about many aspects of the nurse's role including duty of care and scope of practice.

Triage was found to be a key component of the nurse's role because it leads either to physical or mental health care, or referral (see Figure 5.1). The majority of interview and focus group participants agreed that the provision of general health care was a significant part of the nurse's role. The majority of participants identified the nurse has a role to provide referral when necessary. Student's opinions demonstrated they

want a partnership approach with management of mental health care issues and referral.

The general consensus of interview and focus findings showed that 72 per cent of parent respondents highlighted the importance of the nurse's role to participate in school educational staff meetings. However, nurses said that they were mostly excluded from multidisciplinary 'student services' meetings. Often collaboration occurred when a referral was made to a teacher, one of the allied health staff, or an external service provider.

5.3 Integrated findings with relationship to extant literature

The following section relates the findings of the current study to the extant research literature with regard to the practice of school nurses. These empirical studies focus almost exclusively on school nurses, as participants. There are seven studies, however, that have been conducted in Israel, Australia, New Zealand, Finland, the UK, and the US that have asked the views of stakeholders in school communities other than nurses. Methodological limitations associated with these studies will be identified first.

5.3.1 Israel Study

The Ministry of Health in Israel conducted a quantitative study using a structured questionnaire to ask School Principals (n=26), school nurses (n=22), and head of parent committees (n=18) their views regarding aspects of the school nurses role in health promotion (Gross et al., 2006). The survey instrument developed for use in this study (Gross et al., 2006) was used in the current study. The recruitment and data collection was clearly identified and response rates were provided. The study provided evidence that the survey tool was tested for validity and reliability. Because the data were collected in elementary schools the findings are limited in its application to directly compare to those in the current study.

5.3.2 KPMG Study

The study that is methodologically similar to the current study was conducted in Victoria, where the Office for Children in the Department for Education and Early Childhood Development undertook a review of secondary school nursing practice (KPMG, 2009). Information was collected through interviews at schools (n=6) with

community stakeholders, School Principals, student wellbeing teams, nurses and students, and by three online surveys completed by school nurses, school staff and community based stakeholders.

The full report has not been published and was not accessible. The data collection was not well explained in the executive summary that is available. The report fails to identify the tools used for data collection, including: an interview guide used in the qualitative phase, and evidence of a pilot study to determine the validity and reliability of the questions. The quantitative phase includes three surveys. The number of participants and response rates are not identified. The survey tools are not identified and it was not reported if the tools were tested for validity or reliability. Additionally, the findings from the qualitative phase are unclear. It is unknown how the participants were recruited and the report fails to identify the community stakeholders, and the participants in the student wellbeing team. Furthermore, the statements made in the findings fail to indicate whether a few, some or many participants are responsible for the findings. The author identifies the limitations of the study as follows: the procedures do not constitute a comprehensive review of operations and the study only reflects the perception of the stakeholders consulted (KPMG, 2009).

5.3.3 New Zealand Schools Study

The Health Service Research Centre in New Zealand (NZ) conducted a mixed methods study in 2008 to review nursing services in NZ secondary schools and report to the Ministry of Health. The report identifies the following data collection methods: interviews with school nurses (n=17), surveys of School Principals (n=154), and surveys of school nurses (n=235). The KPMG study (KPMG, 2009) and the NZ study (Buckley et al., 2009) are similar to the current study as they both review the school nurse's role from the perspectives of school nurses, and Principals. The NZ study does not clearly identify how nurses were recruited for the interviews; however, the study states that surveys were emailed to all of the 336 secondary schools throughout NZ. The study clearly identifies the number of participants in the qualitative and quantitative phases and reports the response rates. Information about the development of the survey instruments is not provided, therefore, it is not possible to assess their reliability and validity. Findings from the qualitative and quantitative data collection are clearly reported, however the authors fail to identify

the number of qualitative participants represented in the qualitative findings, whether it is a few, some or many. The study reports the limitations: that it does not determine which models of school based health centres are effective and that it has not obtained the views of students, (Buckley et al., 2009) unlike the current study. Furthermore, the study does not explore differences among students and schools (except for school decile rating), such as student ethnicity, boarding or day students, single sex or co-educational (Buckley et al., 2009).

5.3.4 US Study

A study recently undertaken in the US provides a basis for comparison to the current study regarding the nurse's role in schools, however, it did not include the perspectives of parents and students (Baisch et al., 2011). The study used a mixed methods design that included cross sectional surveys of Principals (n=24), clerical staff (n=45), and teachers (n=565) and the interrogation of primary school students health records. The study was conducted to evaluate the impact of school nurses on promoting a healthy school environment and healthy, resilient students. However, the study failed to clearly identify the recruitment procedures and survey response rates. The authors cite the limitations including: the inability to match comparable schools and that the survey had not been validated in schools (Baisch et al., 2011).

5.3.5 US Study

An academic and a nurse conducted a quantitative study in the US using a questionnaire to compare the perception of the school nurse's role between administrators (n=29) and school nurses (n=9) (Green & Reffel, 2009). The study clearly identifies the recruitment procedure and response rates. The validity and reliability of the survey instrument used are reported. The authors identify the sample size as a limitation (Green & Reffel, 2009). Unlike the current study, perspectives of the parents and teachers were not included.

5.3.6 UK Study

A group of nurse academics in Wales conducted a qualitative study in 2004 using a structured questionnaire to ask health service managers (n=13), senior personnel officers (n=22), and head teachers and nurses (n=45) their views regarding aspects of the role of the school nurse (Merrell et al., 2007). The recruitment and data collection was clearly identified and response rates were provided. The study provided

evidence of validity and reliability of the survey tool. The author identified limitations of the study as the number and location of school nurses were unknown, therefore data were sought from employers as key informants (Merrell et al., 2007). Unlike the current study, this study failed to seek the perspectives of parents and students regarding the role of the school nurse.

5.3.7 Finland Study

A recent Finish study undertaken by a team comprising academics in nursing and psychiatry used participatory action research to develop a professional practice model of mental health promotion for mental health nurses in schools (Onnela et al., 2014). The model was developed in collaboration with members of the school community, community interest groups, students and parents. School staff included: Principals, teachers, study advisors, counsellors, school nurses, and school psychologists. It is claimed that the outcome of the research was a professional practice model for mental health nurses; however, in reality it comprised a list of suggested interventions (Onnela et al., 2014).

It is difficult to understand exactly how the study was undertaken and the proposed model developed, because the journal article is not well organised or written. For example, it is stated that “new questions were asked for reflection in workshops” (Onnela et al., 2014, p.622), however, the authors fail to identify the difference between old and new questions as well as how many participants were asked and when the questions were asked throughout the nine workshops. Furthermore, the process used for developing and evaluating the interventions is not clear. The model, itself, is the major problem with the study, because it is simply a list of suggested interventions, such as mental health rallies and the provision of a mental health information kiosk in the school lobby.

5.3.8 Resources for school nurse

5.3.8.1 *Time*

While students and parents in this study overwhelmingly demonstrated their satisfaction with the service the nurse provided, parents, teachers, and nurses expressed their concern that large numbers of students in each school contribute to great workloads that challenge nursing resources. These findings are consistent with Australian literature where nurses describe their workloads as hectic, busy and

demanding (Prymachuk et al., 2011; Sendall et al., 2011). Furthermore, many parents, teachers, and nurses identified that student's issues are complex and take time to assess and manage. These findings mirror a recent Australian nurse's study (Guzys et al, 2013) that focused on the sustainability of secondary school nursing practice. Other studies involving school nurses have concluded that nurse's workloads are becoming unmanageable at a time when the demand for mental health care is increasing (Baisch et al., 2011; Seigart et al., 2013; Teich et al., 2008).

These findings are consistent with previous studies that highlight concerns that nurses may not have sufficient time available to provide appropriate mental health care for adolescents in schools (Prymachuk et al., 2011; Seigart et al., 2013). Furthermore, it was evident that no nurse to student ratios were applied in the schools that were involved in this study. This finding parallels international evidence that government recommended targets for nurse to student ratios are ill defined and unregulated (Green & Reffel, 2009; Griffin et al., 2006; Merrell et al., 2007; National Association of School nurses, 2008).

5.3.8.2 Professional development

The majority of students, parents and teachers were unaware or confused about the school nurse's level of qualifications and furthermore, that the nursing degree qualification includes theory of mental health assessment, care and management. Interestingly, two of the nurses employed at one school did not have a degree qualification and were employed as division two enrolled nurses. Most participants, including students, suggested that the nurse should be required to have a degree as a primary qualification. Within Australia there are differences for educational requirements to practice as a school nurse. In Queensland and Victoria school nurses are required to hold a general registered nursing qualification (Sendall et al., 2011) whereas, in Western Australia there are no legal or mandatory requirement for school nurses to hold a degree as a minimum qualification resulting in some independent schools employing enrolled nurses, classified as division 2 nurses with APRHA. There is a lack of consistently recognised requirements to practice as a school nurse. In the UK it had been identified that only forty per cent of nurses hold an academic qualification, mainly a diploma or a degree (Merrell et al., 2007). In the US a bachelor degree is required in some states but not others (Broussard & White, 2013). In New Zealand it is evident that some schools employ a registered nurse whereas

other schools employ a enrolled nurse and some do not have a nurse (Buckley et al., 2009). In Hong Kong it is identified that an enrolled nursing diploma is required as a minimum qualification (Lee, 2011).

Students, parents and teachers all indicated their belief that it was advisable and preferable for nurses to hold extra qualifications, including those in mental health theory. This finding is consistent with Australian (Barnes, Walsh, et al., 2004; Sendall et al., 2011) and international studies (Broussard & White, 2013; Buckley et al., 2009; Haddad et al., 2010) that highlight nurses' report of the specialised nature of their role and suggest that postgraduate qualifications should be mandatory and would be appropriate in the following areas including; primary health care and health promotion, adolescent health and development, adolescent mental health, family planning and sexual health and youth studies.

It is stated in the NZ Schools Study that Principals prefer to employ registered nurses. While 154 completed the survey it is not apparent how many actually agreed with this statement. It may have been one or two, or it may have been the majority. Nurses identified additional post graduate qualifications in adolescent health are useful, however, the report does not report how many nurses expressed this opinion (Buckley et al., 2009). The Victorian study suggests secondary school nurses should be appropriately qualified and have a sound understanding of adolescent health issues and recommends that all nurses without training and experience in the area of adolescent health and mental health and health promotion should undergo mandatory training in this area, however there was no quantification of who, and how many hold this belief (KPMG, 2009, p.26).

Many teachers and parents in this study expressed an opinion that it was important for the nurse to regularly update their mental health knowledge to provide expertise in the care and management of adolescents with mental health concerns. The majority of nurses in this study acknowledged their professional accountability to maintain personal development as required by their regulatory authority. In a number of studies conducted in Australia, the UK and the US, school nurses have reported that receiving professional training to further develop their expertise in promoting mental health is necessary for them to be able to perform their role successfully (Chipman & Gooch, 2003; Haddad et al., 2010; KPMG, 2009; Prymachuk et al.,

2011). The current study is distinctive in that it highlights the concerns of students, parents, and teachers about inconsistencies regarding school nurse's qualifications and their level of postgraduate preparation.

5.3.8.3 *Clinic*

Students identified the importance for privacy to be maintained during a visit to the school nurse irrespective of whether they had seen the nurse or not. It is evident in the survey responses and qualitative findings that the nurse's clinics were sometimes difficult to locate and often cramped, and the lack of privacy was seen to be a significant issue. Similar issues have been reported by nurses to occur in the US, UK, Canada, NZ and Australia (Buckley et al., 2009; KPMG, 2009; Prymachuk et al., 2011; Seigart et al., 2013).

5.3.8.4 *Support*

Many parents and teachers, in addition to nurses, acknowledged that the nurses' role is professionally isolating, complex, and demanding. These findings add to those of previous Australian studies that have focused on the school nurse's own report of their role and the potential for fatigue and burnout (Downie et al., 2002; Guzys et al., 2013; KPMG, 2009; Sendall et al., 2011). Many teachers, in addition to parents and nurses, identified that appropriate support and supervision was very important. In Australian, UK, and US studies nurses have reported that informal support is important and helpful for reflective practice and formal strategies are needed to debrief when necessary (Barnes, Courtney, et al., 2004; Guzys et al., 2013; Prymachuk et al., 2011). It was evident in the current study that there are no formal frameworks in place for supervision and debriefing was uncommon. This finding replicates those of previous studies conducted with nurses in Australia, New Zealand and the UK that have identified a lack of support for school nurses and community nurses, more generally (Borrow et al., 2011; Buckley et al., 2009; KPMG, 2009; Prymachuk et al., 2011; Sendall et al., 2011). A number of authors have recommended formal clinical supervision in a supportive environment to enable reflective practice and promote clinical and professional confidence (Guzys et al., 2013; Kool et al., 2008; KPMG, 2009; Prymachuk et al., 2011). In summary, the findings of the current study with regard to resources highlight the inconsistencies that exist in the educational preparation of school nurses and confirm the widely held belief that school nurses are generally under-resourced and unsupported. This

research draws attention to the perspectives of students, parents, and teachers as well as school nurses. The following section discusses the findings with regard to mental health literacy which is a major component in the model that was developed.

5.3.9 Mental health literacy

While the term mental health literacy was not used directly, students, parents, and teachers identified that they thought it was part of the nurse's role to facilitate mental health literacy across the whole school community. However, participants identified that there needs to be clarity around expectations of the nurse and how this would be put into practice. These issues are discussed in detail in the following sections.

5.3.10 Information and support: proactive general

Students, parents, and teachers, as well as nurses, were in favour of the nurse providing general information and support for the students in the classroom setting and on an individual basis. Studies conducted with nurses in the US, NZ, Australia and Finland that show nurses are providing general health information sessions for students in the classroom on topics such as: sexual health, nutrition, smoking prevention and cessation, prevention of sexually transmitted diseases, and parenting (Buckley et al., 2009; Downie et al., 2002; Seigart et al., 2013; Sendall et al., 2011; Tossavainen, Turunen, Jakonen, Tupala, & Vertio, 2004). In NZ it was evident that Principals identified their support in having nurses take part in health education and program activities (Buckley et al., 2009). However, there are no previous studies that have asked students their views about this, they have only asked the parents and teachers (Downie et al., 2002; KPMG, 2009; National Association of School nurses, 2008; Seigart et al., 2013; Sendall et al., 2011). Furthermore, in the current study parents and teachers suggested that it was important for the nurse to provide health information to them as well. Again, there is some evidence that nurses do this on topics such as: parenting, drugs, medication and anaphylaxis management, infectious diseases, immunisations, asthma and epilepsy, adolescent development and general health care, but there are no previous reports of parents and teachers views (Downie et al., 2002; Green & Reffel, 2009; KPMG, 2009; Lee, 2011; Merrell et al., 2007; Smith & Firmin, 2009). The role of the health service in supporting student, teacher and parent health education is emphasised in the HPS framework (Burns et al., 2014; World Health Organization, 1996).

5.3.11 Information and support: proactive mental health

The findings of this study make it clear that most students, parents, and teachers do not understand the nurse's role in providing mental health information and support. It is equally clear in the literature that nurses are engaged in this form of care. For example, in two large cross sectional studies conducted in the UK which examined school nurse's involvement, attitudes, and training needs for mental health work in schools it was found that school nurses spend considerable time working with young people who have mental health problems and provide advice and support (Haddad et al., 2010; Merrell et al., 2007). Furthermore, a study in the US found that Principals, teachers and administration staff were very satisfied with having a nurse in their school and value nurses working with children and the way the school nurse works with parents (Baisch et al., 2011).

From the evidence it is apparent that students, parents, and teachers believe that mental health literacy education is critical, and the school nurse should be encouraged to collaborate with staff and participate in classroom activities as a guest speaker. Some nurses are engaging in facilitating mental health literacy and are willing to do so. International literature highlights the importance of mental health literacy as a facilitator of help seeking, and for mental health literacy to be introduced before the need arises as the period of adolescence is a time when mental health problems often initiate, and they are more likely to seek help if they have this knowledge (Anderson & Teicher, 2008; Barker, 2007; Mauerhofer et al., 2009). This finding parallels evidence in Australian studies where the nurse has a role in classroom delivery of information for students on topics related to mental health such as: grieving, eating disorders, illicit drug use, suicide and depression (Downie et al., 2002; KPMG, 2009) especially if conducted as part of a comprehensive whole school program (Burns et al., 2014; World Health Organization, 1996).

Additionally, in the US school nurses designed and implemented a mental health program for students to increase awareness about mental health and illness in students (DeSocio et al., 2006). Furthermore, in the US it has been identified the nurse is able to facilitate increased awareness and knowledge about mental health issues and access to resources through newsletters, and class and one-on-one information sessions (Ghaddar et al., 2012; Green & Reffel, 2009). These strategies when conducted as part of a comprehensive whole school program has the capacity

to enhance curricular, to involve parents and teachers and to enhance school environment and ethos (Burns et al., 2014; Wyman et al., 2010; Wyn, Cahill, Holdsworth, Rowling, et al., 2000).

In addition to the nurse providing information in the classroom' students, teachers, parents and students identified that school nurses were accessible, had opportunity to build rapport with students and had the skills to provide sound mental health information in a one-on- one context. School nurses in Australia, Hong Kong, Finland and the US identify they provide health information in a one-on-one context including: healthy lifestyle choices, sexual health and contraception and smoking cessation (Downie et al., 2002; KPMG, 2009; Lee, 2011; Smith & Firmin, 2009; Tossavainen et al., 2004).

However, in the current study there were some reservations by teaching staff about the nurse providing mental health information due to their lack of understanding about the nurse's training in mental health care and professional boundaries. Some parents and teachers lacked understanding that general and mental health issues have a reciprocal relationship and are not always exclusively independent. Nurses in Australia and the UK (Downie et al., 2002; Pryjmachuk et al., 2011) identified that teaching staff had concerns with the nurse providing mental health information and school administration staff in the US (Green & Reffel, 2009) identified concerns about the nurse providing mental health information due to their reluctance to accept the role moving beyond first aid, and their lack of understanding that health information may be offered outside a traditional classroom setting and during health care provision.

5.3.12 Therapeutic communication

Students, parents, teachers, and nurses all identified that the nurse requires sound interpersonal skills to provide therapeutic communication. Many discussed the nurse's expertise with regard to communication skills and a caring approach. The majority of students identified their belief that the nurse should be compassionate. It was agreed that the nurse uses a wide range of interpersonal skills. During the provision of care, information and support the nurse uses basic skills such as: empathy, listening, reflection, open ended questioning in a non-judgemental, supportive and compassionate approach. This is consistent with nursing literature

where the supportive role of the nurse has been identified (Downie et al., 2002; Hutchinson & John, 2012). It is reported by nurses in the UK, Hong Kong and US (Lee, 2011; Prymachuk et al., 2011; Puskar & Bernardo, 2007; Smith & Firmin, 2009) and by students, nurses, teachers, Principals and community stakeholders in Australia (KPMG, 2009), that nurses use communication and interpersonal skills accompanied with compassion and empathy to create a safe environment where adolescents are encouraged to feel listened to.

The term counselling was found to be a sensitive term and not appropriate as it can be misunderstood leading participants to consider the skills required may be beyond the nurse's scope, rather than the actual intent which is to use basic interpersonal skills in practice. It is notable that the term counselling is used extensively in the literature by nurses and other stakeholders (Baisch et al., 2011; Barnes, Walsh, et al., 2004; Downie et al., 2002; Haddad et al., 2010; KPMG, 2009; Merrell et al., 2007). However, nurses have noted that practice boundaries are frequently put in place by other health professionals who consider counselling to be exclusively within their domain (Prymachuk et al., 2011; Stevenson, 2010). For this reason, the framework that has been developed to guide school nurse practice in the current context has focused on the concepts of information and support and therapeutic communication. It is suggested that these concepts better identify what school nurses actually do in practice and avoid ambiguity and inter-professional conflict.

Irrespective of whether the student had seen the nurse or not, the majority of students identified it was of great importance that the nurse was: approachable, caring, able to listen, and that the student would feel comfortable with the nurse. While there are no comparable studies regarding student's perspectives on the importance the nurse's attributes, the World Health Organisation and Australian literature on adolescent help seeking behaviour highlights that trust and confidentiality are central to the relationship with health service providers (Barker, 2007; Boulter & Rickford, 2013; Muir et al., 2009; Rickwood et al., 2007; Wilson & Deane, 2001). Furthermore, research suggests that adolescents feel more comfortable with health professionals they know, and people who come in regular contact with them are in an ideal position to develop a relationship, provide emotional support, and refer to mental health services, which has significance for the role of the nurse (Rickwood, 2005). The current study is unique in that it identifies the student's, parent's, and teacher's

perspectives on the importance of compassionate care provided by the school nurse and the attributes the nurse requires performing this effectively.

5.3.13 Assessment

Virtually all students, parents, teachers and nurses identified that physical assessment is an integral part of the nurse's role, and that the nurse has sound assessment skills to determine if first aid is required. This is consistent with the nursing literature in Australia, the US and UK where examples of the nurse providing general nursing care assessments in schools are highlighted (Barnes, Walsh, et al., 2004; Debell, 2006; KPMG, 2009; National Association of School nurses, 2005). Furthermore, in interviews and focus groups, as well as questionnaires, many students, parents, and teachers indicated that they believe it is very important for the nurse to assess mental health status. It is evident that most stakeholders understand that physical and mental health are inextricably linked. This finding is also consistent with studies conducted in Australia, the UK, US, and Finland (Debell, 2006; National Association of School nurses, 2005, 2014; Onnela et al., 2014; Puskar & Bernardo, 2007; Shannon et al., 2010; Stevenson, 2010). It is also clear in this literature that it is the view of school nurses that they have the appropriate expertise and skills to undertake adolescent mental health assessment (Kendall et al., 2003; National Association of School nurses, 2014; Puskar & Bernardo, 2007)

The findings of the current study confirm this view held by nurses, but they also highlight some reservations held by parents and teachers regarding the nurse's capacity to undertake mental health assessment. This view reflects a general lack of understanding about the scope of nursing practice. It is not surprising given that nurses, themselves, appear to be unable to clearly articulate their role. This issue highlights the need for a universally agreed, clearly defined, comprehensive practice framework for school nurses that is focused on the promotion of health and well-being in the whole school community (Weare & Nind, 2011; World Health Organization, 1996).

5.3.14 Triage

Students, parents, teachers, and nurses identified that one of the nurse's key roles is to assess students' level of physical and mental health and prioritise care. This key role is labelled triage. It is a key component of the nurse's role because it leads either

to physical or mental health care, or referral. In the current study, nurses provided examples and described how they triage and prioritise students with general and mental health care needs. While the practice of triage is important in the context of nursing more generally, and there is an extensive literature about it, there is no academic literature known to the author that discusses triage in the context of school nursing practice.

5.3.15 General health care

The overwhelming majority of students, parents, teachers and nurses identified that general health care is a significant part of the school nurse's role and first aid is an important component of this care. Many students reported that they had received care from the school nurse because they were unwell. The main reasons for students visiting the school nurse were: first aid, advice and information, support and someone to talk to. Examples of general nursing care specified in the US, UK, Canada, NZ, Hong Kong, and Australian literature include: basic emergency care to ill and injured students (commonly referred to as first aid), direct hand on care to students and staff for subacute minor conditions, immunisation, health screening for vision, hearing and weight, and the management and treatment for chronic health conditions (Buckley et al., 2009; Downie et al., 2002; Green & Reffel, 2009; Guzys et al., 2013; Lee, 2011; Merrell et al., 2007; National Association of School nurses, 2008; Seigart et al., 2013). General health care is often provided simultaneously with mental health care which will be discussed in the following section.

5.3.16 Mental health care

Many parents, teachers and students highlighted the importance of the school nurse's role to provide care for students with mental health problems. Without exception, all nurses expressed clear and definite views that that provision of mental health care is an integral part of their practice. Furthermore, all nurses and some teachers and parents identified that the prevalence of students with mental health problems is increasing, and that these students require a great deal of care. These findings mirror those of previous studies where nurses report that they are spending increasing amounts of time with adolescents who have mental health problems and see this as a major aspect of their role (Haddad et al., 2010; National Association of School nurses, 2014; Prymachuk et al., 2011; Stevenson, 2010). It is also evident in the literature that school nurses in Australia, Canada, the US, and UK hold the view that

they have the expertise and clinical skills to provide adolescent mental health care (Baisch et al., 2011; Haddad et al., 2010; Merrell et al., 2007).

However, some teachers and parents expressed their caution about nurses providing mental health care to students at school. The issues included their uncertainty about the nurse's role and level of expertise. It is not surprising that teachers and parents are unsure about the school nurse's role with regard to mental health care when nurses, themselves, have not clearly identified this as part of their practice. In turn, nurses have not been able to articulate this because there is a lack of uniformity across jurisdictions or consistency within jurisdictions about what the job description of the school nurse entails. In Australia, for example, in a major adolescent mental health promotion initiative in secondary schools called MindMatters, the role of school nurses is not discussed. Despite MindMatters adopting the HPS framework (Wyman et al., 2010; Wyn, Cahill, Holdsworth, Louise, et al., 2000) which encourages involvement of the school health services (Burns et al., 2014) there was no specific mention of the role of the school nurse (Crockett, 2013; De Jong, 2005; Rickwood et al., 2005; Rowling & Mason, 2005). The current research draws attention to the perspectives of students, parents, and teachers as well as school nurses about the role of the school nurse to provide adolescent mental health care. The following section discusses the findings with regard to reactive information and support which is a major component in the model that was developed.

5.3.17 Information and support: reactive

Although it was not expressed in these terms, many stakeholders stated their belief that it is very important for the nurse to provide mental health information and support for students, as well as families and teachers. Furthermore, it was evident that stakeholders understood that the provision of information and support is a cyclical process where there is constant evaluation and re-evaluation. Every nurse who was interviewed explained that they often assist students, parents, and teachers to recognise stress behaviours and suggested strategies to manage these. Although nurses have previously reported in studies conducted in Australia and the US that they provide mental health information and support (Baisch et al., 2011; Downie et al., 2002; Humensky et al., 2010; National Association of School nurses, 2014; Shannon et al., 2010) this is the first study to identify that this view is shared by many students, parents, and teachers.

The current study has also revealed that some parents were concerned about confidentiality when their child is engaging with the school nurse, and were concerned that they would not be consulted. Some teachers also expressed their concern that the school nurse might not share important health information about a student with parents and teachers when it was in the best interests of the student that they do so. Students, on the other hand, expressed the view that parents and teachers should not be informed about their personal health issues without their consent. Furthermore, some students stated that they would expect to be treated as equal partners in their relationship with the nurse. This finding is consistent with literature that identifies when adolescents seek access to information and support from nurses, without parental permission, they need to feel comfortable to discuss sensitive issues and be assured that confidentiality is respected (Armstrong, 2004; Barnes, Walsh, et al., 2004; Hutchinson & John, 2012; Prymachuk et al., 2011).

Additionally, the broader literature that focuses on adolescent health seeking behaviour makes it clear that confidentiality is central to the relationship between young people and their health service provider (Barker, 2007; Boulter & Rickford, 2013; Muir et al., 2009; Rickwood et al., 2007; Wilson & Deane, 2001). A comprehensive whole school approach aims to involve staff, students and parents in the planning and implementation of school health promotion (Burns et al., 2014; Weare & Nind, 2011). Involvement of the school nurse in this process is an important step in enhancing awareness of the role among the whole school community.

Given that nurses are bound by a code of professional practice in which confidentiality and partnership relationships are important components, the comments of some parents and teachers reflect a lack of understanding of the nurse's scope of professional practice (Guzys et al., 2013; Prymachuk et al., 2011; Stevenson, 2010; Weist et al., 2012). The capacity of nurses to liaise with parents, teachers, and allied health professionals regarding student's health issues is a cornerstone of their practice. This will be discussed in more detail in the next theme that focuses on collaboration and referral.

5.3.18 Collaboration and referral

Collaboration is identified as a significant element of the framework that evolved from the current research. There was a widely held view that the school nurse needs to engage in collaborative practice. For example, many parents, teachers and nurses stated their belief that it is important for the nurse to attend school meetings where issues regarding the wellbeing of students individually and collectively are discussed. This view is evident in Australian, US, and Hong Kong studies where it is suggested by school nurses, Principals, and administration staff that the nurse should be included in the interdisciplinary student services team or student wellbeing team (Baisch et al., 2011; KPMG, 2009; Lee, 2011; National Association of School nurses, 2014; Sendall et al., 2011). While there is agreement that nurses should attend these meetings, it has been reported that some schools rarely have student wellbeing meetings or do not have them at all (Teich et al., 2008).

The findings of the current study reveal that the nurses employed in the three schools that were sampled were mostly excluded from student wellbeing meetings. Reasons given for exclusion were: issues of confidentiality, conflict of interest, and timetabling difficulties. In instances where nurses were included, their role with regard to the management of the student's wellbeing issue was not made clear. This finding is consistent with studies in Australia and the US where nurses report confidentiality as a barrier to information sharing and tensions arising associated with blurred role boundaries (McMurray & Clendon, 2015; Sendall et al., 2011; Weist et al., 2012).

Despite the barriers placed in front of them, there were many examples given of nurses actively engaging in collaboration with parents, teachers, school allied health professionals, as well as external health service providers, on an individual basis. This provided evidence that collaboration is central to nursing practice and that, in reality, the nurses who participated in this study were working in partnership with others. Studies in Australia, NZ, the US, Canada, Europe, Hong Kong, and the UK provide examples of nurses collaborating with members of school communities and external health service providers (Australian Nursing Federation, 2012; Baisch et al., 2011; Barnes, Walsh, et al., 2004; Buckley et al., 2009; Council on School Health Services, 2008; Debell, 2006; Green & Reffel, 2009; Humensky et al., 2010; Lee, 2011; Merrell et al., 2007; Seigart et al., 2013; Shannon et al., 2010). Furthermore,

nurses believe that it is appropriate for them to make mental health assessments and discuss referral pathways with adolescents, parents, school staff, and internal and external specialist care providers (Armstrong, 2004; DeSocio & Hootman, 2004; Green & Reffel, 2009; Haddad et al., 2010; Puskar & Bernardo, 2007; Stevenson, 2010).

This view is reflected in comments made by students, parents, teachers, and nurses who participated in the current study that the nurse has a role to provide referral when necessary. The survey findings show that following a visit to the school nurse, some students were referred by the school nurse to school services providers, their general practitioner, and outside school services. This study contributes to existing international literature by showing that students and parents, as well as teachers and other school staff, believe that it is important for the school nurse to refer students for specialist care when appropriate (Buckley et al., 2009; Downie et al., 2002; Humensky et al., 2010; Hutchinson & John, 2012; Lee, 2011; National Association of School nurses, 2014; Prymachuk et al., 2011; Seigart et al., 2013; Stevenson, 2010).

5.3.19 Suggestions made by participants to heighten awareness of the nurse's role in the school community

Students, parents, teachers, and allied health professionals uniformly expressed their view that there was a lack of clarity about the nurse's role in their school community. This finding is consistent with studies in the US, UK, and Australia where nurses report that members of the school community lack understanding about their role (Green & Reffel, 2009; Guzys et al., 2013; Prymachuk et al., 2011; Sendall et al., 2011; Stevenson, 2010). In this study, many teachers and parents were also keen to suggest strategies to improve the whole school community's level of understanding about the nurse's role. These strategies included: communicating the nurse's role to the whole school community by contributing to the school newsletter and electronic media. For example: for the nurse to use a Wikki to provide web links to access health information. In addition, it was suggested that the nurse market her role by providing health education in school classroom where this was not already happening, and for the nurse to explain that the role includes assessment and support of student's wellbeing rather than to only provide first aid treatment. Studies in the US and Australia identify there is a need for school nurses to increase the awareness

about their role and have suggested similar strategies (Ghaddar et al., 2012; Green & Reffel, 2009; Hutchinson & John, 2012; Smith & Firmin, 2009; Weist et al., 2009).

5.4 Framework for School nurse Practice

5.4.1 Introduction

The purpose of this research was to undertake the formative evaluation of a proposed practice framework for nurses working in secondary schools to promote adolescent mental health care. The literature suggests that secondary school health nurses spend a great deal of their time engaged in helping students with mental health and psychosocial issues and that this practice is increasing. It has been identified that the role of the school nurse in addressing adolescent mental health issues needs to be defined more clearly. A framework that addresses school nurse practice in mental health promotion will be of benefit to students and other members of school communities nationally and internationally (Haddad et al., 2010; National Association of School nurses, 2014; Prymachuk et al., 2011; Puskar & Bernardo, 2007; Weare & Nind, 2011). A framework that is developed with extensive input from stakeholders in school communities is more likely to be implemented successfully than one imposed by school nurses.

Following an extensive review of relevant literature and in consultation with academics in Nursing, Public Health, and Psychology, a program logic model (Taylor-Powell & Henert, 2008) was developed to guide the research process (see Appendix A). It shows that the practice framework will facilitate the nurse being more effective in promoting good mental health in the school which in turn, it is anticipated, will lead to better mental health outcomes for students. The Program Logic Model labelled the outputs identifying five components of the framework: 1. Mental health literacy education; 2) Training and recognising mental health problems and taking urgent action; 3) Self referred screening and triage; 4) Education and counselling; and 5) Liaison and collaboration.

The five components of the program logic model were broadly considered in the design of the student and parent questionnaires, and the focus group and interview schedules. In this way, the previous knowledge and understanding of the researcher was made explicit and the questionnaires and discussion were given direction. Once these instruments were developed, no further consideration was given to the Program

Logic Model. It was not shown to participants or discussed with them. Themes used in the framework for school nurse practice (Figure 5.1) evolved from the qualitative data. Mental health literacy, triage and collaboration were the only terms borrowed from the logic model to label themes that described concepts that were discussed by participants.

5.4.2 Evolution of the Practice Framework

A great deal of interview and focus group data obtained from students, parents, teachers, allied health professionals, and nurses contributed to the development of the Framework for School nurse Practice. Key themes emerged from statements that were repeated by stakeholders in all participant groups. Most participants not only recognised the key themes in the role of the school nurse, they also identified the interplay between themes and the continuing nature of their involvement with the nurse. It was evident that many participants were confused about aspects of the nurse's role and they enthusiastically endorsed the development of a practice framework to clarify exactly what the nurse does. The importance of the nurse's roles to assess students' level of physical and mental health and prioritise care was highlighted. Triage is a key component of the nurse's role because it leads either to physical or mental health care, or referral. Some participants identified that nurses should be resourced appropriately and supported within the school community.

Survey findings complimented the qualitative data and supported the themes that emerged from the qualitative analysis. These findings provided additional insights into the way students and parents viewed the school nurse's role. Most respondents were in favour of the nurse providing general information and support for the students in the classroom setting and on an individual basis. A large majority of students reported that they had received care from the school nurse when they were unwell. A Principal finding was that nurse's need to be compassionate and use sound interpersonal skills to provide therapeutic communication.

The themes within the framework are supported by national and international literature that has focused on the role of the school nurse, as well as literature that is more broadly about the promotion of adolescent mental health in schools. The current study is distinctive in that the views of students, parents, and teachers were

canvased and their perspectives were the centre point of the framework that has evolved.

5.4.3 Implementing the Framework for School nurse Practice

Following this formative evaluation, the next step in the development of an effective mental health promotion intervention involving secondary school nurses will be the implementation of the framework in selected schools in Australia and thorough process and impact evaluation. Before this can happen it will be necessary to share the findings of this research project with colleagues in a broad range of disciplines whose work focuses on adolescent mental health promotion. The invisibility of the nurse in the school context must be discussed and addressed with reference to a whole of school approach. With support, a case can be made to Australian Government and non-government organisations to fund the further development and implementation of the framework. The framework may potentially be adopted by State Governments within Australia and the Governments of countries within which these findings resonate.

5.5 Strengths and limitations of the study

This study has a number of strengths that will be identified in this section, but it also has some limitations with regard to the setting and sample, and response rates for parents. As to the setting, Perth is a relatively prosperous city situated in a wealthy country. While there are inequalities associated with wealth relative to others in the community, there are very few, if any, families that experience absolute poverty in the sense of not being able to afford the basic necessities of life. Therefore, the results of this study may not be generalizable to populations in less advantaged developed countries and they may not be applicable to the work undertaken by school nurses in developing countries. The framework that has been developed would not necessarily be appropriate in these circumstances. Further formative research would be required to adapt the framework to fit different contexts.

Of the 19 schools that were contacted, 12 were deemed to be unsuitable because they did not employ a registered nurse, and four schools were not able to participate for a variety of reasons. Furthermore, all of the schools that were approached were independent private schools where approval could be given by the Principal; no government (public) schools were asked to participate. In Western Australia

government schools require approval from the Principal and the Department of Education (Western Australia). In addition an additional ethics application needs to be submitted to the Department of Education which is a lengthy process. To enable this research to be conducted in a timely manner a convenience sample of independent schools were selected. It is possible that the characteristics of the schools that did participate were different to those that did not with regard to socio-demographic factors or “school culture” and this could potentially bias the results. However, using the Australian Bureau of Statistic’s SEIFA index it was found that the three schools came from very diverse socio-economic levels of advantage. It was however beyond the scope of this research to measure if governance structures and level of pastoral care offered in these schools differed in important ways. Findings from this research will inform the next stage of the development of the framework which will include a broader selection of schools from all three Education sectors.

Of the three schools that agreed to participate in this study, one was a “girls only” school which meant that of the total number of students that completed surveys, 77 per cent were female. There was a very small and statistically significant difference between males and females associated with their perception of compassionate care, indicating that this was more important for females than males. While this is a potential cause of bias in the findings, it is well documented in current literature that girls seek care from school nurses more often than boys (Barker, 2007; Hutchinson & John, 2012; Rickwood, 2005; Robinson et al., 2010). Of the total number of male students who completed this survey, 73 per cent reported that they had been to see the school nurse compared with 84 per cent of female students. Seventy-three per cent is a significant proportion of the male students participating in this study. In addition, male students were equally represented in the focus groups that were conducted in the two co-educational schools. The response rate for parents varied with the overall rate being 31 per cent; as high as 55 per cent in school A, 32 per cent in school B and as low as 10 per cent in School C. It should be acknowledged that as parents self-selected those who elected to participate in the study may not be representative of the total parent population. However, the overall response rate is similar to other surveys of this type undertaken in Australia and other countries (Baruch, 1999; Blair, Czaja, & Blair, 2013; Sax, Gilmartin, & Bryant, 2003).

The major strength of the study is that it includes the perspectives of students and parents, as well as teachers and allied health professionals. Until now, the majority of research projects that have focused on the role of the secondary school nurse have recruited either school nurses, or school nurses and school administrators, as participants. This research was focused on the needs of the school community with regard to mental health promotion rather than the needs of school nurses. The health seeking behaviour of students within the school community has been recorded and the findings discussed with reference to the broader literature about adolescent health seeking behaviour. Perhaps for the first time, members of school communities have identified the invisibility of the school nurse and their desire for the nurse's scope of practice to be clearly identified. Furthermore, for school nurses to be fully recognised as key health professionals within the school community working within the health promoting schools framework.

The robust methodological approach is a strength of this research. The student and parent surveys provided useful quantitative data that allowed for the reporting of prevalence rates for many important variables and for statistical comparisons to be made. The interview and focus group data provided detailed accounts of participants' views that gave rise to the evolution of the practice framework. Together, the integrated findings addressed a number of gaps in the existing literature with regard to knowledge and understand of the nurse's role in secondary schools.

Finally, the integrated review of literature provides a useful foundation of evidence-based knowledge about adolescent mental health and health seeking behaviour, as well as a comprehensive overview of the health promoting schools framework. This review is a valuable resource for school nurses and may be used in future in undergraduate and postgraduate education programs, and is useful for employers of school nurses including: health departments and education sectors.

5.6 Specific recommendations

The results of this study have potential significance for school nurses across Australia and internationally. The study highlights the need for a school nursing practice framework in secondary schools. For the successful implementation of the framework, a collaborative approach with key stakeholders will be required. On the basis of the research findings, it is recommended that:

- Each school has at least one nurse onsite at all times;
- An evidence-based formula for determining the appropriate ratio of nurses to students in secondary schools is clearly articulated and regulated;
- School nurses have a minimum qualification as a registered nurse;
- School nurses have post graduate qualifications in child and adolescent health;
- Schools have a clinic for nurses to practice which includes an area for private consultations;
- Schools provide support for nurses to attend regular professional development;
- Nurses collaborate with students, parents, teachers, allied health professionals within the school community, and external service providers;
- Nurses are included, and have a clearly defined role, in regular student wellbeing team meetings;
- Nurses are included in the development of the curriculum when general and mental health are topics are involved;
- Nurses are included in the planning and implementation of whole of school health promotion programs and initiatives;
- Nurses have the opportunity to debrief regularly with appropriate teachers and health professionals;
- Nurses have access to regular clinical supervision;
- Nurses create awareness of their role and actively promote their framework for practice across the whole school community; and
- Nursing practice in secondary school is regularly evaluated according to agreed standards.
- Findings from this study will inform the evaluation of the framework in a larger sample of schools from all sectors.

5.7 Conclusion

As a result of the extensive input in the study from whole of school communities including: students, parents, teachers, nurses, and allied health, this study has led to development of a practice framework for nurses working in secondary schools. By implementing this nursing practice framework there is the potential to improve adolescent mental health outcomes. Young people will be supported in schools to

access appropriate mental health care which will be underscored by compassionate nursing care. Timely access to appropriate and supportive adolescent mental health care has implications to prevent clinically significant mental health problems. Furthermore, the potential of implementing the nurse's practice framework in mental health promotion and working collaboratively in a health promoting school context is likely to be of benefit to students as well as the whole school community nationally and internationally.

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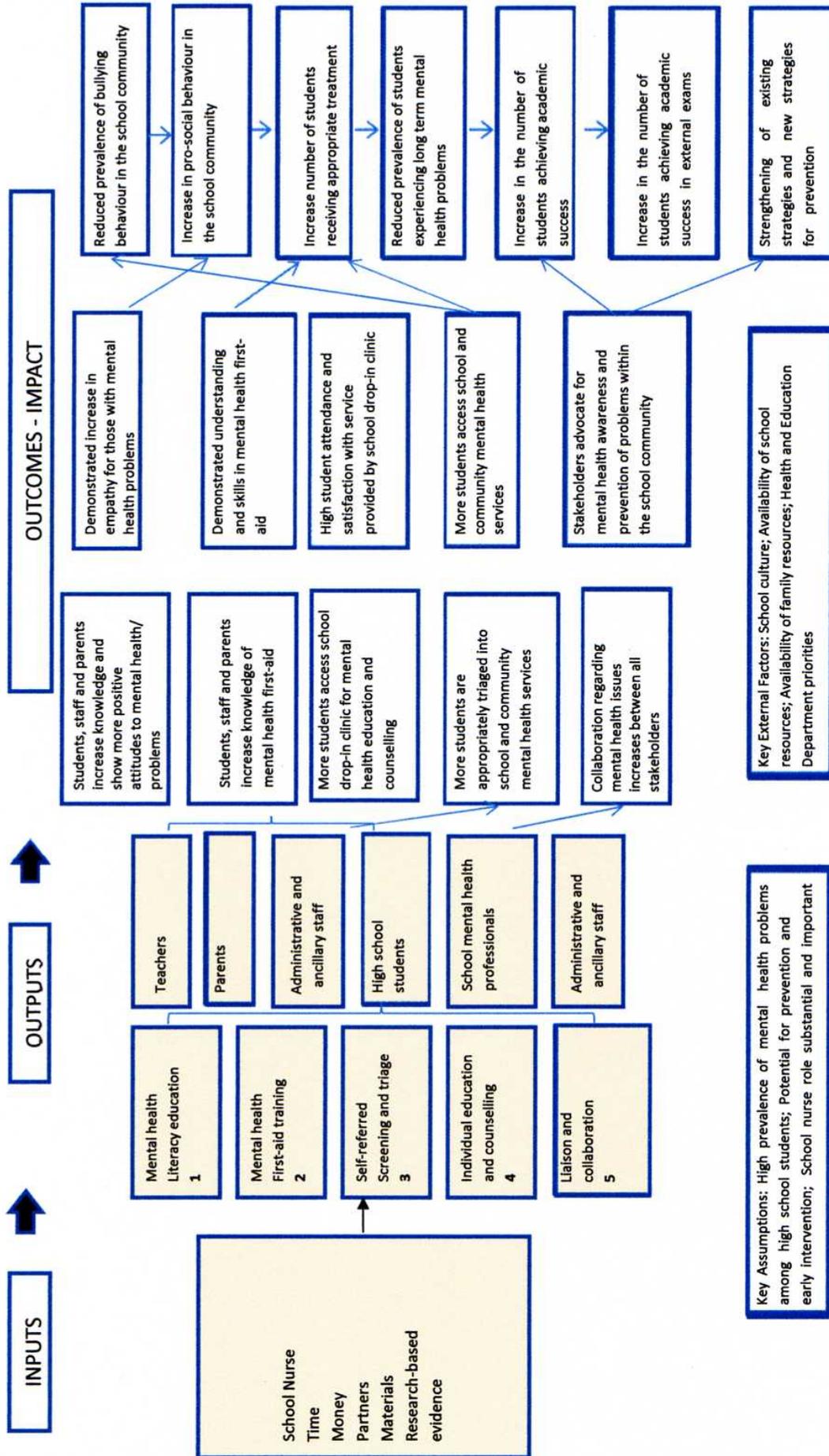
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APPENDIX A

Figure 1. Program Logic Model



Appendix B

PRE PROPOSAL

Title

“How does the role of the school health nurse assist in building healthy school communities?”

Student: Alison McCluskey; Supervisors: Dr Garth Kendall and A/Prof Sharyn Burns

Background and rationale

Adolescence is a period of growth and development characterised by physical, cognitive, emotional and social changes. During adolescence the brain undergoes significant structural and functional alterations that prepare the young person for their transition into adulthood. (Evans, Gerlach, & France, 2007). These changes place adolescents at risk for unsafe behaviours, such as experimentation with drugs and alcohol, unsafe sex, and delinquency (Sawyer, 2000). For a range of physiological and psychosocial reasons, mental health problems, especially anxiety, depression, self-harm, suicide, and eating disorders are common in this age group (Australian Bureau of Statistics, 2008). Major depression is an especially common and serious disorder of adolescence. Lifetime prevalence increases dramatically from one per cent of the population under 12 years of age to approximately 17-25 per cent by the end of adolescence (Anderson & Teicher, 2008). The 2:1 female: male prevalence ratio for unipolar depression is a well-established finding (Angold & Costello, 2006). Further reports support this claim identifying that one in five adolescents experience some form of emotional disorder (Chipman & Gooch, 2003; Patton et al., 2000).

Research highlights the significant impact that mental health has on educational achievement (Evans et al., 2007). There is increasing recognition that student outcomes in literacy, numeracy and science are attributable as much to emotional, attentional, and social regulation as intellectual ability per se (Evans et al., 2007). Mental health problems are likely to impact negatively on both the individual and their family. Furthermore, they place a burden on the community in terms of the cost associated with social welfare, loss of productivity, and loss of employment opportunity (Jane-Llopis, 2006; PISA, 2010). For some young people, at least, mental health disorders that emerge during childhood will persist into adulthood (Copeland, Shanahan, Costello, & Angold, 2009).

The frameworks currently in place for addressing mental health in the high school setting, and the lack of clarity of the nurses' role.

It is recognised that after the child's home, school is the second most influential environment in a child's life (Moses et al., 2008). In an endeavour to improve the health of young people, the Health Promoting School framework has been established internationally (World Health Organization, 1997). The role of the health sector within the framework and the role of the school nurse in particular, is acknowledged (St Leger, 1999). Within this framework, the promotion of mental health has received increasing attention. Mind Matters, is an example of a popular Australian mental health promotion and prevention program. It focuses on a whole school strengths based approach. However, the role of the school nurse within this program, and with regard to mental health promotion more generally, has not been clearly defined (Rowling & Mason, 2005; Wyn, Cahill, Holdsworth, Louise, & Carson, 2000). And yet, recent international, national, and local research shows that school nurses spend a great deal of their time dealing with student mental health and psychosocial issues (Brooks, Kendall, Bunn, Bindler, & Bruya, 2007; Downie, Chapman, Orb, & Juliff, 2002; McMurray & Clendon, 2010; Moses et al., 2008).

There is also recognition of the increased time required for the school health nurse to assist students with mental health issues (NASN, 2005; Puskar et al., 2007; Wilson et al., 2008) and that the time required to assist with counselling has been underestimated by nurses (Moses, 2008). It is widely accepted that the school nurse is in a key position to assist with adolescent mental health issues (Chipman & Gooch, 2003; Debell, 2006; NASN, 2005; Wilson et al., 2008). Due to their understanding of health, social and developmental problems as well as the social determinants of health the school nurse is often the first point in call for a student and is viewed as a safe, accessible, and non-judgemental person (Brooks et al., 2007; NASN, 2005) It is also recognised that school nurses act as a bridge between services (Armstrong, 2004; DeSocio & Hootman, 2004).

In this project it is proposed to survey members of high school communities in order to ascertain their perception of the role of the school nurse with regard to mental health issues. A framework for mental health promotion, proposed by the applicant, will serve as the basis for discussion about how best for the school nurse to serve the school community. The framework will include mental health: literacy; first aid; assessment and triage; management; and advocacy.

Significance

A framework that addresses mental health promotion will be of benefit to high school students and school nurses both locally and nationally. A framework that is developed with extensive input from the school community is more likely to be implemented successfully than one imposed by school nurses.

Aim

The aim of this project is to undertake comprehensive needs assessment identifying the role of the school health nurse with regard to a mental health promotion framework as perceived by high school students, families, staff, and other health professionals who work in schools.

Objectives

4. To ascertain the community's present understanding of the role of the school health nurse in the assessment and management of adolescent mental health issues.
5. To identify if the proposed framework seen to be of benefit to various stakeholders, young people, parents and the school community?
6. To identify if the framework needs to be modified and made appropriate for the needs of the school and whole community.
7. To assess the support to the school health nurse in the implementation of the framework.

Study design and methodology

Three independent high schools in metropolitan Perth will be approached to participate in the study.

One on one interviews with students, teachers, parent representatives, School Principals, school psychologists, and school nurses will be conducted (estimated n = 15 in each school). Focus groups (n = 4 in each school) with students, parents and staff will also be conducted. Stakeholders will be asked specifically about the role of the school health nurse in generally and the role with regard to mental health promotion. In addition, a questionnaire will be developed and sent to parents within each of the schools community to gather data on parents' understanding about the role of the school health nurse in generally and the role with regard to mental health promotion.

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Appendix C

MEETING GUIDE

Firstly, thank-you once again for agreeing to participate in my PhD research project at Curtin University. As you know I am a lecturer and also a PhD student at Curtin University. The purpose of meeting you today is to plan the process of data collection at your school. As we discussed last year, I would like to remind you that the overall goal of the project is to improve adolescent mental health outcomes. The title of the project is;

How does the role of the school health nurse assist in building healthy school communities?

Project outline: what we will be providing in schools:

- An opportunity for the community's to express their present understanding of the role of the school health nurse in the assessment and management of adolescent mental health issues.
- An opportunity to contribute to the development of a proposed framework which may benefit young people, parents and the school community.
- A summary of the outcomes of this study.

What will be required of the schools?

The first step is to plan the Questionnaire data collection

- This includes both parent and student questionnaires.
- A questionnaire (Appendix B) has been developed and will be sent to parents and students (Appendix C) within each school community to gather data on parents' understanding about the role of the school health nurse in general and the role with regard to mental health promotion. The researcher will be selecting approximately 50 students and their parents from randomly chosen classes in year groups 7 – 12 to complete a brief questionnaire each that will take no more than 10 minutes. The questionnaire includes 2 pages for the parents and 4 pages for the students sent by hard copy or on-line.
- Could we please discuss the “pastoral care /form classes and a way of random selection?
- **The school community needs to be informed about the questionnaires, focus groups and interviews**
- I would like to suggest the following letter Appendix Eii for you to “advertise” the project in the school newsletter. I am happy for you to alter this information to suit the school.
- In the newsletter a date needs to be included, informing the parents when the questionnaires are coming home. Could we please plan this date?

- I will provide all of the consent forms and questionnaires. What is the best method to get the questionnaires to the “form or PCG classes”?
- I propose 2 possibilities for when the students complete the questionnaires in the form class
 1. I could come daily to the form classes mark off the consent then ask the students to complete, or
 2. The form teachers could mark off the consent and invite the student to complete and then leave the questionnaires in a box at the health centre or at another location.

Planning the focus groups

Focus groups

Upon receiving cooperation from the school and consent, I, a trained focus group facilitator, will conduct 3 focus groups. Each focus group will have up to 15 participants, depending on the number who consent to being involved. The focus group will be a discussion group led by structured questions. These discussions will be recorded on tape for transcription and analysis.

- In the newsletter teachers and parents will be invited to participate in separate focus groups. There will be a focus group for parents and one for teachers.
- I need to plan with you a venue, date and time for, A) the Parent focus group, B) the teacher focus group, please.
- I also need to ask if you think it is appropriate that my mobile telephone number be included for parents and teachers to contact me to express interest in participation.
- I will also need to invite up to 15 students from years 10/11, and /or 12 classes, randomly chosen for 45 minutes to conduct a focus group.
- Could we please plan, A) which classes and which date to ask the students and B) a date, time and venue to run the student focus groups?

Planning the one-on –one interviews

- **In-depth interviews**

Focus group participants (except students) will be given the opportunity to participate in a one-on-one interview. These participants will be those, randomly selected from the focus groups, who indicate that they would like to be involved in the interviews. The interviews are designed as an extension of the focus groups and allow further exploration and investigation of the concepts and issues that may have arisen within the focus group discussion. The interviews will be arranged at a later date and will last approximately 30-40 minutes.

- I need to plan with you times, dates and a venue where interviews (up to 15) can be conducted, please.

What we will provide

- Trained staff to facilitate and observe the focus groups and interviews
- Equipment (digital recorder), questionnaires and consent forms.

- Today I will leave a copy of the questionnaires, consent forms and letter for the newsletter for you to have a look at.

Please do not hesitate to contact me at any time

Thanks so much for meeting me today

Alison McCluskey

(PH: XXXXXXXXXXXX)

Appendix D

“How does the role of the School Health Nurse assist in building healthy school communities?”

Parent Questionnaire

(NAME) College has a School nurse who runs a health clinic for students. The role of the nurse includes working together with parents and teachers to assist with student’s health care needs. This care includes the provision of acute, chronic, and emergency health care in addition to health care education and counselling.

The purpose of this questionnaire is to obtain information about the role of the school nurse in your school.

Please shade the circle that corresponds with your answer or write your response in the space provided.

Remember ALL answers are confidential

Q1. Has your child been to see the school nurse?	Yes	No	Don't know
	<input type="radio"/>	<input type="radio"/> Go to question 3	<input type="radio"/> Go to question 3

Q2. Did your child’s last visit to the school nurse meet your expectations?	
Unsure	<input type="radio"/>
Yes	<input type="radio"/>
No Please explain.....	
.....	
.....	

Q3. Would you be happy for your child to see the school nurse in the future?	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q4. A number of statements are listed that have used to describe the specific roles of the school nurse. Please read each statement and then shade the appropriate circle to the right of the statement to indicate how you perceive the importance of specific role. There are no right or wrong answers.

Not important	1			
Slightly important		2		
Quite important			3	
Very important				4
	1	2	3	4
Follow up of chronically ill students to prevent absenteeism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide health education for students and promote good health habits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participate in school educational staff meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate students with behavioural problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advise/train school educational staff for the management of students with behaviour problems and low academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follow up with behaviour problems and low academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate students with low academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide first aid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advise parents and teachers on health themes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate hygiene in the school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate cases of persistent absenteeism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Help students to improve their quality of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you very much, we appreciate the time you have spent completing this questionnaire

Appendix E

“How does the role of the School Health Nurse assist in building healthy school communities?”

Student Questionnaire

(Name) College has a School nurse who runs a health clinic for students. The role of the nurse includes working together with parents and teachers to assist with student’s health care needs. This care includes the provision of acute, chronic, and emergency health care in addition to health care education and counselling.

The purpose of this questionnaire is to obtain information about the role of the school nurse in your school.

Please shade the circle that corresponds with your answer or write your response in the space provided.

Remember ALL answers are confidential

Q1. What is your Gender?	Male	Female
	<input type="radio"/>	<input type="radio"/>

Q2. What year are you in?	7	8	9	10	11	12
	<input type="radio"/>					

Q3. Did you know that the school has a nurse?	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q4. Has the nurse been involved in your health education? If so, please identify which? (You may shade more than one response).	
Sexual health (e.g. PASH program) <input type="radio"/>	Mental health such as cyber bullying <input type="radio"/>
Growth and development education <input type="radio"/>	Other/ Please specify
First Aid management <input type="radio"/>	

Q5. Do you think it is good that the nurse is involved in your health education?	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q6. Have you been to see the school nurse?	No - go to Section A	Yes - go to Section B
	<input type="radio"/>	<input type="radio"/>

SECTION A

Q7. Why have you not been to see the school nurse?	
No reason to go <input type="radio"/>	Worried the nurse might tell mum/dad/teacher <input type="radio"/>
Too shy <input type="radio"/>	Too embarrassed <input type="radio"/>
Too busy <input type="radio"/>	Other/ Please specify

Q8. If you had a reason to visit the school nurse how important would the following things be for YOU?				
Not important	1	2	3	4
Slightly important				
Quite important				
Very important				
That the nurse will be approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse will be caring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse will be able to listen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That you would feel comfortable with the nurse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse would give helpful and good advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There would be enough time allocated for the visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Privacy would be maintained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End Of section A: Thank-you – you have finished!

SECTION B

Q9. How did you know that the school has a nurse?			
Website	<input type="radio"/>	Parent/teacher informed me	<input type="radio"/>
Saw the health centre clinic	<input type="radio"/>	Other/ Please specify	
Newsletter	<input type="radio"/>		

Q10. How many times have you been to see the school nurse?	
In the last week	
In the last month	
In the last year	

Q11. How easy was it to find the health clinic?			
	Very Easy	Difficult	Easy
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12. When you last visited the nurse did you have to make an appointment?		
	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q13. Were you able to see the nurse straight away?		
	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q14. If the nurse was unavailable did you go back?		
	Yes	No
	<input type="radio"/>	<input type="radio"/>

Q15. What was the reason for your visit?			
First Aid treatment	<input type="radio"/>	Support /talk to someone	<input type="radio"/>
Feeling Unwell	<input type="radio"/>	Sexual Health	<input type="radio"/>
Advice/Information	<input type="radio"/>		
Other/ Please specify			

Q16. When you last visited the school nurse how important were the following things for YOU?				
Not important	1	2	3	4
Slightly important				
Quite important				
Very important				
That the nurse will be approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse will be caring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse will be able to listen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That you would feel comfortable with the nurse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The nurse would give helpful and good advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There would be enough time allocated for the visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Privacy would be maintained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17. When you last visited the nurse			
Were your parents involved?	Yes <input type="radio"/>	No <input type="radio"/>	NA <input type="radio"/>
Did you require a follow up appointment with the nurse?	Yes <input type="radio"/>	No <input type="radio"/>	NA <input type="radio"/>
Were you referred to your GP?	Yes <input type="radio"/>	No <input type="radio"/>	NA <input type="radio"/>
Were you referred to another service outside of the school such as a hospital?	Yes <input type="radio"/>	No <input type="radio"/>	NA <input type="radio"/>
Were you referred to someone else in the school such as pastoral care or psychologist?	Yes <input type="radio"/>	No <input type="radio"/>	NA <input type="radio"/>

End Of section B: Thank-you – you have finished!

Appendix F

Moderators guide

General introduction

My name is _____ and this is _____. We are both from Curtin University and are here today to hear your opinions about the role of the school nurse. A framework for suggested practice has been developed and I am interested in your opinions based on the proposed framework. Because you belong to the school community your opinion is important to us.

Before we start the discussion I'd like to get some formalities out of the way. You will notice that you have consent from in front of you. We require written consent for ethical reasons.

Confidentiality of your responses and your anonymity will be assured. The interviews will be transcribed and any identifying data, such as personal names, will be removed. Your name is required as part of your consent however your name will be coded which helps to ensure you that the information will be treated as confidential. If you do not wish to sign the consent form please feel free to withdraw from the group.

Explain the process

The purpose of this focus group is to discuss your perceptions of the role of the school nurse. Before we start I would like to go through some information about the procedure of the focus group/or one-on-one interview.

Group Rules

Confidentiality

We are taping the session. This is because this session is important and we don't want to miss any of it. The information will be typed up and your names will not be used. All data will be de-identified.

Honesty

Please answer all questions honestly. There are no right or wrong answers and we are interested in hearing your opinions. Tell us what you really think and not what you should feel or what you think we want to hear.

Speaking

So every-one gets a chance to speak we ask that only one of you at a time speak. If someone is speaking please wait until they are finished and then speak. You may not

always agree with what another person has said but remember we all have the right to express our own thoughts and feelings.

Freedom to leave

If anyone is uncomfortable with anything that we talk about at any time please feel free to leave or sit quietly and not comment.

Icebreaker

To get started I would like to go around the table and ask each person to say their name and their favourite food! OK let's begin.

Focus group/one-on-one interview questions

1. What do you think the role of a school nurses is?
2. A. What are your thoughts on the nurse engaging in teaching
 - (i) Mental health literacy (skills and knowledge for good mental health)?

Prompt: for example the nurse running a session on skills to stand up to a bully

- (ii) Mental health education? (Students taking control of their own health status)?

Prompt: For example, the nurse may facilitate a session on providing tips on how to be safe on the internet

- B. What are your thoughts about the school nurse facilitating students, teachers and parents to recognise and take appropriate action when a problem first arises?

Prompt: For example, a student is stressed at exam time.

In this example do you think the nurse has a role in:

Raising the awareness of risk factors?

Raising awareness about how to access help?

- C. What would be your expectations of the nurse undertaking?

- (i) Screening - comprehensive assessment of the student's health status

Prompt: For example, a student comes in with a headache

Do you think that the nurse's role is to investigate what is causing the headache?

- (iii) Triage – giving immediate aid or referring the student to other health professionals?

Prompt: Headache example,

Do you think the nurse should provide treatment?

What about the nurse making a referral for example to the GP? Or any other service provider?

D. What are your thoughts on the nurse offering the student one-on-one?

- (i) Health education
(ii) Counselling?

E. What are your thoughts on the nurse working with other service providers, such as the school psychologist and community health professionals?

Could prompt this eg what do you think the school nurse's role in referring students is?

3. Are you aware that the school nurse has undertaken education and or has qualifications in the area of mental health assessment, care and management?
4. What do you think could assist the nurse to improve assessment and management of mental health issues within this school?
5. Is there anything further you would like to add?
6. Would any-one like to make an appointment and engage in a one-on-one interview with me on this topic?



Appendix G
PARENT INFORMATION SHEET

Study Title;

“How does the role of the School Health Nurse assist in building healthy school communities?”

Research team: Alison McCluskey, Dr.Garth Kendall, Associate Professor Sharyn Burns

You are invited to participate in a research project being conducted at (NAME) College in conjunction with Curtin University, Perth, WA.

The aim of the study is to survey students, parents, and teachers about their perception of the role of the school nurse. School nurses report that they see many students with mental health problems. School nurses assist students and the school community to promote student good health and wellbeing.

As a participant you will be asked to complete the attached parent questionnaire. It is about your perception of the role of the school nurse. It is anticipated that this questionnaire will take 5 minutes to complete. In addition, you need to be aware that your child will be asked to complete the student questionnaire which is also attached. It will take 10 minutes to complete during form time at school.

Both questionnaires will be identified only by a study number and the information given will be confidential. The completed copies will be stored in a locked filing cabinet and accessed only by the researcher and her supervisors.

Participation in this study is completely voluntary. As a participant you are free to withdraw at any time without consequence or prejudice. Doing so will not affect in any way your child’s access to health care services at school.

The researcher will be available by phone call or appointment to answer or clarify any questions. Alternatively questions can be answered using an interview process with the researcher in an office setting within at Curtin University. Please contact the Researcher Alison McCluskey on (08) 92661739 or Supervisors Dr Garth Kendall on (08) 9266 2191 or A/Prof Sharyn Burns on (08) 92664123 for any further information.

In the event of any questions or concerns of an ethical nature in relation to the intentions of this study you are welcome to contact the Secretary of the Human Research Ethics Committee, Curtin University on (08) 9226 2784. This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 12/2012). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

Appendix H

INVITATION TO PARTICIPATE – SCHOOL NURSE RESEARCH

Dear (Name of school) community member. My name is Alison McCluskey and I am undertaking a research project on the role of the secondary school nurse. The Deputy School Principal, (NAME) has agreed for members of the (NAME) College community to take part in this project.

The aim of the study is to survey students, parents, teachers and allied health about their understanding of the role of the school nurse. School nurses see many students with a variety of physical, social, and emotional problems. School nurses assist students and the school community to promote student good health and wellbeing.

There are two parts of the project:

1. I will be selecting approximately 50 students and their parents from randomly chosen classes in year groups 7 – 12 to complete a brief questionnaire each that will take no more than 10 minutes. Questionnaires will be identified only by a study number and the information given will be confidential.
2. In addition, I will be running three focus groups with approximately 15 people in each; one for parents, one for senior students, and one for teachers and other staff. Senior school students will be randomly selected and invited to participate.

I would like to invite you, a parent, teacher, or other staff member at the school, to participate in a focus group. The focus group discussion will be audio-taped and carried out in a private room at the school. It is expected that the focus groups will take up to 45 minutes. Following the focus group discussion, you will also be asked if you would like to participate in a one-on-one audio-tape recorded interview with me that will also take up to 45 minutes.

Participation in this study is completely voluntary. As a participant you will be free to withdraw at any time without consequence or prejudice. Doing so will not affect in any way you or your child's access to health care services at the school.

Parental consent: If you do not wish for your child to participate

Your School Principal has agreed that your child can participate in the questionnaires to be conducted term 2) unless you do not wish for him/her to take part. Your child may withdraw at any point without prejudice should he/she wish. **If you do not want your child to participate** please tell us by contacting the Deputy Principal (NAME) by: Phone: (08) xxxxxxxx

Fax: (08) xxxxxxxx

Email (email address)

Appendix I
PARENT/TEACHER/ALLIED HEALTH INFORMATION SHEET

Study Title;

“How does the role of the School Health Nurse assist in building healthy school communities?”

Research team: Alison McCluskey, Dr.Garth Kendall, Associate Professor Sharyn Burns

You are invited to participate in a research project being conducted at (NAME) College in conjunction with Curtin University, Perth, WA.

This research has the approval of the Curtin University Human Ethics Committee (Approval Number HR 12/2012).

The aim of the study is to ask students, parents, teachers and allied health about their perception of the role of the school nurse. School nurses report that they see many students with a variety of social and emotional problems. School nurses assist students and the school community to promote student good health and wellbeing.

Your involvement in the study will be to participate in either a one-on-one interview and/or a focus group discussion with up to 15 other participants to share your perceptions of the role of the school nurse with regard to mental health issues and your views about the development of a practice framework to ensure that all students get the same high quality of care. The interview and focus group discussion will be audio-taped and carried out in a private room at the secondary school. The interviewer is an experienced School nurse who is currently researching this issue. It is expected that the interviews and focus groups may take up to 45 minutes.

Interview and focus group transcripts will not have name-identifying data on them and will be coded by a number to ensure confidentiality. Data will be stored in a locked cabinet with only the investigators having access to them.

Participation in this study is completely voluntary. As a participant you are free to withdraw at any time without consequence or prejudice. Doing so will not affect in any way you your child’s access to health care services at school.

The researcher will be available by phone call or appointment to answer or clarify any questions. Alternatively questions can be answered using an interview process with the researcher in an office setting within at Curtin University.

Please contact the Researcher Alison McCluskey on (08) 92669070 or Supervisors Dr Garth Kendall on (08) 9266 2191 or A/Prof Sharyn Burns on (08) 92664123 for any further information.

In the event of any questions or concerns of an ethical nature in relation to the intentions of this study you are welcome to contact the Secretary of the Human Research Ethics Committee, Curtin University on (08) 9226 2784.

Appendix J
STUDENT INFORMATION SHEET

Study Title

“How does the role of the School Health Nurse assist in building healthy school communities?”

Research team: Alison McCluskey, Dr Garth Kendall, Associate Professor Sharyn Burns

I am Alison McCluskey and I am doing research on the role of the secondary school nurse. You are invited to participate in a research project. This project is being conducted at (NAME) College, in conjunction with Curtin University in Perth.

The aim of the study is to survey students, parents, and teachers about their understanding of the role of the school nurse. School nurses see many students with a variety of physical, social, and emotional problems. School nurses assist students and the school community to promote student good health and wellbeing.

If you would like to take part in this study, you can come along to a 45 minute group session. The session will include a maximum of 15 people. The group session will be held at (NAME) College, in (SUBURB), on Friday May 21st from 10.30-11.30 am.

During this session, you will be asked about your understanding of the role of the school nurse, with regard to managing health issues. The researcher will ask you about how the nurse can help improve care for students.

You will be asked some questions. You do not have to answer anything that you feel uncomfortable about. The focus group discussion is a group discussion. We will be asking your opinions. The discussion will be audio-taped and carried out in a private room at the secondary school. The interviewer is an experienced school nurse, who is currently researching this issue.

The information collected during the study will be stored securely and kept confidential. All personal information will be kept as long as it is needed, and then it will be destroyed. Information will not be reproduced in a manner that could lead to the identification of any of the participants.

Participation in this study is completely voluntary. If you agree to participate you are free to withdraw at any time. If you would like to withdraw, you can always see the school nurse if you would like to.

If you would like to ask some questions about what is involved, please do not hesitate to give me a ring. I can be reached on (08) 9266 9070, or you can contact my supervisors, Dr Garth Kendall on (08) 9266 2191 or Associate Professor Sharyn Burns on (08) 9266 4123.

This research has the approval of the Curtin University Human Ethics Committee (Approval Number HR 12/2012). If you have any questions about this approval, you are welcome to contact the Secretary of the Human Research Ethics Committee, Curtin University on (08) 9226 2784.

Appendix K

PARENT/TEACHER/ALLIED HEALTH CONSENT FORM

Study Title; “How does the role of the School Health Nurse assist in building healthy school communities?”

Research Team: Alison McCluskey, Dr Garth Kendall, Associate Professor Sharyn Burns

I have been given clear written and verbal information and understand the intentions of this study.

I have taken the time to consider participation in this study.

I have had the opportunity to ask questions and had them answered to my satisfaction.

I understand that in the event of this work being published, as a participant, I will not in be in any way identifiable.

I understand I may withdraw from the study at any time without consequence, effect or access to routine health care.

Participant Statement

I.....(Print full name)
understand the intentions of the study and know that I have the opportunity to ask questions at any time.

I agree to participate in a one-on-one interview and/or a focus group discussion.

I understand that my participation in this study is voluntary and I can withdraw at any time without affecting in any way my own and my child’s access to health care and services.

Signature..... Participant

Signature..... Researcher

Date.....

Appendix L

STUDENT CONSENT FORM

Study Title; “How does the role of the School Health Nurse assist in building healthy school communities?”

Research Team: Alison McCluskey, Dr Garth Kendall, Associate Professor Sharyn Burns

I have been given clear information about this study.

Any questions I have asked have been answered so that I understand what is going to happen.

I agree that the research data gathered from the results of this study may be published, provided that my name is not used.

I understand that I don't have to participate if I don't want to.

I know that either my parent/guardian or I can contact the Deputy Principal (NAME) at her office or phone her on (08) xxxx xxxx if I have any questions or concerns.

Participant Statement

I.....(Print full name)
Understand what the study is about and I know that I can ask questions at any time.
I agree to participate in a focus group discussion.
I understand that my participation in this study is voluntary and I can withdraw at any time.

Signature..... Participant

Signature..... Researcher

Date.....