Clinical supervisors' perceptions of podiatry students' preparedness for clinical placement and graduates' preparedness for podiatry practice in Australia: An exploratory study

K. Reynolds & M. McLean

Abstract

Introduction: Little is known about Australian podiatry students' preparedness for clinical placement and graduates' preparedness for clinical practice. This qualitative study explored clinical supervisors' perceptions of podiatry students' and graduates' preparedness-related challenges and their recommendations for improvement.

Methods: Eleven registered podiatrists who had supervised or were still supervising students were interviewed. Transcribed interviews were thematically analysed. Benner's (1984) stages of clinical competence from novice to expert informed the study.

Results: Clinical supervisors were divided about students' preparedness for clinical placements, with their perceptions ranging from generally prepared (n = 2) to unsure (n = 5) to unprepared (n = 4). They commented on junior versus senior students, institutional differences and specific clinical skill deficiencies, e.g., scalpel debridement and patient communication skills. Perceived challenges for students on placement included poorly developed clinical skills and low self-efficacy, both stemming primarily from insufficient hands-on experience. Participants suggested that for improved placement preparedness, students required better quality clinical experiences and communication skills training. Being work-ready, which most graduating Australian podiatrists were reported to be, involved being safe and self-efficacious. Participants also suggested that a supportive clinical environment, an internship and more advanced interpersonal skills would facilitate preparedness.

Faculty of Health Sciences & Medicine, Bond University, Australia

Correspondence
Katrina Reynolds
Faculty of Health Sciences & Medicine
Bond University
Level 2, Building 5, 14 University Drive
Robina, Queensland 4226
Australia
Tel: +61 7 5595 5536
Email: katrina.reynolds@student.bond.edu.au

Conclusion: In terms of Benner's (1984) framework, during training, podiatry students should be considered novices, and they should be considered advanced beginners on graduation. An entry-level graduate should not be expected to be competent across all areas of clinical practice. Hands-on clinical practice during placements was needed for moving successfully through Benner's (1984) stages of clinical competence. While clinical supervisors believed that podiatry training generally prepared students for clinical practice immediately following graduation, they asserted that manual clinical and communication skills improvement is required for clinical placements.

Keywords: competence; self-efficacy; practical clinical skills; communication skills

Introduction

Clinical experience during podiatry training, generally through placements, is an integral component of all pre-registration podiatry programs in Australia (ANZPAC, 2015b). Such programs require the completion of either a 3- or 4-year bachelor, graduate-entry masters or doctoral degree before commencing clinical practice as a podiatrist. Since the 1990s, the profession has required graduates to meet podiatry competency standards, which were formalised by ANZPAC in 2009 (ANZPAC, 2009). The required competencies ensure graduates can safely and effectively practise podiatry in the community (ANZPAC, 2015b). Clinical placements, comprising 1,000 hours minimum (ANZPAC, 2015a), provide students with real-world experience to complement on-campus tuition (Gilbert & Brown, 2015) to develop competencies such as professional and ethical behaviour, communication skills and patient assessment, diagnosis and management. At various stages during their pre-registration studies, students are assigned to diverse clinical practice contexts (ANZPAC, 2009), in both university clinics and various external clinical settings. During these placements, they are supervised by registered podiatrists (ANZPAC, 2015b), who are generally referred to as "clinical supervisors". Clinical supervisors are expected to support and assess students' developing competencies while modelling good practice (Attrill et al., 2016). Clinical supervisors are, thus, responsible for facilitating students' acquisition of profession-specific skills (Chipchase et al., 2012) as well as assisting them to apply their theoretical knowledge to patients and hone their professional clinical skills (Attrill et al., 2016). Preparedness for professional podiatry practice, thus, relies on applying theoretical knowledge and gaining hands-on practical experience while on placement (Curran et al., 2006). In this context, clinical supervisors must be skilled practitioners as well as educators (Higgs & McAllister, 2007) and must provide a learning environment conducive to developing professional, practical and communication skills (T. Brown et al., 2013).

Anecdotally, concern has been raised in the podiatry profession that graduates may not be adequately prepared and competent to begin independent (including solo) clinical practice. Podiatry is not alone in this regard, with employers of medical and other allied health graduates suggesting that many graduates are not work-ready, i.e., at a level of

competence that can be reasonably expected of newly registered health professionals (R. Brown & Crookes, 2016; Jones et al., 2015). To this end, McAllister and Nagarajan (2015) reported that new allied health graduates from a range of disciplines lack communication and interpersonal skills, problem-solving abilities and an understanding of business practice. However, little is known about podiatry graduates' preparedness for clinical practice. Unlike their medical counterparts, who undergo 1 or 2 years of internship post-graduation, podiatry graduates are required to work as podiatrists without supervision following graduation. Therefore, it is important that in the required 1,000 hours of clinical placement (ANZPAC, 2015a), under supervision, podiatry students learn to apply their theoretical knowledge and skills training to care for patients. This study, thus, set out to explore clinical supervisors' perceptions of (1) the preparedness of podiatry students for clinical placements, (2) the preparedness of graduates for clinical practice and (3) the perceived challenges for student clinical placement preparation and related recommendations for clinical placement and graduate practice.

Theoretical framework

Benner's (1984) concept of competence used in nursing informed this study, as it can be applied to skill acquisition in podiatry (Lima et al., 2014). Benner's concept of competence is based on the Dreyfus model of skill acquisition, in which, during training and clinical practice, an individual passes through five developmental levels of skill acquisition from novice through advanced beginner, competent, proficient and, finally, to expert after several years in practice. In nursing, whilst graduates are considered to be equipped with the foundational knowledge and skills for registration (Woods et al., 2015), the novice stage is often representative of nursing students still studying at university (McHugh & Lake, 2010), with progression to advanced beginner by graduation (Burns & Poster, 2008). This conceptualisation is, however, in conflict with being competent (third on Benner's proposed continuum), which is linked with the ability to practise safely and often independently in the clinical setting (Burns & Poster, 2008; Woods et al., 2015). Being competent and safe is an expectation of podiatry students at graduation (ANZPAC, 2015a). In nursing, despite the requirement for at least 800 placement hours (Australian Nursing & Midwifery Council, 2009), competency is often demonstrated post-graduation, after 2 or 3 years in the same job or situation (Lima et al., 2014). Hence, much like Brown and Crookes' (2016) research, this study endeavours to illuminate the perceived capability that can reasonably be expected of a newly graduated podiatrist in line with Benner's stages of professional development.

Methods

As this was an exploratory study, it lent itself to a qualitative approach using semi-structured interviews (Doody & Noonan, 2013). The study was influenced by an interpretive research paradigm in which the ontological assumption was that there are multiple socially-constructed realities, and that whilst the nature of knowledge regarding

podiatry students' preparedness for practice is subjective (as it is based on individual clinical supervisors' experiences), such experiences can be valuable (Irwig, 2007). Many variables contribute to perceptions of and actual preparedness in the clinical domain, including the attributes of the student and the clinical supervisor, types of patients and resources at each placement site, aspects of curriculum (e.g., learning objectives) and the learning environment (e.g., type of health setting) (Darcy Associates Consulting Services, 2009). Notwithstanding, there is an expectancy from the podiatry profession that despite varied clinical learning experiences, all students will graduate with a common set of professional attributes, knowledge and skills (Darcy Associates Consulting Services, 2009) to meet the minimum practice requirements in terms of being competent and safe practitioners.

Participants

Following ethical approval, several advertisements were placed with the Australasian Podiatry Council between October 2015 and May 2016 to purposively recruit podiatrists who were currently or who had been clinical supervisors of pre-registration podiatry students in Australia. For the purpose of this study, a clinical supervisor is defined as a registered podiatrist with supervisory responsibilities for pre-registration podiatry students in the clinical environment. The clinical environment included all possible scenarios, ranging from public and private practice to the community healthcare service and university clinics. Although 17 Australian-registered podiatrists were recruited, only 11 were interviewed. Six did not participate because of competing commitments or changed circumstances.

Semi-structured interviews

Prior to conducting the semi-structured interviews, an interview guide comprising closed- and open-ended questions was developed and piloted with one clinical supervisor, who was excluded as a participant. Minor refinements were based on the clinical supervisor's feedback (Yeong et al., 2018). This pilot testing ensured that the questions were unambiguous and would elicit clear responses. The final set of questions are shown in the appendix. This interview framework ensured that all participants were asked the same questions (Jamshed, 2014) but allowed for flexibility (Dearnley, 2005) to explore issues raised by individual participants and/or the interviewer (Adams & Cox, 2008). Published ANZPAC podiatry competency standards (ANZPAC, 2015b) were incorporated as prompts to check coverage of the required graduate competencies. Participants were free to ask questions or to decline to answer any questions. Telephonic interviews, conducted by the primary investigator at each participant's convenience, were recorded. Notes were taken during the interview, and most interviews lasted 35–45 minutes. The interviews were professionally transcribed and checked against the original audio files. Participants understood that they could withdraw at any stage of the study without consequence.

Data analysis

Braun and Clarke's (2006) six-phase approach for thematic analysis was selected for this qualitative exploratory study. Transcripts were read and reread, and the associated audio files were listened to several times (Taylor-Powell & Renner, 2003). Both researchers applied a constant moving back and forward approach between the data set (Braun & Clarke, 2006). Due to a lack of research in this area, both researchers used deductive and inductive analysis (Clarke & Braun, 2017). As a registered podiatrist and a clinical supervisor, the primary investigator was aware of potential bias. To provide impartial analysis, an ongoing reflexive dialogue involving consciously stepping back to reflect on what was being said (Attia & Edge, 2017) was used to make meaning and allow for accurate representation of underlying contexts (Braun & Clarke, 2006; Corlett, 2013). The second researcher (PhD supervisor) was an experienced medical educator with no prior experience with podiatry education. Collectively, coding categories were identified by manually highlighting phrases and repetition of key words within the text data. Codes were then sorted into potential themes based on repeated identification across the transcripts. Consensus regarding themes and sub-themes was reached following discussion. Member checking was not undertaken as it was recognised that new experiences could potentially influence the analysis (Creswell, 2013).

This study was approved by the Bond University Human Research Ethics Committee #15226. Each participant gave written informed consent to participate prior to entering the study.

Findings

Participant demographics

Table 1 summarises the demographic data of the 11 clinical supervisors (6 females, 5 males) interviewed. All but one (from New Zealand) had graduated in Australia. At the time of the interviews, seven were currently supervising podiatry students, two had last supervised a year earlier and two were no longer supervising. Their supervision took place or had taken place in external clinics in various Australian states and primarily involved undergraduate, rather than graduate-entry, students in Australian podiatry training programs. On average, they had been supervising 8.6 years (range: 1–18 years).

Student preparedness for clinical placements

Only two clinical supervisors believed podiatry students were prepared for their clinical placements, with five being unsure and four definite that students were not prepared. Lack of preparedness was related largely to their level of study, with final-year students being more prepared (Table 2). Institutional differences were identified, as were clinical skill deficiencies, such as not being comfortable with patients or being unable to perform certain procedures:

I think, in general, they're not as prepared … I don't think we expect really high levels of practice skill initially, but they should at least have the basic things. (P1M)

I'd say they vary in their stage of preparedness. The students we get toward the end of their study will be more prepared than the ones we see at the beginning of their third or fourth year. (P10F)

Table 1

Summary of Clinical Supervisors' Demographics, Qualifications and Supervisory Experience

Participant (ID)	Age	Year Graduated as Podiatrist	Additional Qualifications	Years of Clinical Supervision	Year Level of Supervision
1 (P1M)	40	2006	Master of Health Sciences (Podiatry)	9	4
2 (P2M)	29	2008		3	4
3 (P3F)	41	1995	Master of Health Sciences (Health Information Management); PhD	17	4
4 (P4M)	40	1996		8	2, 3, 4
5 (P5F)	29	2009	Graduate Certificate in Diabetes	1.5	3
6 (P6M)	37	2008		1	3, 4
7 (P7M)	42	1997		18	2, 3, 4
8 (P8F)	52	1984		15	3, 4
9 (P9F)	57	1980		10	4
10 (P10F)	44	1992	Master of Health Leadership & Management	6	3, 4
11 (P11F)	29	2008	Master of Health Leadership & Management	6	4
	40.5 ± 7.8			8.6 ± 2.12	

Note: ID = identification; M = male; F = female

Table 2

Perceived Reasons for Variability in Podiatry Students' Preparedness (or Lack Thereof) for Clinical Placement.

Themes	Additional Quotations
Year of study	*They are prepared to practise still as a student, under supervision.* (P2M)
	It all depends on what year as well. I guess for me, what I would expect from a second year is very different to what I'd expect of a fourth year, so I guess knowledge in relation to where they are in their learning. (P3F)
	It varies so much in that the students I supervise [from the one institution], they're all just … at really differing levels. (P5F)
	Not very prepared. Most of the ones I have in the uni clinic are second-year students, but I have third- and fourth-year students. … I had a couple that were quite close to finishing, and they weren't very prepared. (P7M)
Institutional differences	*I think it actually varies from different educational institutions. … I'd actually like to think that they're quite well prepared.* (P4M)
	It really does vary. I've found it quite amazing how much it changes from university to university. (P8F)
	I would say it depends on what university they've come from … depending on where they've studied. I would say a lot of students that we get, compared to say 5 years ago, have issues with basic podiatry skills … such as using a scalpel. (P11F)
Specific deficiencies (e.g., not comfortable with patient, particular procedures)	*Mine are predominantly observational for them. From what I have seen, … they appear to be particularly good with biomechanics. … I think from the surgical and ingrown toenail point of view, maybe not quite as prepared as what maybe I think they probably need.* (P6M)
	Extremely unprepared. The students are only prepared to present to clinicians. They don't understand that they actually need to present to the client, so everything is based on trying to get a sign-off [on their logbook] from a clinician. (P9F)

Perceived challenges for students on clinical placement

Clinical supervisors identified two areas of deficiency related to preparedness for clinical placements: clinical skills and low self-efficacy (Table 3).

Poorly developed clinical skills

Deficiencies in clinical and/or practical skills (at final-year level) were generally related to the management of common skin and nail conditions affecting the foot:

> *I actually find that their actual competency with the nuts and bolts work, like ingrown toenails and wart removal, ... seems to be lacking across the board. ... The thing they are going to do most, for instance, like a corn or callous, is probably the thing they are least competent in.* (P6M)

Table 3

Perceived Challenges for Students on Clinical Placement

Themes	Reasons	Additional Quotations
Poorly developed clinical skills	Insufficient clinical exposure time	*It appears they have limited contact with patients.* (P11F)
		In my opinion, they haven't had enough exposure to real-world clinical scenarios. (P7M)
	Private versus public sector	*With the private sector, often the podiatrists won't let the students do hands-on, … which gives them limited experience.* (P4M)
	Manual dexterity difficulties	*I think they are mostly lacking in practical skills. A lot of students have issues with basic podiatry skills, … such as using a scalpel, GT (general treatment) skills.* (P11F)
	Lack of training in communication skills	*I think what I notice most of all is a lack of communication skills. The communication skills with the patient, discussing the case, discussing the treatment options [are] poor.* (P8F)
Low self-efficacy	Low self-esteem	*There are some that are so ready and so keen, and there are others that really doubt themselves. They are the ones that seem really not ready.* (P5F)
	Lack of confidence	*They know the medical [theoretical] side of the profession, but to apply it to the patient they lack confidence. I've particularly found there is a lack of confidence in diagnosing.* (P8F)
	Role uncertainty	*Liaison with the staffing team, … this is something that comes with experience, but sometimes they don't take up the advantage of working with other people on the team.* (P8F)
	Poor time management (poor self-regulation)	*Time management is extremely poor because they have not been exposed to much private practice.* (P9F)

In terms of the communication skills that required development in the clinical setting, clinical supervisors identified listening skills, engaging in respectful communication and establishing rapport with patients as issues:

> *They tend to talk down to people a little bit. ... They don't engage.* (P1M)

The main reason for deficient clinical skills was primarily attributed to insufficient patient contact, despite the professional body's mandated placement hours. An interesting point raised by clinical supervisors was the difference between placements in the public and private sectors. To this end, their lack of "hands-on" experience was, in part, attributed to Medicare and private health insurance-related restrictions and not being able to provide rebatable services, resulting in students being allowed to be observers only in private practice. This leads to variable clinical experience:

> *They [the students] definitely want to treat patients in private practice. It's virtually impossible to do anything meaningful [in private practice], so I think that's fairly clearly the biggest challenge.* (P7M)

In contrast with:

> *A lot of students aren't getting the hospital setting where they can actually treat patients.* (P11F)

Low self-efficacy

Low self-efficacy—manifested as low self-esteem, lack of confidence and self-doubt—made students appear unprepared for "going off and working on their own" (P2M) in the clinical setting. For some students, their lack of confidence in clinical skill application, formulation of a diagnosis and planning and/or prioritising patient care was perceptible despite their theoretical knowledge:

> *Their ability to direct and guide clients as to how to address their needs is not apparent. … They're not confident to determine a review time for somebody to return.* (P9F)

This perceived lack of confidence was also related to role ambiguity for some students and seemingly impacted their engagement at the team level:

> *It's not at the top of the list, but a lot of them don't seem to know how to fit into the workplace. I think there is a bit of uncertainty as to what their role is in the clinic.* (P7M)

Low self-efficacy also impacted students' self-regulation. Organisational skills, such as time management on placement and not knowing what to prioritise, were seen as poor. This was often attributed to students being overwhelmed. Some clinical supervisors linked this to students' lack of exposure to authentic settings, which resulted in their expectations not reflecting the real world of clinical practice:

> *Time management is always difficult because universities [in their internal clinics] will give you an hour and a half to two hours to treat a patient and that can be for general care. … In private practice, you are looking at 30 minutes.* (P1M)

Perceptions of preparedness for clinical practice as registered podiatrists

In terms of clinical supervisors' perceptions of what it means to be "prepared for clinical practice", the overarching theme was one of *work-readiness*, with two themes—*safe* and *self-efficacious*—associated with this theme. Being "safe" was acknowledged as necessary in the use of one's skills related to professional knowledge and clinical decision-making, when performing clinical and/or practical dexterities and for effective communication with the patient and other members of the healthcare team. Being "self-efficacious" involved being able to work independently and with confidence (Table 4).

Table 4

Clinical Supervisors' Perceptions of the Term "Prepared for Clinical Practice", i.e., Being Work-Ready.

Theme	Sub-Theme	Associated Quotations
Safe	Sound theoretical knowledge (with critical thinking ability)	*They should have not only developed their clinical reasoning and have a good understanding of the theory, because they're not really going to get much theory afterwards.* (P1M)
		Be able to take a good history and be able to sort through that history to guide what assessments are relevant … and implement an evidence-based treatment plan. (P3F)
		I guess when I hear that sort of sentence, I think in terms of transferring … knowledge that they've learnt in the classroom into real life. (P5F)
	Performing clinical and/or practical skills	*Being competent in the clinical requirements … so that they can practise at a safe level.* (P6M)
		To be able to trust the public with them and to be able to trust especially their clinical skills are safe and their diagnostic skills are adequate. I am looking at it from a more practical application point of view. (P8F)
		For me that means work ready I suppose. When I think of the term clinical, … I am thinking of work ready. Ready to graduate and go and work straight away and be prepared for the clinical component of the job. (P10F)
	Effective communication skills	*Being prepared … is about having … basic communication skills.* (P3F)
		I guess that professionalism, in terms of the ability to communicate with other members of the team and also the patient, that is really important. (P11F)
Being self-efficacious	Independent	*To be able to operate as an independent practitioner.* (P7M)
		I would expect that they could walk into a treatment room and manage a consultation independently. (P9F)
	Confident	*To be able to confidently deal with clinical practice.* (P2M)
		I guess when I hear that phrase, I think of … how ready they are to actually do some hands-on work … I guess confidence … willing to give it a go, motivation. (P5F)

Graduates' preparedness for clinical practice

Despite the challenges identified during clinical placement, in the main, clinical supervisors believed that graduates were generally prepared for clinical practice. Perceptions of elements of general preparedness, however, varied, ranging from graduates having a fair understanding of the expected job requirements, e.g., from "I think by the time [they graduate] … they know what to expect. I think they have a fair idea" (P10F) to needing a supportive environment and/or internship or being prepared only for certain clinical settings (the public sector and the internal university clinic) at graduation (Table 5). For one clinical supervisor, their opinion incorporated some of the desired inter- and

intrapersonal skills for the role and the related impact of certain personality traits in practice, asserting that positive self-efficacy skills were an important competency in workplace preparedness and performance:

> *I would say with somebody with the right personality to work in the field, they're probably seven out of ten ready. If somebody hasn't got good people skills, they might only be five out of ten ready.* (P8F)

Table 5

Clinical Supervisors' Perceptions of Graduating Podiatrists' Preparedness (or Lack Thereof) to Practise

Themes	BUT	Additional Quotations
Generally prepared	Need a supportive environment	*The majority would be when they have graduated, ... going into a supportive working environment. I wouldn't say that they are prepared for practice going off and working on their own.* (P2M)
	May not be prepared for the private sector	*I think, I guess again it depends on the educational setting, of the two settings that you've got is public or private. I think they are set up well for the public sector.* (P4M)
	May not cope in, e.g., big hospitals	*I think they are quite ready, but then anecdotally I hear from people that see them on external placements, and they think they're really not ready. That's because I think that they get thrown into a big hospital or something for only a week at a time and that's a really big change for them. I'm probably seeing them at their best because they're comfortable in the internal clinic and they've got a system and all that sort of stuff. From my perspective, they are ready.* (P5F)
	Need supervision	*I'd say about just above halfway but in saying that, when you look at intern doctors, they're only at that level as well. I think, yes, they are generally ready for practice, but my concern is that they don't have anything after that. Particularly if they are going to practise on their own. They effectively will have no supervision from that point onwards for the rest of their career.* (P6M)
Not prepared		*Incredibly unprepared. If I was rating it out of 10, I'd probably give it a one.* (P9F)
		Compared to what it looked like maybe 5, 6 years ago, ... not as prepared. (P11F)
		Less than they were 2 years ago. I don't think they are prepared the way they used to be. I think that they really need a period of heavy supervision after they finish and that's difficult, because you can't employ someone like that. (P1M)
Neutral		*It's mixed bag. ... It's very individual, but it's also around how they're taught, so I couldn't make a generalisation of this.* (P3F)

Recommendations: Improving preparation for clinical placement

Two themes were identified for transitioning to clinical practice: *Improvement in the quality of students' clinical experience* and *better communication skills training.*

Improved clinical experience (quality, not quantity)

Suggestions for improvement included better and earlier clinical contact opportunities for more hands-on clinical work (i.e., not as observers):

> *Definitely more time in clinic … more hands-on practical experience with patients, not in the uni [university] clinic setting, but in the real-world setting.* (P7M)

Scheduling placements earlier in the curriculum, allowing for appropriate alignment between theory and clinical practice, as well as relevance, were recommended:

> *Using the knowledge that they have learnt weeks ago … having that deeper understanding and not just remembering one thing that you've learnt that week.* (P5F)

The recommendation of increased clinical exposure came with the suggestion for explicit clinics to support both general practice learning and some of the specialty areas of practice as a way to improve students' clinical and/or practical skills in these domains:

> *I think that the idea of having a very intense general care student clinic in second year and then doing the more advanced things once you develop that in third and fourth year have been the best way of training people for graduate practice.* (P1M)

> *They have very little hands-on [practice]. … [It would help] if they could actually get some of those patients (namely musculoskeletal and paediatrics) through before they … come to the community health setting so they are slightly familiar with it.* (P2M)

Exposure to experienced clinicians (rather than academics) as clinical mentors was proposed to promote podiatry students' clinical skills while at university. Clinicians' narratives were suggested to provide contextual detail:

> *I had classes where clinicians came in and discussed cases, and they weren't academics. They were just people like me, and they sat around and talked about their day. That's the sort of thing I think there still needs to be a little bit of.* (P8F)

Communication skills training

Concentrated communication skills training was recommended to improve student–patient interactions and to increase confidence in communicating effectively in the workplace:

> *I think the communication side of things is probably the main thing that I would change, … just getting a grasp for what is appropriate small talk to make with a patient and body*

language. The way you greet them in the corridor and the way you offer them to take a seat in the chair. Those really small things that I think come naturally to some people but are so foreign to others. ... Sometimes the verbal part of the consultation is just as important as the practical part. (P5F)

Focus on just giving students time to learn to communicate with patients. To learn how to ask them, you know, just take a basic history. (P11F)

Discussion

Whilst clinical supervisors' perceptions of podiatry students' preparedness for clinical placements were mixed, there was reasonable consensus that graduates were work-ready (i.e., safe and self-efficacious practitioners) if they were provided with support once in practice, as in an internship. Being safe and self-efficacious were identified by the clinical supervisors as key requirements for new graduates to practise clinically. The notion of a "safe" practitioner included the knowledge, skills and attitude needed to be prepared for clinical practice as a podiatrist, i.e., clinical (psychomotor) skills, sound theoretical knowledge, critical thinking capabilities and good communication skills.

Podiatry students' theoretical knowledge was not identified as a challenge during clinical placement, implying that students had acquired or were acquiring this satisfactorily during their university studies. The same did not hold true, however, in terms of the development of basic clinical skills required for placement practice, with Bisholt (2012) purporting that an increased theoretical focus can come at a cost to clinical training.

Variable performance on placement with respect to key occupational skills, such as challenges and deficiencies when undertaking physical examinations and certain procedures (e.g., scalpel debridement of callous, corn removal and toenail cutting) and communication skills with patients, especially at final-year level, were identified by a number of clinical supervisors. Benner's (1984) application of the Dreyfus model posits that in the acquisition and development of a skill, a learner passes through five stages of ability. Such reported deficiencies in clinical and communication skills suggest students match more of the elements of the first two stages (novice and advanced beginner) than those of the third stage (competent). Benner described novices as task-focused, which is demonstrated in our results, with fourth-year students being more concerned about achieving sign-off on outcomes from their supervisor than interacting with the patient. As advanced beginners, students' patient care requires back-up by supervisors to ensure important patient needs do not go unattended (e.g., we found students lacked the manual clinical skill to conservatively manage an ingrown toenail in fourth year) (Benner, 1984).

Based on these findings, there is a conceivable gap between the theory taught and the clinical practice experience of the podiatry student. All clinical supervisors in our study conveyed the need for quality clinical placement experiences, incorporating a

more aligned and earlier clinical curriculum with increased hands-on clinical exposure to allow more opportunities for knowledge application to promote the theory to practice connection. These recommendations also point to the appropriate sequencing of theory and practice in the curriculum to ensure the theory relevant to a particular placement is learnt before a student is exposed to specific clinical conditions (Chipchase et al., 2012). This was believed to be challenging in specialty areas such as paediatric and musculoskeletal podiatry, where in some instances, students deemed to have no experience—therefore novices (Benner, 1984) at fourth-year level—were expected to perform tasks they were unprepared for. Podiatric theory should be learnt in a sequenced curriculum so effective links can be maintained with the clinical experience (Healey & Jenkins, 2000). Focused clinics, such as the ones suggested, would enable students to actively engage with patients (Arndt et al., 2009; Taylor & Hamdy, 2013). Therefore, to ensure the best possible experience for the podiatry student, sequencing, consistency and preparation must be considered when planning clinical placements (Birks et al., 2017; Maginnis et al., 2010). Successful development through Benner's (1984) stages is very much dependent on increasing clinical experience and exposure (Nicol et al., 1996). The proposed use of mentoring by clinical experts to enable students' professional skill growth is also in keeping with Benner's model (Norwood, 2010).

The clinical supervisors observed low self-efficacy in students, evidenced by an apparent lack of confidence and autonomy, and believed this had an impact on students' preparedness for clinical placement. As noted in the context of the nursing profession, self-efficacy is vital to podiatry students' performance and ability to act independently in the clinical setting (Abdal et al., 2015; Al Sebaee et al., 2017). Students who require the clinical supervisor to define situations and to set priorities are recognised to be advanced beginners (Benner, 1984). The advanced beginner is dependent on others, looking for direction and guidance from their supervisor to assist with experience-based comparisons and interpretations (Benner, 2004). In contrast, individuals with a strong sense of self-efficacy will perform tasks, such as patient prioritisation, with a greater degree of confidence (Abdal et al., 2015; Artino, 2012). In fact, in Benner's (1984) model, competent-level performance is marked by an ability to prioritise (Thomas & Kellgren, 2017). Therefore, self-efficacy is recognised as an important factor in clinical development. In addition, an individual's confidence is a predictor of competent performance (Kiernan, 2018). Successful clinical encounters boost student confidence in being able to fulfil their role. At "competent" level, the student displays the ability to cope (Benner, 1984).

Affording podiatry students opportunities to perform their occupation-specific skills in real-world settings with realistic workloads would facilitate Bandura's (1977) enactive mastery experiences (Artino, 2012; Cox & Simpson, 2016). This is only possible providing the placement experience allows hands-on engagement as opposed to solely observation—reported for private practice placements—which offers only potential

vicarious experiences for learning (Hultquist, 2014). In the main, it is recognised that mastery experiences have the greatest contribution to self-efficacy advancement because they are the most realistic indicators of one's capabilities (Pfitzner-Eden, 2016; Sewell & St George, 2009). Likewise, Benner (1984) maintains that skilled performance is reliant on the student moving from a role of observer to one of performer. If the student is unable to transition from being outside of the situation to being engaged, they will be unable to progress from novice to advanced beginner and beyond (Donnelly, 2014). Further, the expectation that podiatry graduates practise independently following graduation suggests they need to meet Benner's level of competent (Liou & Cheng, 2013). The clinical supervisors' recommendation for an internship and supervision in supportive environments post-graduation suggests, perhaps, that not all graduates may be competent, i.e., Benner's stage 3. These findings support Nicol and colleagues' (1996) view that the graduating nursing student should be considered an advanced beginner, competent in some areas and a novice in others.

Because of the former lack of clarity surrounding skill acquisition and expected level of competence (Brown & Crookes, 2016), it is not surprising that the clinical supervisors varied in their perceptions of preparedness for practice, both in terms of students on clinical placement and at graduation. The perception of unpreparedness for clinical practice, even for a few students, whilst not foreign to undergraduate health professional education (Illing et al., 2008; Monrouxe et al., 2017), is of concern for the podiatry profession, as unprepared graduates may not be clinically safe (Banneheke et al., 2017; Lewallen & DeBrew, 2012).

Educational interventions—in this case communication skills training and increased hands-on clinical experience—to practise clinical skills and bolster confidence are, therefore, needed to address the areas of identified unpreparedness before students graduate (Monrouxe et al., 2017). Consideration should also be given to experiential learning opportunities such as intern programs (Morris et al., 2016) to consolidate learning and improve preparedness of podiatry graduates at the completion of their studies.

Limitations

Despite several calls for participants, recruitment was difficult. Nevertheless, our sample size of 11 clinical supervisors for this qualitative research was sufficiently representative of podiatry supervisors, as they graduated from institutions in all but one state (Western Australia) in Australia and each have several years of clinical supervision experience. As the semi-structured interviews were conducted by telephone, it was not possible for the interviewer to observe any non-verbal communication cues and use these cues as opportunities to further probe and seek clarification.

Conclusion

The purpose of this study was to offer exploratory insight into the preparedness of podiatry students for clinical placement and podiatry graduates for clinical practice from the perspective of clinical supervisors. This qualitative study has provided a snapshot of the key requirements for being prepared to practise as podiatrists on graduation, i.e., being work-ready as safe and self-efficacious individuals. Generally, the supervisors considered the graduates prepared to function as podiatrists without supervision, however the supervisors recommended that students need to be within an environment where they are well supported rather than in solo practice. However, deficiencies were identified in terms of students being prepared for clinical placements. These primarily included students' underdeveloped manual clinical skills and low self-efficacy due to insufficient hands-on placement experience, particularly in the private sector. Educational and support interventions are, thus, needed to ensure students are better prepared for their placements and that they are, for the most part, advanced beginners on clinical placement rather than novices, with an expectancy that they will advance to competent at graduation, or soon thereafter.

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Appendix

Semi-Structured Interview Guideline

General questions

Demographic information

1. Gender
2. Age
3. When graduated?
4. Where graduated?
5. Any post-graduate qualifications in podiatry or education?
6. Current program: undergraduate or graduate entry or both?
7. For how long have you been a clinical supervisor?

Primary questions

Reflecting on your experiences as a podiatrist and clinical supervisor ...

1. What do you understand by the phrase "prepared for clinical practice"?
2. In terms of the podiatry students that you supervise, how prepared do you think the students are for practice [placements] in the clinical setting?
3. What do you think are some of the challenges facing podiatry students entering clinical practice [placements]?
4. What recommendations would you propose to improve podiatry students' preparation for clinical practice [placements]?
5. As a clinical supervisor, how well prepared are podiatry students [as graduates] for clinical practice?