

# **Work-Readiness of New Graduate Physical Therapists for Private Practice in Australia: Academic Faculty, Employer, and Graduate Perspectives**

## **Running Head: Graduate Work-Readiness**

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**Submitted Date:** February 9, 2020

**Accepted Date:** December 31, 2020

**Article Type:** Original Research

**TOC category:** Education

**KEYWORDS:** Education: Physical Therapist Students, Private Practice, Workplace, Clinical  
Competence, Clinical, Employment

## ABSTRACT

**Objective.** The purpose of this study is to explore academic faculty, employer, and recent graduate perspectives of the work-readiness of Australian new graduate physical therapists for private practice and factors that influence new graduate preparation and transition to private practice.

**Methods.** This study used a mixed-methods design with 3 surveys and 12 focus groups. One hundred and twelve participants completed a survey and 52 participated in focus groups. Descriptive statistics were utilized to summarize the quantitative data and thematic analysis was used to analyze the qualitative data. Triangulation across participant groups and data sources was undertaken.

**Results.** Australian new graduate physical therapists were perceived to be “somewhat ready” for private practice and “ready” by their third year of employment. Participants proposed that new graduates bring enthusiasm, readiness to learn, and contemporary, research-informed knowledge. New graduates were also perceived to find autonomous clinical reasoning and timely caseload management difficult; to have limited business, marketing and administration knowledge and skills; and to present with underdeveloped confidence, communication, and interpersonal skills. Factors perceived to influence graduate transition included private practice experience, such as clinical placements and employment; employer and client expectations of graduate capabilities; workplace support; university academic preparation and continuing education; and individual graduate attributes and skills.

**Conclusion.** Australian new graduate physical therapists have strengths and limitations in relation to clinical, business, and employability knowledge and skills. New graduate work-readiness and transition may be enhanced by additional private practice experience, employer and client expectation management, provision of workplace support, and tailored university and continuing education.

**Impact.** The number of new graduate physical therapists employed in private practice in Australia is increasing; however, until this study, their work-readiness for this setting was unknown. This exploration of new graduate performance in private practice and transition can help to increase understanding and enhancement of work-readiness.

## INTRODUCTION

An increasing majority of physical therapists in Australia, the United States, Canada and New Zealand are employed in private practice.<sup>1-5</sup> Private practices operate using a fee-for-service business model where clients pay directly for their care, with or without insurance and government contributions.<sup>6-9</sup> Despite most physical therapists working in private practice, the majority of new graduates have historically been employed in hospitals in Australia.<sup>1, 10-13</sup> This employment trend may be due to new graduate familiarity with hospitals from university placements and new graduates feeling more comfortable when clinical responsibilities are shared with other health professionals.<sup>1, 12-16</sup>

However, in recent times, to meet changing workforce demands, the number of new graduate physical therapists employed in private practice in Australia has increased. Reports from Health Workforce Australia and universities estimate that approximately 50% of new graduates enter private practice.<sup>1,17,18</sup> Between 2011 and 2012, statistics from the Australian Physiotherapy Association indicated that the percentage of new graduates employed in private practice in Australia increased from 34.7% to 41.8%.<sup>10</sup> In 2012, then, nearly 650 new graduates, representing 3.2% of Australian physical therapists, were employed in private practice.<sup>1,10</sup> The recent increase in number and size of university programs and therefore physical therapy graduates in Australia may explain the increase in new graduates working in private practice.<sup>1,15,19</sup> The growing demand for primary healthcare, physical therapists, and subsequent employment opportunities in private practice may also have contributed to the change in graduate employment trends.<sup>1,5</sup>

Private practice employment can be challenging for new graduate physical therapists.<sup>14, 20-22</sup>

In Australia, private practitioners provide “first contact” services - 71% of clients present without a medical referral,<sup>6</sup> and often, although not exclusively, with musculoskeletal

issues.<sup>8, 10</sup> This is similar to international trends where “direct access” physical therapy is also common, especially in relation to musculoskeletal disorders.<sup>22-24</sup> For new graduates with limited experience, clinical responsibilities associated with assessment and treatment of clients without a referral or diagnosis, may feel daunting.<sup>14,20,22</sup> Shorter consultation times and lack of access to experienced colleagues in some practices may add to the pressure.<sup>14, 20,</sup><sup>22</sup> Business and administration responsibilities may also be unfamiliar to new graduates<sup>14, 20,</sup><sup>22</sup> as university placements predominately occur in hospitals,<sup>14,21</sup> with less than 10% of 2012 Australian physical therapy student placements undertaken in private practice.<sup>15</sup>

It is not surprising then, that stakeholder concerns have emerged regarding new graduate work-readiness for private practice. Concerns have been voiced by Physiotherapy Business Australia, a subgroup of the Australian Physiotherapy Association, and the Council of Physiotherapy Deans of Australia and New Zealand.<sup>21</sup> Adding weight to these concerns are research reports of employers needing to provide and/or fund significant graduate continuing education,<sup>20</sup> new graduates lacking confidence and experiencing significant stress.<sup>14,20,22</sup> Universities are therefore under pressure to review and update their curricula to enhance new graduate preparation for private practice.<sup>25-27</sup> To do this requires an understanding of what graduate work-readiness means in private practice, as work-readiness is a complex, dynamic and contextual phenomenon.<sup>28,29</sup> Work-readiness has been broadly defined as the degree to which graduates possess characteristics and attributes that prepare them for transition and success in the workplace.<sup>25</sup> Currently, though, there is a lack of consensus regarding characteristics and attributes required to be “work-ready” in private practice.<sup>29</sup> Exploring perspectives of new graduate performance in private practice employment, and identifying factors that can enhance graduate transition to private practice, then, may increase understanding of work-readiness and inform strategies for improvement.

To the authors' knowledge, only three published qualitative studies have explored the preparation and transition of new graduate physical therapists to private practice.<sup>14, 20, 22</sup> Previous research findings indicated new graduates need to improve clinical and non-clinical skills for private practice, and that transition is influenced by multiple factors: University, private practice experience, continuing education, and supportive work colleagues.<sup>16, 20-22</sup> Current research findings may not be transferable as participants were recruited internationally or from one city or state in Australia.<sup>14,20,22</sup> The findings from two studies<sup>14,22</sup> also may be limited as perspectives were sought only from recent graduates who may lack insight into their own capabilities.<sup>14,22</sup> The third study<sup>20</sup> focused on job satisfaction of physical therapists at different career stages, so findings related to new graduates may not be exhaustive.

Work-readiness is linked inherently to the dynamic and contextual attributes of the workplace. Workplace learning provides a useful conceptual framework to consider new graduate physical therapists' preparation, readiness and transition to work in private practice as it considers the interconnected nature of conceptual, procedural and dispositional knowledge.<sup>30, 31</sup> The theory of workplace learning proposes that "workplaces structure and routinely provide learning experiences as part of everyday work activities and through guidance from other workers."<sup>30(pg.4)</sup> Conceptual knowledge is described as facts, information and concepts, procedural knowledge as techniques, skills and tasks, and dispositional knowledge as attitudes, values, and interests. The deployment of each cannot occur without reference to the others.<sup>30</sup> Furthermore, the workplace learning framework asserts the concept of situated learning. While educational institutions are central to preparing graduates for practice, learning also occurs beyond universities through everyday workplace

experiences.<sup>30</sup> Such learning is constrained by the workplace environment and worker engagement, taking place within a “contested terrain,” where workers and management may have differing goals.<sup>30</sup> Thus, workplace learning considers the influence of tasks, practice and relationships over time; it views readiness as dynamic, situational and multi-faceted rather than a static end-point.<sup>30, 31</sup>

Based on the workplace learning framework, a mixed-methods study was undertaken, allowing the exploration of new graduates’ *situated* experiences in depth and breadth and from multiple perspectives, addressing the limitations of previous research.<sup>32</sup> The aim of this study was to explore academic faculty, employer, and graduate perspectives in Australia regarding the:

1. The work-readiness and transition of new graduate physical therapists into private practice employment
2. Barriers and facilitators to successful transition of new graduate physical therapists to private practice employment.

## **METHODS**

### **Design**

A mixed methods research study involving three electronic surveys and 12 focus groups was conducted by seven physical therapists (CW, AB, SC, LC, FK, AR, JS) and one sociologist (RO) employed at six different Australian universities. A survey was used to collect ratings of perceived work-readiness in graduates over the first three years of work. These data were used to inform the design of focus group questions. Focus groups were undertaken to explore understanding of new graduate work-readiness for private practice and factors influencing

transition to private practice. Academic faculty, employers, and recent graduates were invited to participate in a survey and/or a focus group. Ethical approval to conduct the study was obtained from the lead university (University of Canberra) and partner universities (Curtin University, Griffith University, Monash University, University of Queensland, Western Sydney University).

### **Participants**

Participants were recruited for the survey and focus groups by purposive and snowballing techniques to maximize the quality of responses and response rates.<sup>33-35</sup> Physical therapists from different stakeholder groups—academic faculty, employers, graduates—were recruited to enhance the richness, diversity, and applicability of findings.<sup>33, 34, 36</sup> Participants needed to meet selection criteria for one of the following participant groups:

1. *Physical therapy academic faculty* employed by an Australian university, with teaching experience in an accredited entry-level physical therapy university program in Australia in the past three years in the area of musculoskeletal physical therapy. Entry level university programs included undergraduate and graduate-entry level programs where graduates are able to register to practice physical therapy in Australia,<sup>36</sup> and not postgraduate specializations within physical therapy.<sup>37</sup> Academic faculty experienced in musculoskeletal physical therapy were selected as they were able to provide detailed insight of relevant knowledge and skills as most clients in private practice present with musculoskeletal issues.<sup>8, 10</sup>
2. *Private practice employers* who had employed at least one, but preferably more than one, new graduate physical therapist in the past three years in their private practice.
3. *Recent physical therapy graduates* who graduated in the past three years from an accredited entry-level physical therapy university program in Australia, who were



registered to practice physical therapy with the Australian Health Practitioner Regulation Authority, and who had a minimum of six weeks of experience working in private practice.

Potential participants for surveys and focus groups were identified through academic faculty colleagues, clinical coordinators, and clinical partners, and by reviewing graduate destination surveys, as well as searching publicly available directories and private practice websites. Participation was promoted via advertisements through the Physiotherapy Research Foundation, Australian Physiotherapy Association, and social media sites frequented by physical therapy students and graduates. Potential participants were emailed an invitation to participate and provide informed consent before completing the survey and/or focus group.

### **Surveys**

An electronic survey for each participant group was administered in 2016 (Appendix 1). Prior to distribution, surveys were drafted by the primary author, an academic faculty member and physical therapist who works in private practice, tested and refined by the co-authors, physical therapy educators and a sociologist. Qualtrics survey software was utilized to administer the survey and to maintain data security.<sup>38</sup> Participants were asked to complete the survey within two weeks. Follow-up emails were used to maximize response rates.

Closed and open-ended questions were included in each survey. Participants were asked to rate the work-readiness of physical therapists in private practice at one, two and three years after graduation using a 5-point Likert scale (where 1 = not at all ready, 2 = not ready, 3 = somewhat ready, 4 = ready, 5 = very ready). Participants were then asked to explain their ratings and to describe the factors that they perceived to influence graduate preparation and

transition. Participants were also asked to provide demographic data, such as age, gender, state or territory of work, as well as education and work experience.

### **Focus groups**

A total of 12 focus groups (four per participant group) were undertaken in 2016. Recruitment was assisted by the use of teleconferencing and/or video conferencing options, fostering inclusion of a geographically diverse sample. Focus groups ran for 50-60 minutes and consisted of three to six participants, allowing all participants to make in-depth contributions.<sup>39</sup> Focus groups were facilitated by one of three researchers (RO, FK, CW). All facilitators were involved in the first focus group, enabling collaborative review of questions and the process, to inform future focus group facilitation.<sup>35</sup> Focus group questions, provided in Appendix 2, aimed to delve into detailed perspectives of graduate work-readiness and factors influencing new graduate transition. Focus groups were audio recorded and professionally transcribed.<sup>35</sup>

### **Data analyses**

All authors were involved in data analyses to increase evaluative rigor.<sup>33</sup> Descriptive statistics were used to summarize the demographics for each participant group. The median Likert score (and interquartile range) of graduate work-readiness was calculated for each participant group. Nvivo data analysis software was used to manage qualitative data.<sup>40</sup> Following constructivist grounded theory conventions, qualitative data were analyzed thematically to explore patterns in responses to open-ended questions in the surveys and focus groups.<sup>41</sup> Two researchers inferred themes for each data set through open, selective and theoretical coding.<sup>33,</sup>

42-45

While the primary author (CW) was involved in coding of all qualitative data, focus group facilitators (RO, FK) also coded data sets from the focus groups they facilitated, and

other authors (AB, JS, LC, SC, AR) provided secondary review of data sets. Any differences regarding the deconstruction, interpretation and reconstruction of data were resolved through discussion and consensus agreement between researchers.<sup>35</sup> Method and data source triangulation of themes were also undertaken as a data verification process to enhance trustworthiness and understanding of perspectives.<sup>46</sup>

## **RESULTS**

One hundred and twelve participants completed the survey including 27 academic faculty members (24.1%), 53 employers (47.3%) and 32 graduates (28.6%) (Table 1). One hundred and thirty-nine participants consented, indicating a participation rate of 80.6% (112/139). A total of 52 participants participated in one of 12 focus groups: 20 academic faculty members (38.5%), 15 employers (28.8%) and 17 graduates (32.7%). Thirty-one of the 112 survey participants also took part in a focus group (27.7%) including 11 academic faculty members, 11 employers and nine graduates.

The quantitative and qualitative data were compared and synthesized in response to the research questions. Themes and subthemes identified in survey and focus group data across all participant groups are presented.

### **The work-readiness and transition of new graduate physical therapists**

According to median scores of graduate work-readiness, obtained from Likert response questions in surveys, academic faculty members and employers perceived new graduates to be “somewhat ready” for private practice employment in their first year of practice, while

recent graduates described themselves as “not ready” to “somewhat ready”. By their second year of employment, all participant groups suggested recent graduate physical therapists to be “somewhat ready,” and by their third year of employment, “ready” for private practice (Table 2).

Three overarching themes encompassed participant perspectives regarding new graduate capabilities: *Clinical knowledge and skills*, *Business knowledge and skills*, and *Employability skills* (Table 3). *Clinical knowledge and skills* was defined as physical therapy knowledge and skills required to assess and treat a client in private practice, such as the ability to make evidence-based, clinical reasoning decisions; *business knowledge and skills* was defined as the knowledge and skills associated with providing a clinical service for a fee, such as scheduling, marketing and knowledge of third-party funding models; and *employability skills* were defined as generic knowledge and skills applicable to employment in a range of jobs and industries, such as communication and teamwork skills.<sup>47, 48</sup>

#### *Clinical knowledge and skills*

New graduates were perceived to bring *research informed and contemporary knowledge* but may find *clinical reasoning* through diagnosis, assessment and treatment difficult (Table 3). New graduates may also find management of large, new or complex *caseloads* challenging. Additional *time* to assess and treat clients and between appointments may be required, and new graduates may find *autonomy* in clinical decision-making challenging.

#### *Business knowledge and skills*

New graduates were perceived to have limited understanding of *business and financial* aspects of private practice, such as the importance of building and maintaining client

numbers and charging clients for services to cover associated costs (Table 3). New graduates may also find *marketing and client service* difficult due to lack of confidence or skills. Their lack of experience and confidence could produce a conflict regarding how often to schedule appointments and when to discharge clients. New graduates were also perceived to be unfamiliar with *administration and paperwork* aspects of private practice, including letter writing and reports for insurance companies and health professionals who refer clients for physical therapy.

### *Employability skills*

New graduates were perceived to have *enthusiasm and readiness to learn* which may reinvigorate colleagues and enhance their development (Table 3). New graduates were also perceived to generally have low levels of *confidence* which may have a negative impact on client adherence and satisfaction with treatments provided by new graduates. New graduate *communication and interpersonal skills* varied but were perceived to be mostly underdeveloped, particularly in relation to establishing rapport with clients and liaising with other health professionals.

## **Barriers and facilitators to successful transition of new graduate physical therapists**

Five themes were identified that explained factors that influence the transition of new graduates to private practice: *Experience in private practice, Employer and client expectations, Workplace support, University academic preparation and continuing education, and Graduate attributes and skills*. These factors acted as either barriers or facilitators to new graduate transition, depending on individual graduate differences and

circumstances. Supporting data (selected quotes) from each participant group for each theme are provided in Table 4.

*Experience in private practice* in the form of clinical placements for physical therapy students was perceived to facilitate new graduate transition (Table 4). The limited number and funding for private practice placements was identified as a barrier. Alternative experiences that were suggested to assist new graduates included placements in student-led university clinics with clients paying for services, and volunteer and paid work experience in private practices as a physical therapy assistant or sports trainer.

*Employer and client expectations* regarding new graduate capabilities were perceived to influence the transition to private practice (Table 4). Employers with high expectations may make graduate transition difficult, while employers who recognized graduate limitations, and consequently provided support, assisted graduate transition. Clients, meanwhile, could facilitate graduate transition if they had optimistic expectations, adhered to treatments and achieved positive outcomes. Clients with negative expectations may make graduate transition more challenging by not trusting or following graduate advice.

Participants also noted that *workplace support* assisted new graduate transition, while the absence of support was reported as a barrier (Table 4). New graduates found the transition easier if they treated fewer clients, had longer consultation times, were paid a salary, could seek advice from experienced colleagues, and had access to mentoring and professional development.

*University academic preparation and continuing education* were perceived to assist new

graduate transition if relevant to private practice (Table 4). Content gaps in existing university curricula were identified, as well as challenges with adding or changing content. Continuing education for new graduates was reported to not always be available or affordable. Enablers included tailored postgraduate programs for new graduates, and employers funding providing continuing professional education.

A range of *graduate attributes and skills* were perceived to influence graduate transition (Table 4). Graduates who were confident, mature, committed to lifelong learning, and resilient – willing and able to persevere through challenges – were perceived to transition more easily into private practice employment. Strong communication, interpersonal and critical reflection skills were also considered helpful. Absence or under-development of these attributes and skills were perceived as barriers.

## DISCUSSION

This is the first research study known to the authors to integrate academic faculty, employer, and graduate perspectives of the work-readiness of new graduate physical therapists for private practice employment in Australia. Academic faculty members and employers perceived new graduates to be “somewhat ready” for private practice at the point of graduation, although recent graduates perceived themselves to be less so. New graduates were perceived to have both strengths and limitations in relation to *clinical, business and employability knowledge and skills*. Barriers and facilitators to successful transition of new graduate to private practice were also identified across participant groups and research methods: *Clinical placements and employment, employer and client expectations of graduate capabilities, workplace support, university academic preparation and continuing education*

*and individual graduate attributes and skills.* The themes can be analyzed within the framework of workplace learning, to consider the contribution of the individual and the workplace to work-readiness.

Participants perceived graduate work-readiness to include “clinical”, “business”, and “employability” knowledge and skills. These overarching themes reference the three interdependent domains of workplace learning: “*conceptual*”, “*procedural*” and “*dispositional*” knowledge<sup>30, 49</sup> (Figure). Clinical reasoning, although largely *conceptual* (what individuals know) also requires procedural and dispositional knowledge; the management of time and a clinical caseload, although largely *procedural* (what individuals do), is also dependent on conceptual and dispositional knowledge; and confidence, although commonly *dispositional* (who individuals are; what individuals value), impacts on all knowledge domains. *Clinical knowledge and skills*, as a theme, offers an example of how this framework retains the socio-personal complexity of graduate attributes, with individual readiness always embedded in context. In addition to the contemporary knowledge needed to assess and diagnose patients (*conceptual knowledge*), new graduates found applying this knowledge challenging when treating patients as part of new and large caseloads (*procedural knowledge*). It took new graduates additional time to bridge the divide between what they knew and valued as good care, and their capacity to embody these values and skills in a new setting through habituated practice (*dispositional knowledge*).

The similarity between our findings and the work of other scholars adds to the credibility of study findings.<sup>50-54</sup> A New Zealand study of employer perceptions of new graduate readiness found that employers assumed new graduates were clinically competent, but in need of



further development regarding dispositional attributes of professionalism and confidence, and the conceptual attribute of understanding the ‘bigger picture’.<sup>54</sup>

New graduates were perceived to present with both strengths and limitations in all forms of knowledge. New graduate strengths, such as “enthusiasm and readiness to learn” and “contemporary and research-informed knowledge”, may assist new graduate learning and lead to practice benefits. Colleagues may be re-energized, update their knowledge and skills, and become more evidence-based, as found in other contexts.<sup>50-54</sup> Meanwhile, new graduate limitations were theorized by participants to result in a short-term reduction in the quality of client care, client numbers and business income, and in graduate stress and fatigue. Previous research in private practice and other settings has identified similar new graduate knowledge and skill gaps in clinical reasoning, paperwork, communication<sup>9, 13, 14, 20, 22, 54, 55</sup> and potential impacts of reduced client retention, and an increase in employer costs and graduate stress.<sup>14, 20, 22</sup> This study provides further examples of new graduate limitations and potential impact, while also acknowledging new graduate strengths which have previously not been reported. Findings, therefore, may provide direction and incentive for various stakeholders to collaborate in improving new graduate work-readiness.

Billet’s socio-personal workplace learning framework proposes five factors which may influence graduate work-readiness.<sup>30</sup> The first premise is that learning is not confined to university but occurs through every-day, ongoing experiences.<sup>30, 56</sup> This is relevant to survey results: Graduates in their first year of practice were perceived as “not ready” or “somewhat ready” for private practice but were “ready” by their third year of employment. New graduate workplace learning in the first two years of employment is therefore critical. This finding is

consistent with other research indicating that the first two years of physical therapy employment, regardless of setting, involves significant learning.<sup>57, 58</sup>

“*Experience in private practice*” was also proposed by participants to enhance new graduate work-readiness. Increasing private practice placement experiences for students has been previously proposed,<sup>14</sup> and aligns with workplace learning theories.<sup>1, 49, 56, 59</sup> Private practice placements may be especially difficult to source for students as clients select and pay for their own therapist and practices often have insufficient staff, space, and resources to support students.<sup>15, 21, 60-63</sup> This may be why in 2012, fewer than 1 in 10 Australian physical therapy placements were in private practice.<sup>15</sup> Nevertheless, participants emphasized the importance of private practice placements, and as per previous research, universities are advised to continue seeking these learning opportunities.<sup>14, 15, 21, 60-63</sup> Participants in this study and previous research also advised students to seek other “*experience in private practice*”.<sup>14</sup> Examples include volunteer opportunities and paid employment in private practice, and physical therapy and sports trainer roles.

A second premise of workplace learning theory is that learning is influenced by affordances of workplace environments.<sup>1, 64</sup> This premise is supported by the proposal that *employer and client expectations* and *work support* influence graduate transition. Employers may assist graduate transition by recognizing graduate limitations and providing support. Workplace supports which may assist new graduate transition include smaller caseloads, longer appointments, salaried employment, mentoring, continuing education and access to senior colleagues. Previous research attests to the value of workplace support<sup>14, 20, 22, 57, 58</sup> and the impact of client expectations on treatments.<sup>65, 66</sup> Employers, then, should reflect on and potentially moderate their expectations, and where possible provide workplace support. New

graduates, too, should advocate for workplace support during employment negotiations, and work on building trust and rapport with clients.

A third premise of workplace learning is recognition of the workplace as a “contested terrain” of workers, labor and management.<sup>30</sup> The tensions between income generation, client retention and graduate learning at work was identified in the *business and finances* subtheme. It is therefore important for employers and graduates to reflect on the compatibility of their values and practice norms during job selection and recruitment. Employers too should consider the type and extent of workplace support and continuing education they can provide, and if they have the capacity to absorb initial costs associated with hiring new graduates.

The fourth premise of workplace learning is the importance of education institutions in preparation for practice.<sup>30, 31, 49</sup> The role of universities in contributing to graduate work-readiness was identified by all participant groups. Inclusion of private practice content into university curricula, such as incorporating teaching of business and employability skills, was recommended, and has been reported previously.<sup>9, 13, 14, 20, 22, 54, 55</sup> Universities should therefore ensure curricula address contemporary workforce needs.<sup>49</sup> Postgraduate university study and continuing education opportunities for new graduates were also suggested by participants and in previous research.<sup>14, 20</sup> Access to and financial barriers limiting continuing education opportunities for graduates requires consideration.

The final premise of workplace learning is the need for worker engagement with workplace activities and learning.<sup>30, 31, 64</sup> Stakeholders agreed that individual *graduate attributes and skills*, such as confidence and commitment to lifelong learning, influenced new graduate transition. Interestingly all of the listed attributes and skills are embedded within the

Physiotherapy Practice Thresholds – the minimal standards of practice for registered physical therapists in Australia.<sup>67</sup> Mastery of these attributes and skills may vary due to individual graduate differences in age, gender, personality, training and experience.<sup>13, 22, 68, 69</sup> Study findings, therefore highlight graduate attributes and skills that are important to develop, extend, and reinforce during physical therapy education and employment.

This research study has some limitations. For example, any participant's perspective may be questioned, such as academic faculty who commented on graduate readiness after finishing university, employers who have employed a small number of graduates, or a recent graduate who has limited experience or worked elsewhere before private practice. There were also approximately 28% participants who completed the survey and focus groups, which means their opinions were canvassed more than once. Participation in the focus group as well as the survey, though, helped to increase the depth of understanding of perspectives. The trustworthiness of this study's findings was also enhanced by triangulation of data between participant groups and research methods, involvement of multiple researchers in data collection and analyses, and theoretical and inductive thematic saturation being reached.<sup>33, 35, 46, 70</sup> Moreover, the transferability of findings was facilitated by the recruitment of participants of different ages and genders, and participants from different states and territories (Table 1).<sup>34, 35</sup> No study participants, however, were recruited from South Australia, and small numbers were recruited elsewhere.<sup>33, 35</sup> Furthermore, findings do not necessarily represent the perspectives of all physical therapists nationally or internationally.<sup>33, 35</sup>

In conclusion, this research explored the perspectives of academic faculty, employers, and graduates regarding the work-readiness of new graduate physical therapists for private practice in Australia. Graduate work-readiness in private practice is of utmost importance

given the majority of new graduates, and indeed in Australia most physical therapists in their career, are employed in this setting.<sup>1, 10</sup> Moreover, graduate work-readiness concerns should be explored and promptly managed given the potential impact on client care, as well as business finances, and new graduate experiences.<sup>14, 20, 22</sup> Participants in this study agreed that new graduates presented with strengths and areas for improvement, and factors were identified that act as barriers or enablers to work-readiness. This research therefore adds to the limited evidence available on this topic and provides valuable insight to inform development of strategies to enhance graduate preparation and support for private practice employment.

## **Author Contributions**

Concept/idea/research design: C. Wells, R. Olson, A. Bialocerkowski, S. Carroll, L. Chipchase, A. Reubenson, J. Scarvell, F. Kent

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## **Acknowledgments**

The authors are grateful to Paul Wallace, who acted as our research assistant for this project.

## **Ethics Approval**

Ethical approval to conduct the study was obtained from the lead university (University of Canberra) and partner universities (Curtin University, Griffith University, Monash University, University of Queensland, Western Sydney University).

## Funding

Tagged grant funding from the Physiotherapy Research Foundation and the Western Australia Physiotherapy Registration Board was utilized to pay for a research assistant to assist with project administration, and to cover expenses related to team meetings, data collection, and analyses.

## Disclosure and Presentations

The authors completed the ICMJE Form for Disclosure of Potential Conflicts of Interest and reported no conflicts of interest.

Partial findings in this study were presented in oral presentations at the Australian Physiotherapy Association Conference in 2016 and 2018, and the New Zealand Association for Health Professional Educators in 2017.

## REFERENCES

1. Health Workforce Australia. *Australia's health workforce series – Physiotherapists in focus*. Adelaide: Health Workforce Australia; 2014. Accessed February 16, 2021. [http://iaha.com.au/wp-content/uploads/2014/03/HWA\\_Australia-Health-Workforce-Series\\_Physiotherapists-in-focus\\_vF\\_LR.pdf](http://iaha.com.au/wp-content/uploads/2014/03/HWA_Australia-Health-Workforce-Series_Physiotherapists-in-focus_vF_LR.pdf).
2. Bureau of Labor Statistics, United States Department of Labor. *Occupational outlook handbook: Physical therapists*. Washington: Bureau of Labor Statistics, United States Department of Labor; 2018. Accessed February 16, 2021. <https://www.bls.gov/ooh/healthcare/physical-therapists.htm>

3. Stokes F, Dixon H, Nana G, Business and Economic Research Limited. *Workforce supply projects, 2014-2035: The physiotherapy workforce*. Wellington: Business and Economic Research Limited; 2014. Accessed February 16, 2021.  
<https://www.physioboard.org.nz/sites/default/files/physiotherapy-board-nz-workforce.pdf>.
4. Canadian Institute for Health Information (CIHI). *Physiotherapists in Canada: physiotherapists, 2016 –Data Tables*. Ottawa: CIHI; 2017.  
<https://secure.cihi.ca/estore/productFamily.htm?pf=PFC3600&lang=en&media=0>.
5. Pretorius A, Karunaratne N, Fehring S. Australian physiotherapy workforce at a glance: a narrative review. *Aust Health Rev*. 2016; 40:438-442.
6. Dennis S, Watts I, Pan Y, Britt H. Who do Australian general practitioners refer to physiotherapy? *Australian Family Practice*. 2017; 46:421-426.
7. Landry MD, Williams AP, Verrier MC, Holyoke P, Zakus D, Deber RB. Shifting sands: assessing the balance between public, private not-for-profit, private for-profit physical therapy delivery in Ontario, Canada. *Physiother Res Int*. 2008; 13:189-199.
8. Perreault K, Dionne CE, Rossignol M, Poitras S, Morin D. Physiotherapy practice in the private sector: organizational characteristics and models. *BMC Health Serv Res*. 2014; 14:362.



9. Wassinger K, Baxter GD. Business plans in physiotherapy: A practical guide to writing a business plan for the non specialist. *Phys Ther Rev.* 2011; 16:210-227.
10. Australian Physiotherapy Association. *InPractice 2025: Final report.* Melbourne: Nous Group; 2013. Accessed February 16, 2021.  
[https://australian.physio/sites/default/files/tools/InPractice\\_2025.pdf](https://australian.physio/sites/default/files/tools/InPractice_2025.pdf)
11. Australian Physiotherapy Association. *InPublic 2025.* Melbourne: Nous Group; 2015.
12. Dodson I, Fletcher C, Henzell N, Spurr R. Career goals and aspirations of the fourth year University of Otago physiotherapy students: a questionnaire. *New Zealand Journal of Physiotherapy.* 2001; 29:19-28.
13. Jones M, McIntyre J, Naylor S. Are physiotherapy students adequately prepared to successfully gain employment? *Physiotherapy.* 2010; 96: 69-75
14. Atkinson R, McElroy T. Preparedness for physiotherapy in private practice: novices identify key factors in an interpretive description study. *Man Ther.* 2016; 22:116-121.
15. Health Workforce Australia. *Clinical training profile: Physiotherapy.* Adelaide: Health Workforce Australia; 2014.
16. Dean C, Stark A., Gates C, Czerniec S, Hobbs C, Bullock L, Kolodziej I. A profile of physiotherapy clinical education. *Aust Health Rev.* 2009; 33: 38–46.

17. Bacopanos E, Edgar S. Employment patterns of Notre Dame graduate physiotherapists 2006-12: targeting areas of workforce need. *Aust Health Rev.* 2015; 40:188-193.
18. Mulcahy A, Jones S, Strauss G, Cooper I. The impact of recent physiotherapy graduates in the workforce: a study of Curtin University entry-level physiotherapists 2000-2004. *Aust Health Rev.* 2010; 34:252-259.
19. McMeeken J, Grant R, Webb G, Krause KL, Garnett R. Australian physiotherapy student intake is increasing and attrition remains lower than the university average: a demographic study. *J Physiother.* 2008; 54: 65-71.
20. Davies JM, Edgar S, Debenham JA. A qualitative exploration of the factors influencing the job satisfaction and career development of physiotherapists in private practice. *Man Ther.* 2016; 25: 56-51.
21. Kent FM, Richards KL, Haines TP, Morgan PE, Maloney SR, Keating JL. Patient and practitioner perceptions of student participation in private practice consultations: a mixed-methods study. *Focus on Health Professional Education.* 2015;16: 42-54.
22. Solomon P, Miller PA. Qualitative study of novice physical therapists' experiences in private practice. *Physiother Can.* 2005; 57: 90-98.
23. Bury TJ, Stokes EK. A global view of direct access and patient self-referral to physical therapy: Implications for the profession. *Phys Ther.* 2013; 93: 449-459.

24. Kruger J. Patient referral and the physiotherapist: three decades later. *J Physiother.* 2010; 56:217-218.
25. Caballero C, Walker A. Work readiness in graduate recruitment and selection: a review of current assessment methods. *Journal of Teaching and Learning for Graduate Employability.* 2010; 1:13-25.
26. Hunt A, Adamson B, Harris L. Physiotherapists' perceptions of the gap between education and practice. *Physiother Theory Pract.* 1998; 14:125-138.
27. Tran T. Enhancing graduate employability and the need for university-enterprise collaboration. *Journal of Teaching and Learning for Graduate Employability.* 2016; 7:58-71.
28. Moore T, Morton J. The myth of job readiness? Written communication, employability, and the 'skills gap' in higher education. *Studies in Higher Education.* 2017; 42:591-609.
29. Walker A, Storey KM, Costa BM, Leung RK. Refinement and validation of the Work Readiness Scale for graduate nurses. *Nurs Outlook.* 2015; 63:632-638.
30. Billet S. *Learning in the workplace: Strategies for effective practice.* St Leonards: Allen & Unwin; 2001.

31. Billett S. *Curriculum and pedagogic bases for effectively integrating practice-based experiences*. Brisbane: Griffith University, Australian Learning & Teaching Council; 2011.
32. Creswell JW. Revisiting mixed methods and advancing scientific practices. In: S.N. Hesse-Biber SN, Johnson RB, eds. *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. New York: Oxford University Press; 2015:57-71.
33. Kitto SC, Chesters J, Grbich C. Quality in qualitative research. *Med J Aust*. 2008; 188: 243-246.
34. Portney L, Watkins MP. *Foundations of clinical research applications to practice*. 3rd ed. Upper Saddle River, NJ: Pearson Education; 2009.
35. Sargeant J. Qualitative Research Part II: Participants, analysis and quality assurance. *J Grad Med Educ*. 2012:1-3.
36. Chipchase L, Galley P, Jull G, et al. Looking back at 100 years of physiotherapy education in Australia. *Aust J Physiother*. 2006;52:1-7.
37. Westervelt KC, Crane L, Sibold J, Hing W. Physical therapist post-professional education in the United States and Australia. *Phys Ther Rev*. 2018; 23:68-76.
38. Qualtrics [computer program]. <http://www.qualtrics.com>. Accessed January 20, 2020.

39. Punch K. *Introduction to social research: Quantitative and qualitative*. London: Sage; 1998.

40. Nvivo [computer program]. Version 11.0. Doncaster, Victoria: QSR International.  
<http://www.qsrinternational.com/nvivo-product/nvivo11-for-windows>.

41. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006; 3(2):77-101.

42. Charmaz K. *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage; 2006.

43. Charmaz K. The power of constructivist grounded theory for critical inquiry. *Qual Inq*. 2017; 23:34-45.

44. Glaser BG. *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociological Press; 1992.

45. Sullivan GM, Sargeant J. Qualities of Qualitative Research: Part I. *J Grad Med Educ*. 2011; 3:449-452.

46. Carter N, Bryant-Lukosius D, DiCenso A, Blythe J, Neville, AJ. The use of triangulation in qualitative research. *Oncol Nurs Forum*. 2014; 41:545-547.

47. Sarfraz I, Rajendran D, Hewege C, Mohan MD. An exploration of global employability skills: a systematic research review. *International Journal of Work Organisation and Emotion*. 2019; 9:63-88.

48. Suleman F. The employability skills of higher education graduates: insights into conceptual frameworks and methodological options. *Higher Education*.2018; 76:263-278.
49. Billet, S. Readiness and learning in health care education. *Clin Teach*. 2015; 12:367-372.
50. Illes R, Davidson M. Evidence based practice: a survey of physiotherapists' current practice. *Physiother Res Int*. 2006; 11:93-103.
51. Manns PJ, Norton AV, Darrah J. Cross-sectional study to examine evidence-based practice skills and behaviors of physical therapy graduates: is there a knowledge-to practice gap? *Phys Ther*. 2015; 95:568-578.
52. Lizandro L, Grimmer-Somers K, Kumar S. A systematic review of the individual determinants of research evidence use in allied health. *J Multidiscip Healthc*. 2011; 4: 261-272.
53. Morrison T, Robertson L. New graduates' experience of evidence-based practice: an action research study. *Br J Occup Ther*. 2016; 79:42-48.
54. Sole G, Claydon L, Hendrick P, Hagberg J, Jonsson J, Harland T. Employers' perspectives of competencies and attributes of physical therapy graduates: an exploratory qualitative study. *New Zealand Journal of Physiotherapy*, 2012; 40:123-127.

55. Schafer S, Lopopolo RB, Luedtke-Hoffman KA. Administration and management skills needed by physical therapist graduates in 2010: a national survey. *Phys Ther.* 2007; 87: 261-281.
56. Billet S. Learning through health care work: Premises, contributions and practice. *Med Educ.* 2016; 50:124-131.
57. Black LL, Jensen GM, Mostrom E. et al. The first year of practice: an investigation of the professional learning and development of promising novice physical therapists. *Phys Ther.* 2010; 90:1758–1773.
58. Hayward LM, Black LL, Mostrom E, Jensen GM, Ritzline PD, Perkins J. The first two years of practice: a longitudinal perspective on the learning and professional development of promising novice physical therapists. *Phys Ther.* 2013; 93:369-383.
- Patton N, Higgs J, Smith M. Using theories of learning in workplaces to enhance physiotherapy clinical education. *Physiother Theory Pract.* 2013;29:493-503.
59. Doubt L, Paterson M, O’Riordan A. Clinical education in private practice: an interdisciplinary project. *J Allied Health.* 2004;33:47-50.
60. Hall M, Poth C, Manns P, Beaupre L. An exploration of Canadian physiotherapists’ decisions about whether to supervise physiotherapy students: results from a national survey. *Physiother Can.* 2016; 68:141-148.

61. McMahon S, Cusack T, O'Donoghue G. Barriers and facilitators to providing undergraduate physiotherapy clinical education in the primary care setting: a three-round Delphi study. *Physiotherapy*. 2014;100:14-19.
62. Rodger S, Webb G, Devitt L, Gilbert J, Wrightson P, McMeeken J. Clinical education and practice placements in the allied health professions: an international perspective. *J Allied Health*. 2008; 37:53-62.
63. Billet S. Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*. 2001;13: 209-214.
64. Mondloch MV, Cole DC, Frank JW. Does how you do depend on how you think you'll do? A systematic review of the evidence for a relation between patients' recovery expectations and health outcomes. *CMAJ*. 2001;165:174-179.
65. Stetler C. Adherence, expectations, and the placebo response. Why is good adherence to an inert treatment beneficial? *Psychol Health*. 2014; 29.
66. Physiotherapy Board of Australia, Physiotherapy Board of New Zealand. *Physiotherapy practice thresholds in Australia and Aotearoa New Zealand*. Physiotherapy Board of Australia, Physiotherapy Board of New Zealand; 2015. Accessed February 16, 2021. <https://physiocouncil.com.au/wp-content/uploads/2017/10/Physiotherapy-Board-Physiotherapy-practice-thresholds-in-Australia-and-Aotearoa-New-Zealand.pdf>



67. Cranmer S. Enhancing graduate employability: Best intentions and mixed outcomes. *Studies in Higher Education*. 2006; 31:169-184.
68. Jackson D. Skill mastery and the formation of graduate identity in bachelor graduates evidence from Australia. *Studies in Higher Education*. 2016; 41:1313-1332.
69. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H, Jinks C. Saturation in qualitative research: Exploring its conceptualization and operationalization. *Qual Quant*. 2018; 52:1893-1907.

Table 1. Participant Demographics

ACADEMIC FACULTY	Survey	Focus Group
Number	27	20
Age, y - Mean(SD)	45.6 (10.2)	49.5 (8.3)
Sex - Female: Male	16:11	9:11
State/Territory of Work - Number (%)		
Australian Capital Territory	2 (7.4%)	4 (20.0%)
New South Wales	3 (11.1%)	5 (25.0%)
Queensland	6 (22.2%)	4 (20.0%)
Tasmania	0 (0.0%)	1 (5.0%)
Victoria	3 (11.1%)	0 (0.0%)
Western Australia	12 (44.4%)	6 (30.0%)
Other – Overseas	1 (3.7%)	0 (0.0%)
Highest Qualification – Number (%)		
Doctor of Philosophy	11(40.7%)	11(55.0%)
Professional Doctorate in Physical Therapy	1 (3.7%)	1 (0.0%)
Master	10 (37.0%)	5 (25.0%)
Postgraduate Diploma	1 (3.7%)	3 (15.0%)
Bachelor (Honors)	3 (11.1%)	0 (0.0%)
Bachelor	1 (3.7%)	0 (0.0%)
Work Experience in Y – Mean (SD)	21.0 (10.1)	24.5 (10.2)
Faculty Experience in Y– Mean (SD)	11.8 (9.0)	10.6 (7.0)

Table 1. Participant Demographics (cont)

EMPLOYERS	Survey	Focus Group
Number	53	15
Age, y - Mean (SD)	41.6 (11.1)	43.7 (10.1)
Sex, Female: Male	19:34	9:5
State/Territory of Work – Number (%)		
Australian Capital Territory	4 (7.5%)	3 (20.0%)
New South Wales	10 (18.9%)	4 (26.7%)
Queensland	11 (20.8%)	4 (26.7%)
Tasmania	2 (3.8%)	2 (13.3%)
Victoria	4 (7.5%)	0 (0.0%)
Western Australia	22 (41.5%)	2 (13.3%)
Highest Qualification – Number (%)		
Professional Doctorate in Physical Therapy	1 (1.9%)	1 (6.7%)
Master	18 (34.0%)	4 (26.7%)
Postgraduate Diploma or Graduate Certificate	2 (3.8%)	1 (6.7%)
Bachelor (Honors)	5 (9.4%)	2 (13.3%)
Bachelor	22(41.5%)	6 (40.0%)
Other – unspecified (overseas)	2 (3.8%)	0 (0.0%)
Work Experience in y – Mean (SD)	18.8 (9.9)	21.2 (9.3)
Number of Graduates Employed – Mean (SD)	8.9 (11.6)	1. (6.8)

Table 1. Participant Demographics (cont)

GRADUATES	Survey	Focus Group
Number	32	17
Age, y - Mean (SD)	24.9 (3.2)	26.2 (4.1)
Sex - Female: Male	15:17	9:8
State/Territory of Work – Number (%)		
Australian Capital Territory	3 (9.4%)	6 (30.0%)
New South Wales	9 (28.1%)	5 (25.0%)
Northern Territory	1 (3.1%)	0 (0.0%)
Queensland	3 (9.4%)	2 (10.0%)
Tasmania	1 (3.1%)	0 (0.0%)
Victoria	4 (12.5%)	1 (5.0%)
Western Australia	11 (34.4%)	3 (15.0%)
Physical Therapy Qualification – Number (%)		
Master	15 (46.9%)	11(55.0%)
Bachelor (Honors)	3 (9.4%)	2 (10.0%)
Bachelor	14 (43.8%)	4 (20.0%)
Work Experience in Mo – Mean (SD)	14.6 (9.5)	19.6 (9.5)

Table 2. New Graduate Work Readiness for Private Practice: Stakeholder Perspectives

	First Year Graduate [Median (Interquartile Range)]	Second Year Graduate [Median (Interquartile Range)]	Third Year Graduate [Median (Interquartile Range)]
Academic faculty	3.0 (2.0, 3.0) <sup>a</sup> (n=27)	3.0 (3.0, 4.0) <sup>a</sup> (n=27)	4.0 (4.0, 4.5) <sup>a</sup> (n=27)
Employers	3.0 (2.0, 3.0) <sup>a</sup> (n=52 <sup>b</sup> )	3.0 (3.0, 4.0) <sup>a</sup> (n=52 <sup>^</sup> )	4.0 (4.0, 5.0) <sup>a</sup> (n=51 <sup>^</sup> )
Graduates	2.5 (2.0, 3.0) <sup>a</sup> (n=32)	3.0 (3.0, 4.0) <sup>a</sup> (n=27)	4.0 (3.0, 5.0) <sup>a</sup> (n=25)

<sup>a</sup> where 1.0 = not at all ready, 2.0 = not ready, 3.0 =somewhat ready, 4.0 =ready, 5.0 =very ready on a Likert scale from 1 to 5

<sup>b</sup> The number of employers is less than 53 as some employers elected option “unable to comment” for 1, 2 or 3 years after graduation due to lack of experience with graduates with this level of experience

Table 3. Work-Readiness of New Graduate Physical Therapists for Private Practice<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>THEME: CLINICAL KNOWLEDGE AND SKILLS</b>		
Subtheme: Research-informed and contemporary knowledge		
<i>“[New graduates] bring more contemporary information to the clinic. However, applying this under the time and profit demands of the private practice world appears a challenge.” (Academic faculty survey)</i>	<i>“[Graduates keep] me motivated to keep up to date with current research. I often learn new techniques from new grads or relearn some I have forgotten.” (Employer survey)</i>	<i>Graduates bring “new ideas and research – some people, if you’ve been out for a long time, not everyone – a lot of people do keep up to date with what’s going on...but there are some people that...don’t keep up as much.” (Graduate focus group, Ingrid)</i>
Subtheme: Caseload		
<i>“In terms of percentage [graduates undertake] maybe 50 to 75 percent of [the] workload of a more experienced practitioner” (Academic faculty focus group, Ian)</i>	<i>“[New graduates] are ready to treat the majority of common conditions but find complex cases difficult.” (Employer survey)</i>	<i>“[It] gets difficult in compensable cases.... trying to combine clinical knowledge with all the other factors (getting a rehab provider on-board, making sure the doctor is on the same page, screening psychosocial aspects)” (Graduate survey)</i>
Subtheme: Time		
<i>“Graduates are adequately prepared to assess and treat patients but may need to be given a little extra time before and after consultations to be organized and prepared.” (Academic faculty survey)</i>	<i>Graduates have “poor time management [they struggle] to manage a full caseload plus additional requirements of private practice eg, Workcover... GP letters, client follow up phone calls” (Employer survey)</i>	<i>“When you’re a new grad, you think you’ve got to assess all of this and figure out how to treat and tailor it down...you can spend too much time on the assessment and not have enough time to treat.” (Graduate focus group, Fiona)</i>

<sup>a</sup>All participant names are pseudonyms

Table 3. Work-Readiness of New Graduate Physical Therapists for Private Practice (Cont)<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
THEME: CLINICAL KNOWLEDGE AND SKILLS (cont)		
Subtheme: Autonomy		
<i>“I’ve heard lots of horror stories with new graduates being hired and the practitioner goes on holidays for six weeks and they’re left solo...I’m not sure how any new graduates could handle that well” (Academic faculty focus group, Olivia)</i>	<i>“I encourage an open-door policy because sometimes it’s... it’s just giving [new graduates] the direction of where to look and what to rule out and that’s enough for them to then go and work it out” (Employer focus group, Fran)</i>	<i>“Being on my own, it has been hard...If I really need to contact [senior physical therapists] I can email them or call them, but it’s not really quite the same as having them more accessible to me, being on-site” (Graduate focus group, Gwen)</i>
Subtheme: Clinical reasoning		
<i>“Graduates do come out with a basic toolbox and it’s just a matter of experience and exposure to find out exactly what spanner goes with what bit and just putting it all together.” (Academic faculty focus group, Kevin)</i>	<i>“There’s a few clinical things that I’ve noticed with new grads that do change over time. The first one is clinical reasoning under time pressure. So, being able to make decisions when you don’t have an hour.” (Employer focus group, Albert)</i>	<i>“Many first-year graduates find it difficult to apply everything they’ve learnt on real-life patients. Also, they try to apply everything they’ve learnt on real-life patients, often doing too much every appointment.” (Graduate survey)</i>

<sup>a</sup>All participant names are pseudonyms

Table 3. Work-Readiness of New Graduate Physical Therapists for Private Practice (Cont)<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>THEME: BUSINESS KNOWLEDGE AND SKILLS</b>		
Subtheme: Business and finances		
<i>“It’s really difficult...because it’s a challenge to go from health care to making money and making a business work.” (Academic faculty focus group, Warren)</i>	<i>“New grads are often uncertain on the processes of business and fail to understand [key performance indicators] and necessity to measure performance from an economic point of view.” (Employer survey)</i>	<i>New graduates need to understand “the philosophy of the business, different types of financial situations, how to be a sole practitioner...the challenges of a financial and business environment, and also even some of the ethics.” (Graduate focus group, Jack)</i>
Subtheme: Marketing and client service		
<i>“[New graduates have] poor sales and marketing knowledge or understanding of financial considerations in the health marketplace” (Academic faculty survey)</i>	<i>“They do tend to lack in the business-side of being a private practitioner in terms of...how to create a recurrent clientele. They can be quite a good clinician but just have an empty appointment book.” (Employer focus group, Erica)</i>	<i>“How often to get someone back, how soon to get them back, how to explain to [clients] how often you would like to see them and why... I’m only just starting to get that now...about a year on.” (Graduate focus group, Ingrid)</i>
Subtheme: Administration and paperwork		
<i>New graduates “need more experience in professional letter writing and oral communication with other professionals and third-party payers” (Academic faculty survey)</i>	<i>“I don’t think they get...what’s required from a third-party insurer and maybe from a legal representative that they might need to go to court for.” (Employer focus group, Matthew)</i>	<i>New graduates are “unfamiliar with workers’ compensation/MVA [Motor Vehicle Accident] processes and documentation and managing insurance clients.” (Graduate survey)</i>

<sup>a</sup>All participant names are pseudonyms



Table 3. Work-Readiness of New Graduate Physical Therapists for Private Practice (Cont)<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>THEME: EMPLOYABILITY SKILLS</b>		
<b>Subtheme: Enthusiasm and readiness to learn</b>		
<i>“[New graduates are] enthusiastic staff who are keen to continue professional development, take up opportunities for new work experiences” (Academic faculty survey)</i>	<i>“Can I just say that I think new grads bring a lot of enthusiasm and a zest for life and learning to your practice which I find really nice? It’s quite refreshing, so that’s a really positive thing that they bring.” (Employer focus group, Danielle)</i>	<i>“I think they’re very motivated and enthusiastic and very wide-eyed and want to learn, ask lots of questions. I don’t think they hold back” (Graduate focus group, Hank)</i>
<b>Subtheme: Confidence</b>		
<i>“I think the ones that do well have a personality that includes a confidence level and ability to chat to the client. It’s that whole service side of industry.” (Academic faculty focus group, Quentin)</i>	<i>“Often the new grads are quite uncertain and apprehensive - this can lead to shyness and lack of confidence, some of the grads are slow to improve in these skills and communication is then compromised” (Employer survey)</i>	<i>“Many clients will be put off by the ‘green’ness of the new grad physio, unless that physio is able to deliver themselves confidently and essentially ‘fake it until they make it’ “(Graduate survey)</i>
<b>Subtheme: Communication and interpersonal skills</b>		
<i>“Grads with stronger interprofessional skills (e.g., communication skills), confidence and empathy seem to perform better even if their clinical skills aren’t any stronger.” (Academic faculty survey)</i>	<i>“They need good, sound communication; rapport building skills as well. That is probably quite a big thing in private practice that they lack...the ability to talk to other health professionals, including GPs, specialists, consultants and other allied health practitioners and case managers” (Employer focus group, Matthew)</i>	<i>“I think communication and ability to develop rapport with patients is one of the most vital skills a grad needs...when your assessment and treatment is amateur, education is the selling point.” (Graduate survey)</i>

<sup>a</sup>All participant names are pseudonyms

Table 4. Factors That Influence New Graduate Physical Therapist Transition to Private Practice<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>EXPERIENCE IN PRIVATE PRACTICE</b>		
<i>“We just want them to have more and more experience on placement...It’s just trying to get as close as we can in terms of mirroring what actually happens out in the work force... There’s nothing like experience.” (F- Academic faculty focus group, David)</i>	<i>“When you consider about 80 percent of physios are in private practice and most new grads coming up have not done a private practice placement, I think that’s a priority for universities.” (B- Employer focus group, Sara)</i>	<i>“I personally didn’t do a private practice placement and it left me in the blurry zone in terms of what it was like in private practice.” (B- Graduate focus group, Jack)</i>
<i>“The ones that seem to cope better...have as undergrads worked as sports trainers...or several have done physio assistant work for private practices. Having this extra exposure seems to help.” (F- Academic faculty survey)</i>	<i>“Setting your foot in a private practice...would definitely help. Whether that’s volunteering or...part of a formal placement.” (F- Employer focus group, Rowan)</i>	<i>“One of the placements that I found really useful was the student clinic at the university, especially because the patients...were paying customers.” (F- Graduate focus group, Yosef)</i>
<b>EMPLOYER AND CLIENT EXPECTATIONS</b>		
<i>“Some [employers] have the expectation that [new graduates] will hit the ground running...that they will have a working knowledge of the more operational /business side of private practice. The expectation that they can manage a complex patient unsupervised straight away. The expectation that they can see patients in very short appointment times and still provide optimal care.” (B- Academic faculty survey)</i>	<i>“The biggest thing... [is] making sure you’re providing enough support for [new graduates] and giving them extra time initially to be able to manage the franticness of a private clinic and to [meet] expectations that patients put on you. Also having to often be that first contact practitioner puts on a little bit extra pressure...providing extra support and mentoring...is very important.” (F- Employer focus group, Sonia)</i>	<i>“Employers can go different ways. They can either be really supportive, realising that they too were graduates once, and ease you into the practice by offering lengthened session times with clients, slowly building a case load and gradually making you more independent. Other employers are all about pumping out the numbers and wanting you to see as many clients as quickly as possible.” (F &amp; B- Graduate survey)</i>

<sup>a</sup>All participant names are pseudonyms. Abbreviations: B = Barriers; F = Facilitators.

Table 4. Factors That Influence New Graduate Physical Therapist Transition to Private Practice (Cont)<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>EMPLOYER AND CLIENT EXPECTATIONS (cont)</b>		
<p><i>“The clinical encounter is complex and the client may put more emphasis on another part of the interaction over the perceived expertise. In some practices seeing a new grad is at a lesser price and so this may suit some.” (F- Academic faculty survey)</i></p> <p><i>“Clients can see new grads as “not knowing” enough, being too inexperienced and they can lose confidence in the physio if results are not as quick as expected.” (B- Academic faculty survey)</i></p>	<p><i>“Some clients may feel they are incompetent and dissatisfied with treatment. Others are happy to see someone who charges less for less complex problems.” (F&amp;B-Employer survey)</i></p>	<p><i>“If a client finds out that you've only just graduated.., it is possible that they feel less confident in your skills. Since you're 'new' and don't have years of 'experience'. However if you can demonstrate confidence in your own skills, build rapport, and show them improvement they often forget their initial point of view and trust you.” (F&amp;B- Graduate survey)</i></p>
<b>WORKPLACE SUPPORT</b>		
<p><i>“[New graduates] need mentoring and guidance, so private practices need to factor this into the patient timetable and expenditure.” (F- Academic faculty survey)</i></p> <p><i>“A graduate program which includes senior clinical support, peer support, training for operational/business/marketing processes, opportunities for professional and career development and open communication with their university [assists new graduates].” (F-</i></p>	<p><i>“Having a buddy with a recent graduate to relate to; having a senior mentor who is easily approachable; extra time for appointments / administration; opportunities to sit in with senior staff to observe.” (F- Employer survey)</i></p> <p><i>“New grads do need extra time per session for at least six months and extra catch-up breaks... They do need supervision or regular consultation with the more senior physios.” (F- Employer survey)</i></p>	<p><i>“[Graduates need] more time for consultations with patients, [tutorials] or time with bosses/senior physios to talk through patients and confirm assessment findings and treatment plans, time for hands on practice to receive feedback, opportunities to sit in on other physio's consultations.” (F- Graduate survey)</i></p> <p><i>“I've loved working with other new grads because they're going through the same things...we can bounce ideas off each other,</i></p>

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*Academic faculty survey)*

*practice our skills and problem solve together.”*  
*(F- Graduate survey)*

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<sup>a</sup>All participant names are pseudonyms. Abbreviations: B = Barriers; F = Facilitators.

Table 4. Factors That Influence New Graduate Physical Therapist Transition to Private Practice (Cont)<sup>a</sup>

Academic Faculty Views	Employer Views	Graduate Views
<b>UNIVERSITY ACADEMIC PREPARATION AND CONTINUING EDUCATION</b>		
<p><i>“It would be nice for [students] to do more private practice type things [at university]. It’s just how much we can do... Maybe getting them more private practice ready would mean taking something out of the course or extending the course.” (F- Academic faculty focus group, Ian)</i></p>	<p><i>“It is essential graduates are provided with sufficient support, mentoring, training and education, and are placed in an environment that facilitates their learning and growth.” (F- Employer survey)</i></p> <p><i>“[Universities should] include more business based units within the degrees. Private practice should be a compulsory unit” (F- Employer survey)</i></p>	<p><i>“I’d usually meet with [senior colleagues] once every couple of weeks...It was a free-form mentoring session where I could bring questions or a case.” ( F- Graduate focus group, Fiona)</i></p> <p><i>“[My employer] is very generous with her money towards doing courses. In my first year I probably did about eight different courses... Other people are lucky to get one course paid for.” (F- Graduate focus group, Tracey)</i></p>
<p><i>“It’s important to discuss with employers and encourage the students to engage a lot of continuing education in the first couple of years...some employers encourage that by offering to pay for one course a year.” (F- Academic faculty focus group, Evelyn)</i></p>		
<b>GRADUATE ATTRIBUTES AND SKILLS</b>		
<p><i>“The ones that do well have a personality that includes a confidence level and ability to chat to the client. It’s that whole service side of industry.” (F- Academic faculty focus group, Quentin)</i></p>	<p><i>“The most important thing is a personality of openness to learning both on a technical and personal level. And the ability to connect with clients.” (F- Employer survey)</i></p>	<p><i>“New graduates need to be extremely self-motivated and resourceful if they wish to up-skill to the point of being able to be an effective private practice physio.” (F- Graduate survey)</i></p>
<p><i>“It varies very much on the confidence and emotional intelligence of the new grad as much as their skills. You can teach skills but you can’t teach a personality.” (B- Academic survey)</i></p>	<p><i>“I think the personality’s such a big thing. You don’t have to be an amazing physio to make progress with patients. Often I think the rapport is what often gets people</i></p>	<p><i>“I think you need to back yourself. You can call it confidence, call it autonomy, trusting in what you know and knowing that whilst you won’t have it all, I guess knowing how to find more knowledge, how to develop yourself.” (F- Graduate focus</i></p>

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*better.” (F- Employer focus group, group, Xavier)  
Sonia)*

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<sup>a</sup>All participant names are pseudonyms. Abbreviations: B = Barriers; F = Facilitators.

Figure Captions

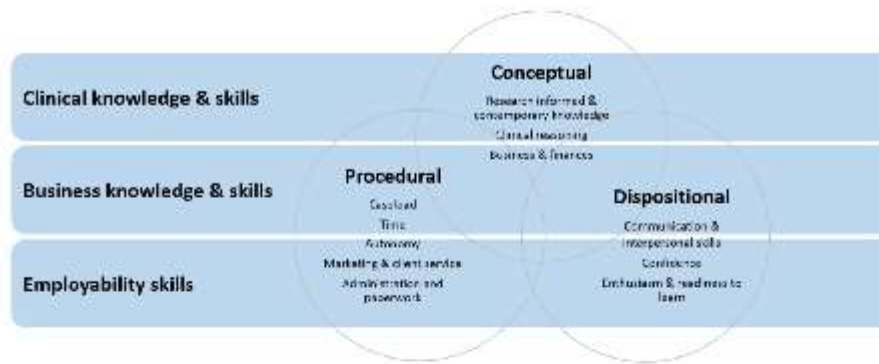


Figure: Forms of knowledge for work readiness in physical therapy using Billet’s conceptual framework of workplace learning. <sup>3</sup>