

# Employers' perspectives of competencies and attributes of physiotherapy graduates: an exploratory qualitative study

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## ABSTRACT

Undergraduate physiotherapy programmes aim to equip graduates with basic skills, knowledge and behaviours to allow them to enter the profession. The aim of this study was to explore employers' perceptions of key factors in work place preparedness of novice physiotherapists. Four employers of recent graduates participated in a focus group interview. The analysis resulted in three themes: professionalism, perspective and confidence. Professionalism related to the importance of generic skills and attitudes, including enthusiasm, work-ethics, flexibility, empathy and energy. Employers assumed a level of competence in novice physiotherapists as all had met the professional registration criteria. Perspective related to the employers' perceptions that the graduates had difficulties changing from a focus on their personal and professional needs to an external focus, such as on the needs of patients, colleagues and the workplace. Confidence was seen to be low in new entrants with regard to how they saw the profession and their own skills and knowledge. These results highlight the importance of facilitating these generic skills in the undergraduate programmes to improve the work place preparedness of new physiotherapy graduates. However, time and experience in work will still be needed by graduates to gain broader perspectives and confidence, and situated mentorship could facilitate the required professional formation.

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## INTRODUCTION

The primary aim of any professional academic curricula is to prepare students for the demands of their occupation following graduation. The undergraduate programmes at Physiotherapy Schools within New Zealand are audited by the Physiotherapy Board of New Zealand on an annual basis to ensure that the defined competencies and requirements for registration of graduates are met for subsequent employment (Physiotherapy Board of New Zealand 2009). The adoption of such standards enables physiotherapy graduates to practice as autonomous practitioners, applying knowledge and skills within various workplace settings (Physiotherapy Board of New Zealand 2009).

The World Confederation of Physical Therapy (2007) has developed international standards in order to ensure a high quality service to society. These standards are expected to be adhered to by all physiotherapists, whether they are specialists or newly qualified, and include aspects of "administration and practice management, communication, community responsibility, cultural competence, documentation, education, ethical behavior, informed consent, legal, patient/client management, personal/professional development, quality assurance, research and support personnel" (World Confederation of Physical Therapists, 2007, p 1).

It is recognised that new graduates need a range of generic skills and knowledge, including interpersonal skills and the ability to work as an interdependent team member, in addition to technical generic and discipline-specific competencies (Higgs 1999). Thus, undergraduate programmes include theoretical and occupation-specific skills, as well as a number of interpersonal and generic skills such as communication, decision making and critical thinking in order to prepare new graduates to enter the workforce (University of Otago 2005). These more generic graduate attributes have been described in many other professional fields (Zaharim et al 2009, Zehrer and Mössenlechner 2009) and identified by employers as being key factors in the employability of new graduates (Zaharim et al 2009, Zehrer and Mössenlechner 2009).

Previous studies investigating physiotherapy curricula have evaluated the effects on learning styles (Kell and van Deursen 2002, Kelly 2007, Van Langenberghe 1988) and academic beliefs (Kell and van Deursen 2002, Kelly 2007). While the effectiveness of medical curricula to prepare students for clinical practice has received attention (Bleakley and Brennan 2011), the literature on the effectiveness of physiotherapy curricula

for the preparation of workforce requirements is scarce. To the authors' knowledge no research has investigated the employers' perspectives of preparedness of new physiotherapy graduates for practice.

Approximately 120 students graduate as physiotherapists from the University of Otago each year. Feedback from employers is important to determine whether these graduates meet the demands of the work place, and also to provide information for the students relating to future employers' expectations. This information could also be relevant for the employers to reflect on their own values when employing recent graduates. The aim of this study was, thus, to gain an understanding of employers' perspectives of workplace preparedness of recent physiotherapy graduates from the University of Otago.

## Background

The Bachelor programme of Physiotherapy (BPhy) at the University of Otago is a four year education. The first year focuses on Health Science, and Years 2 and 3 are predominantly physiotherapy-based with components of clinical practice. The fourth and final year of the programme focuses on clinical practice, consisting of four 6-week placements in Musculoskeletal physiotherapy, Neurorehabilitation, Cardiopulmonary rehabilitation/tertiary care, and community/primary care. The former three placements are assessed by a clinical supervisor throughout the period, in addition to a final clinical examination at the end of each of these placements. Students are required to complete a written assignment for the community placement. On graduation students enter the New Zealand workforce. According to statistics from the Ministry of Health, 54% of active physiotherapists work in private practice and 28% work for the District Health Board (DHB) within New Zealand (Ministry of Health 2010).

## METHODS

### Design

A focus group interview with employers of recent Otago graduates was undertaken as it generates debate, and has been shown to be an effective way of understanding perceptions, interpretations and beliefs of group members (Liamputtong 2009). Focus groups normally consist of 6-8 people from similar professional backgrounds and have similar experiences. The purpose of a focus group is to discuss a specific issue with the help of a moderator and draw on group interaction to create new thinking and knowledge (Morgan 1997, Krueger and Casey 2009).

### Procedures

The methods of this study were reviewed and approved by the University of Otago Human Ethics Committee. Thirteen recent graduates (1-year post-graduation) of the School of Physiotherapy at the University of Otago, who formed part of a cohort from a larger study evaluating the School curriculum, forwarded contact details of their employers. For the purposes of this study all employers were required to have employed a graduate from the BPhy programme at the School of Physiotherapy at the University of Otago within the last five years. Information regarding this study and invitations to participate were sent to twelve employers who had previously agreed to take part in a larger study investigating

the effectiveness of the programme for clinical practice. Four of these employers were available and agreed to participate in the focus group (3 female, 1 male) and signed a consent form prior to entering the study. Two of the four participants worked at a DHB, one at a university teaching clinic and one in private practice. Three were from the South Island and one from the North Island. The range of years in professional experience ranged from 10 to more than 30 years.

The focus group was conducted at the School of Physiotherapy in Dunedin. Three participants joined the group in person and one by teleconference. Four researchers were present, two of whom (JH, JJ) were undergraduate physiotherapy students from the University of Umeå, Sweden. They attended as observers and were subsequently involved with the analysis of the interview. They did not participate in the interview and the interviewees were informed of the purpose of their presence.

Six questions provided a catalyst for exploratory discussions:

1. What are some of the qualities and skills that define for you a competent new graduate physiotherapist?
2. What are the qualities and skills that you expect when employing new graduate physiotherapists?
3. What are some of the key strengths that you have experienced with our new graduates?
4. What are some of the key weaknesses that you have experienced with our new graduates?
5. Do you consider that the new graduate students whom you have employed have been adequately prepared for clinical work?
6. Can you tell us some of the key ways in which you have had to support new graduates in developing competencies as a physiotherapist?

The discussion lasted one hour, was audio-recorded and transcribed verbatim.

### Analysis

On completion of the interview, the leader of the focus group (PH) and two other attendees of the interview (JJ and JH) met to discuss the key points and emerging themes. The audio-recordings were then transcribed and the three researchers (JJ, JH and PH) independently coded the data by reading all the transcripts and field notes many times to note key words expressed by the participants and giving names to themes in the data (Liamputtong 2009). Initial themes were developed independently by three researchers (PH, JJ, JH). Multiple coding was used as described by Johnson and Waterfield (2004). Each researcher independently analysed and developed individual codes and themes that were then compared through regular meetings whereby quotes were chosen to appropriately represent and explain the evolving themes. Once consensus across the themes was reached, a peer-review of the themes was undertaken (GS) to test the credibility of the findings. Further to this, the themes were sent to an experienced qualitative interviewer (TH) for further review and feedback was then incorporated into the thematic analyses. This process ensured the rigour of the results and reduced bias from the researchers' personal interests (Burnard et al 2008, Johnson and Waterfield 2004). The reviewed themes were then sent to the interviewees for member-checking, and three replies were

received signaling agreement. This technique further ensured credibility by re-confirming the interpretation of the focus-group discussion (Johnson and Waterfield 2004, Liamputtong 2009).

## RESULTS

Three main themes emerged from the analysis; professionalism, perspective and confidence.

### Professionalism

The interviewees generally perceived graduates of the University of Otago to be competent clinicians with the required level of skills for the workplace. As the graduates were registered by the Physiotherapy Board of NZ, the employers expected them to hold sound basic competencies.

*"[...] so what you expect is that they're [the graduates] competent because they're registered [...]"* (Participant D)

The employers valued non-clinical, personal attributes such as enthusiasm for the profession, good communication skills, empathy and energy as important skills for employment. These professional attributes were seen as not necessarily linked to clinical knowledge and skills.

*"[...] yes you're right, the clinical skills for the grounding and that's what you need but then probably the things that we look for and that stands out as everything we've said, it's those non-clinical [skills] [...]"* (Participant D)

Clinical expertise was not expected of recent graduates by the employers. They indicated that they could teach the graduates the additional basic skills required for their specific workplaces if they (the graduates) possessed the earlier mentioned personal attributes.

*"I'm looking for enthusiasm and I'm not looking for expertise, I'm looking for enthusiasm, energy, empathy and an understanding of ethics and given anyone with those in the clinical, we can teach them the basic skills if they've got the science background and our interview is all about interpersonal factors and their ability to get on in a multidisciplinary team."* (Participant B)

### Perspective

The employers valued graduates who understood and appreciated that they were part of a bigger picture, had an understanding of their responsibilities within the workforce, the community and the wider health context. In such a way they felt that graduates needed to shift focus in order to provide a good service to the patient, employer, and the workplace organisation.

*"it's all about me [the graduates] and my needs and my learning and developing to the place, actually I'm a paid employee, to me it's about providing a good service to my patients, to my employer or the organization I work for."* (Participant C)

The employers perceived that recent graduates often had difficulty realising that the focus was no longer on them. The students need to understand the environment they are going to work in.

*"I think around education, it's making sure that they understand they do have a role in this [the wider context of*

*healthcare], so that they come out with an understanding of the environment that they're coming into so they need to understand what their role is and advocating for physio as a profession, and a knowledge of the current kind of political and health policy climate."* (Participant D)

### Confidence

The employers perceived that graduates had concerns of confidence in themselves, in the profession and in the skills and knowledge they possess. Although the graduates were considered competent by the employers; there appeared to be a conflict between their level of skill and their level of confidence in the profession.

*"To me the key thing in a new graduate is confidence in the profession that they'd chosen to be a part of and I see at the moment, there's a huge imbalance between competence and confidence with them being low in confidence in the profession."* (Participant B)

Further, the employers suggested that low confidence may be due to a lack of previous work experience or other qualifications. It is thought that this lack of experience can contribute towards difficulty in making decisions within reasonable time when assessing patients, with less time available for offering treatment or advice.

*"[...] and I have noticed some of the staff who have had a previous job or a previous degree such as PE prior to coming in often have more confidence in themselves so potentially are willing to reach those conclusions earlier [...]"* (Participant C)

## DISCUSSION

This is the first study, to our knowledge, investigating employers' perceptions of the competencies and key attributes in recent physiotherapy graduates from the University of Otago in New Zealand. Importantly, the employers reported that graduates were meeting their expectations regarding practical clinical skills required for their respective work places. They were confident that the curriculum provided the graduates with the skills to work as physiotherapists, although expertise was not initially expected or required. The important themes that emerged were not related to clinical skills and knowledge, rather to issues of professionalism and professional behaviour, graduates' confidence in themselves and the profession, and their focus and perspective. These key issues were perceived by the interviewees to be important for integrating successfully into the work place as a competent physiotherapist.

The theme of professionalism included a range of non-clinical skills, rather than a focus on clinical skills and knowledge. The employers reported attributes such as enthusiasm, work-ethic, flexibility, empathy and energy to be important to them when deciding on the employment of a new physiotherapist. In a study by Lopopolo et al (2004) 34 physiotherapy managers ranked communication and professional involvement as one of the most important skills for physiotherapists when entering their first employment. Interestingly, a similar range of graduate qualities was identified for employment in the fields of tourism and engineering (Zaharim et al 2009, Zehrer and Mössenlechner 2009) demonstrating that these attributes are perhaps generic and transferrable into other non-related fields. Employers felt that these generic personal skills were

more relevant when making decisions on employment selection than the actual level of clinical skills and competencies attained by the graduates. These perceptions support findings from a previous qualitative study by Ajjawi and Higgs (2008), exploring how experienced physiotherapists learned to reason in clinical practice. These authors described interpersonal skills, including communication, collaboration and critical self-evaluation, as important skills and attributes to be included in the curricula of the undergraduate physiotherapy programme to better prepare students for employment (Ajjawi and Higgs, 2008). Jones et al (2010) explored the preparedness of final year physiotherapy students for their progression into employment, also mentioned the importance of focussing on these skills in under-graduate education to meet the employer expectations. Those authors highlighted that the analysis and assimilation of these skills cannot be assumed (Jones et al 2010).

Issues of confidence were identified within three areas: within the profession, the physiotherapists themselves and in their skills and knowledge. Although the employers suggested that new graduates were clinically competent, they felt that a number of them lacked confidence in the workplace. Kidd et al (2011) reported that student confidence had its foundation in theoretical knowledge and skills, and was important for professional development (Hecimovich and Volet 2010, Lindquist 2004). These results suggest that graduates may lack awareness in their clinical competence and knowledge. Black et al (2010) explored novice physiotherapists' experiences, learning and development in their first year of clinical practice and found the novice physiotherapists' lack of self-awareness in their abilities and competence was associated with lower self-confidence. Thus, these findings suggest that confidence does not necessarily reflect the level of competence, rather that such confidence issues may be linked to a lack of self-awareness.

Black et al (2010) also found that novice physiotherapists were likely to have increased confidence after positive interactions with patients and other professionals. Thus, peer support, mentoring and positive re-enforcement are likely to be key factors in developing self-awareness and confidence in new graduates. In some of the workplaces represented by the focus group members, mentoring programmes were used to contribute towards a smoother transition into work life and the profession. Wainwright et al (2011) describes the importance of mentorship for developing decision making skills as a cornerstone of effective patient care because mentors facilitate attributes such as effective communication, commitment to learning, and confidence. Similarly studies of novice nurses showed that six months to one year of work in the clinical environment increased both professional behaviours and confidence (Black et al 2010, Clark and Holmes 2007). This emphasizes the importance of time and clinical experience to strengthen confidence. It also suggests that whilst generic attributes can be developed within an undergraduate programme, they require further development and facilitation on employment.

New graduates were also perceived to have an introspective focus, focusing on their own needs as the employee, with a consequent lack of knowledge and perspective of their role as an employee within the wider health care system. Black et al (2010) reported from a longitudinal analysis of novice

physiotherapists over a year that their focus shifted from thinking about self as a practitioner to being more patient-centred. Time and experience were seen as key drivers for this. Considering these findings, it is perhaps not surprising that the employers found that students were often thinking about their needs and so they valued those who were able to look at the broader perspective and their role as an employee. Although the final year of study of the undergraduate programme is spent working in clinical environments, it is concerned with student assessments and strategies to ensure that the competencies for the placement are met. It may not adequately prepare students for the requirements of a new employer. A shift in perspective may be seen as a natural progression when entering employment and working as a physiotherapist (Black et al 2010). However, the present study shows that the University and working community may need to collaborate in order to gain an understanding of how graduates meet expectations and provide high quality physiotherapists.

The findings from this study are confined to students who graduated from the University of Otago in New Zealand and cannot necessarily be transferred into other contexts. However, it is probable that similar findings would be expected in countries with similar education systems and work environments to that of New Zealand. Additionally, further research is required to look at competencies of new graduates in other countries with different physiotherapy education programmes and work environments, particularly with the possible advent of graduate entry, masters and doctoral level physiotherapy programmes. This study only examined the competencies of the new graduates from the employers' perspective and it would also be interesting to look at the integration into the workforce from the new graduate perspective.

The rigour and trustworthiness of the focus group data was ensured by multiple coding, peer reviewing and member checking (Burnard et al 2008, Johnson and Waterfield 2004, Liamputtong 2009, Ryan and Bernard 2003). Although this exploratory study was limited to a small focus group, it included employers from several locations in New Zealand as well as variety of physiotherapy workplaces and settings.

The development of generic skills and knowledge is recognised as an important function of higher education (University of Otago Learning Plan 2008-2010). It is expected that many of these qualities will evolve and develop with maturity and as part of undertaking higher education (Barrie 2007). Our findings emphasise the importance of the development of such qualities in the training and assessment of physiotherapy students. It is also likely that requirements for employment may be modified with changes in the demographics of the population and the health care system. Thus, it is important for educators to maintain a dialogue with the community and employment stakeholders to continually ensure that new graduates meet the expectations and needs of the work place.

## CONCLUSION

The findings of this study indicate that generic skills and attitudes such as enthusiasm, empathy, energy and a strong work ethic were used by employers in their selection of suitable candidates, rather than competence of clinical skills and knowledge. The focus group suggested that recent graduates needed to shift their focus from themselves to



focusing on others, such as patients, colleagues and employers. The University may need to facilitate these generic skills and attitudes alongside the profession-specific clinical skills. To help graduates moving from novice to more experienced clinicians, mentoring programmes may be an effective way to enhance the required professional development in the early years of autonomous clinical practice.

### KEY POINTS

- The physiotherapy graduates of the University of Otago were assumed to be competent by employers who took part in the focus group.
- Well-developed generic skills and attitudes were the factors that differentiated one graduate from another for employment suitability.
- Offering mentorship to the newly graduated physiotherapist in the workplace may contribute to the development of the required levels of professionalism.

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