Factors that contribute to high quality clinical supervision of allied health professionals

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Abstract

Clinical supervision is a professional support mechanism for health professionals aimed at developing the skills, knowledge and competence of the supervisee. Clinical supervision has been shown to benefit health professionals, patients and healthcare organisations. The ultimate purpose of clinical supervision is the delivery of safe and high quality healthcare. Whilst the benefits of clinical supervision are well-realised, recent supervision literature has highlighted the lack of understanding about the concept of clinical supervision and the factors that facilitate high quality clinical supervision at the coal face. Research in this area is particularly lacking for allied health professionals and those working in rural and remote healthcare settings. This thesis aimed to determine the factors that contribute to high quality clinical supervision for allied health professionals, with a particular focus on rural and remote healthcare settings.

Chapter One and Chapter Two of this thesis summarise what is already known about this topic. The literature review highlighted the confusion around the terminology and concept of clinical supervision, the unique context of rural and remote healthcare in Australia and its implications for clinical supervision. The literature review also revealed the gaps in clinical supervision research and practice for allied health professionals and those working in rural and remote healthcare settings.

Chapter Three and Chapter Four report a mixed methods sequential explanatory study that investigated the factors that contribute to high quality clinical supervision in occupational therapists. The quantitative study was a cross-sectional survey and the qualitative study employed a qualitative research paradigm utilising individual interviews with occupational therapy supervisees in Queensland. These studies identified various factors that contributed to, as well as enablers of and barriers to, high quality clinical supervision in this population. This was a pilot phase that was used to test the outcome measures and processes to be used in the main phase. This phase was foundational to this thesis and provided key insights into the factors that contributed to high quality clinical supervision as the literature lacked information in this area. These factors included type, frequency and length of supervision, choice of supervisor, supervisee age and practice area.

Chapter Five reports on a systematic review of the factors that influence the quality and effectiveness of telesupervision for health professionals. This review highlighted several factors that influence the quality of telesupervision such as supervisor characteristics, supervisee characteristics, supervisory relationship and technological considerations. It further highlighted the knowledge gaps in this area.

Chapter Six and Chapter Seven report the mixed methods sequential explanatory study conducted in the main phase. The aim of the studies in this phase was to investigate the factors that contribute to high quality clinical supervision for rural and remote allied health professionals. The quantitative study used a cross-sectional survey approach and the qualitative study employed a qualitative research paradigm utilising individual interviews with allied health supervisees across rural and remote Queensland and South Australia. These studies identified various factors that contributed to, as well as various enablers of and barriers to, high quality clinical supervision in this population including choice of supervisor, supervisee's work setting, discipline and time in work role.

Chapter Eight discusses the implications of these studies for allied health professionals and outlines key areas for further research.

Collectively, the series of studies in this thesis provide important insight into the factors that contribute to high quality clinical supervision in allied health.

Declaration

This thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; to the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, are clearly acknowledged.



Mary Priya George Martin

8/12/2017

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Statement of ethical conduct

The research studies in this thesis were approved by one or more of the following Human Research Ethics Committees: the University of South Australia, Metro South Hospital and Health Service, Darling Downs Hospital and Health Service and the University of Queensland Human Research Ethics Committees. Furthermore, site specific approvals for the pilot phase and main phase were obtained from all the Queensland Health Hospital and Health Services. Informed consent was obtained from participants prior to their involvement (Appendix D) after they read the relevant participant information form (Appendix C).

Publications arising from candidature

Publications included in thesis:

1. Martin, P., Kumar, S., & Lizarondo, L. (2017). When I say clinical supervision. *Medical Education*, Early online. doi:10.1111/medu.13258.
2. Martin, P., & Milne, D. (2017). Choice of clinical supervisor: cunning or collusion? *Journal of Advanced Nursing*, early view. doi 10.1111/jan.13471.
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5. Martin, P. (2017). Clinical supervision in the bush: is it any different? (abstract) *International Journal of Integrated Care*, in press.
6. Martin, P., Kumar, S., Lizarondo, L., & Tyack, Z. (2016). Factors influencing the quality of clinical supervision of occupational therapists in one Australian State. *Australian Occupational Therapy Journal*, 63(5), 338-346. doi: 10.1111/1440-1630.12314.
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Manuscripts under review:

1. Martin, P., Kumar, S., Baldock, K., & Lizarondo, L. Factors that contribute to high quality clinical supervision of the allied health workforce: lessons from the coalface. *Australian Health Review*, under review.

2. Martin, P., Kumar, S., Lizarondo, L., & Baldock, K. Perspectives of health professionals on factors that lead to high quality clinical supervision: a qualitative study. *BMC Health Services Research*, under review.

Publications not included in thesis but completed during candidature:

1. Martin, P., Milne, D., & Reiser, R. (2017). Peer supervision: International problems and prospects. *Journal of Advanced Nursing*, early view. doi: 10.1111/jan.13413.
2. Martin, P., Moran, M., & Forman, D. (2017). Interprofessional competencies: the poor cousin to clinical skills? MedEdPublish, 6(3), paper 9. https://doi.org/10.15694/mep.2017.000123.
3. Martin, P., Kumar, S., & Abernathy, L. (2017). Bridging the training-practice gap in interprofessional student supervision. *Perspectives on Medical Education*, 6(2), 133-137. doi: 10.1007/s40037-017-0330-8.
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Conference presentations arising from candidature

Oral Presentations, Workshops and Posters arising from thesis:

1. Martin, P., Coply, J., & Tyack, Z. (2014, June). *Quality and effectiveness of clinical supervision of occupational therapists in a large Australian state – a sequential, mixed methods study*. Paper presented at the 16th International World Federation Occupational Therapy Congress at Yokohoma, Japan.
2. Martin, P., Kumar, S., & Lizarondo, L. (2017, March). *Achieving effective clinical supervision in allied health*. Paper presented at the Victorian Allied Health Research Conference in Melbourne in March 2017.
3. Martin, P., Kumar, S., & Lizarondo, L. (2017, August). *Making technology work for you in clinical supervision.* Workshop at the National Allied Health Conference.
4. Martin, P. (2017, November). *Clinical supervision in the bush: is it any different?* Oral poster at the 1st Asia Pacific Conference on Integrated Care, Brisbane.
5. Martin, P., Kumar, S., Lizarondo, L., & Baldock, K. (2018, March). *Clinical supervision capacity building: policy implications*. Upcoming poster presentation at the 4th International Healthcare Reform Conference, Sydney.

Invited Presentations arising from thesis:

1. Martin, P., & Ducat, W. (2014, October). *Best practice in supervision including telesupervision*. Invited key note presentation at the Queensland Regional Training Network SIMposium, Brisbane.
2. Martin, P., Kumar, S., & Lizarondo, L. (2014, October). *What factors influence the quality and effectiveness of telesupervision? Findings from a systematic review of the literature* Invited paper at the Rural and Remote Telehealth conference, Toowoomba.
3. Martin, P. (2016, October). *Only a click away: A workshop on best practice in telesupervision*. Invited workshop at the Rural and Remote Telehealth Conference, Toowoomba.
4. Martin, P. (2017, July). *Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study*.

Invited paper at the Australia and New Zealand Health Professional Educators Association (ANZAHPE) conference, Adelaide.

Awards and Prizes arising from candidature

1. Australia and New Zealand Association for Health Professional Educators (ANZAHPE) 2017 Post-Graduate Student Prize. Presented at the ANZAHPE Conference in Adelaide on 12th July 2017 for the thesis.
2. Health Services Research Association Australia and New Zealand (HSRAANZ) 2017 Best PhD Student Paper Award. Presented at the HSRAANZ conference in Gold Coast on 1st November 2017. This was for the paper presented in chapter 3 of this thesis.

1 Introduction

Background

This thesis investigated the factors that influence the quality of clinical supervision of allied health professionals from a supervisee perspective.

Clinical supervision (CS) is an ongoing, formal professional support process involving a supervisor and a supervisee, for which there is an evaluative component (i.e., goals are set and documented to assist with the skill development of the supervisee). Within clinical settings such as hospitals and community health settings, effective CS has been associated with improved patient care experiences and outcomes (Kilminster & Jolly 2000; Spence, Wilson, Kavanagh, Strong & Worrall, 2001), as well as improved staff wellbeing and satisfaction (Winstanley & White, 2003).

Most of the literature on CS has focused on nurses (Dawson, Phillips & Leggat, 2013a; Pearce, Phillips, Dawson & Leggat, 2013), resulting in key knowledge gaps. This includes a lack of agreement about ways to determine the quality of CS (Fitzpatrick, Smith & Wilding, 2012) and lack of high quality studies, especially in allied health, that investigate CS quality and effectiveness (Wheeler & Richards, 2007; Gaitskell & Morley, 2008; Cox & Araoz, 2009; Pearce et al., 2013). In allied health, research on CS is predominantly within psychology and other mental health practice areas with noticeable gaps in CS in non-metropolitan areas (Ducat et al., 2015). To address these gaps, this thesis through a collection of studies, investigated the factors that influence the perceived quality of CS among allied health professionals through a pilot phase and a main phase. The unique contribution of this work is expected to build an emerging evidence base of the factors that affect the quality of CS among allied health professionals. Currently there is a dearth of knowledge about CS of allied health professionals especially in the non-metropolitan context. This research has addressed

this knowledge gap thereby making a unique contribution to the evidence base on CS in rural and remote areas.

Theoretical Framework

There are no clear or standard definitions of quality and effectiveness specific to CS in the health literature. However, there is an interdisciplinary theoretical framework within the health literature which has been used to study complex systems as parts of reality and their potential influences on outcomes. As part of that, the concept of quality in healthcare has been explored using systems theory (Chuang & Inder, 2009; Petula, 2005). Systems theory is said to offer a framework for quality improvement in healthcare systems as systems theory supports system thinking (Petula, 2005). Systems thinking considers the whole system to be made up of the relationship between the parts rather than just the parts in isolation. Furthermore, according to Petula (2005, p. 2), "systems thinking allows healthcare professionals to see the entire system and recognize the importance of the relationships among its component parts". Systems theory has been applied in various contexts in healthcare. For example, some hospitals in the United States have used it to facilitate staff decision making, professional autonomy, and to create supportive environments of care (American Nurses Credentialing Centre, 2003).

The foundation of systems theory rests on two concept pairs: emergence and hierarchy; control and communication (Leveson, 2004; Checkland, 1981). Based on this, a general model of complex systems is able to be expressed as a hierarchy of levels of organization (Bailey, 2006). Petula (2005) compares these hierarchically structured components to Maslow's hierarchy of needs. Using this framework, a hierarchical sequence of factors/components leading to high quality CS within a healthcare system can be constructed in a similar manner. This is possible as there is consistent evidence that outcomes of CS are dependent on multiple factors or components (Ducat et al., 2015; Martin, Copley & Tyack, 2014). These factors can broadly be categorised into *organisational, environmental, interpersonal and intrapersonal levels*. At the *organisational level*, the quality of CS may be influenced by factors such as organisational commitment to supervision, supervision policies and guidelines, and the workplace culture in relation to supervision (Ducat et al., 2016). At the *environmental level*, the quality of CS may be influenced by factors such as access to supervision (due

to shortage of supervisors), mode and type of supervision (such as distance vs face to face supervision) and competing priorities (such as clinical workload being the sole practitioner) (Ducat et al., 2016; Martin, Copley & Tyack, 2014). At the *interpersonal level*, factors such as the supervisory relationships and dual roles (supervision versus line management) have been shown to influence the perceptions of quality of CS (Martin, Copley & Tyack, 2014). At the *intrapersonal level*, factors such as supervisee preparedness for supervision, supervisee prioritising and valuing supervision, supervisee undertaking supervision training and supervisee's previous experience with supervision are thought to influence the quality of CS (Ducat et al., 2016; Martin, Copley & Tyack, 2014). It is likely that these factors, occurring at various levels with complex relationships between them, can influence the perceived quality and effectiveness of CS. Figure 1 provides a diagrammatic representation of the application of systems theory to the quality of CS. Using systems theory as the theoretical framework, a mixed methods design was used in this thesis to study the factors that influenced high quality CS.

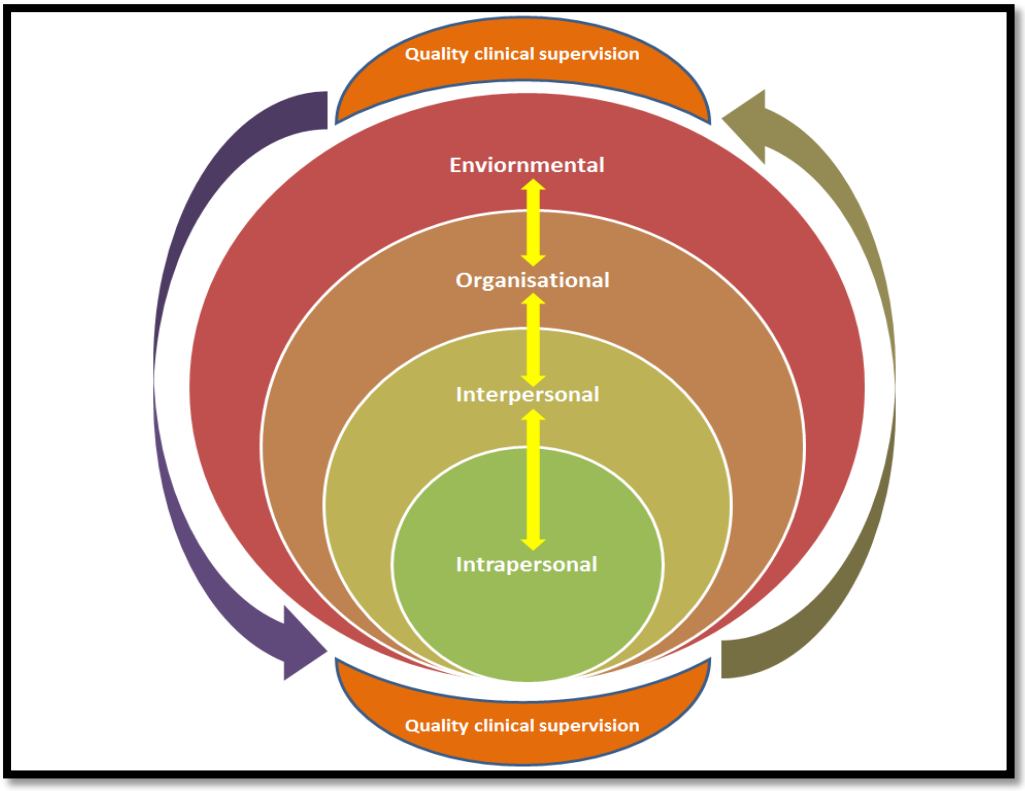

Figure 1: Application of the systems theory to the concept of quality in clinical supervision

Thesis Aims and Objectives

The overall aim of this thesis was to investigate the factors that influence the quality of CS in allied health professionals.

The specific objectives were:

Primary Research

Quantitative Phase:

1 To examine the factors that contribute to effective and high quality CS of allied health supervisees in Queensland and South Australia, with a particular focus on rural and remote contexts

Qualitative Phase:

2 To explore the enablers of and barriers to effective and high quality CS from the allied health supervisee perspective

3 To explore supervisees' experiences of CS in rural and remote contexts

Secondary Research

1 To complete a systematic review of the literature on the effectiveness and parameters of distance supervision/telesupervision

Thesis Structure

This thesis consisted of a pilot phase, a systematic review and a main phase. Figure 2 depicts a diagrammatic overview of the research process.

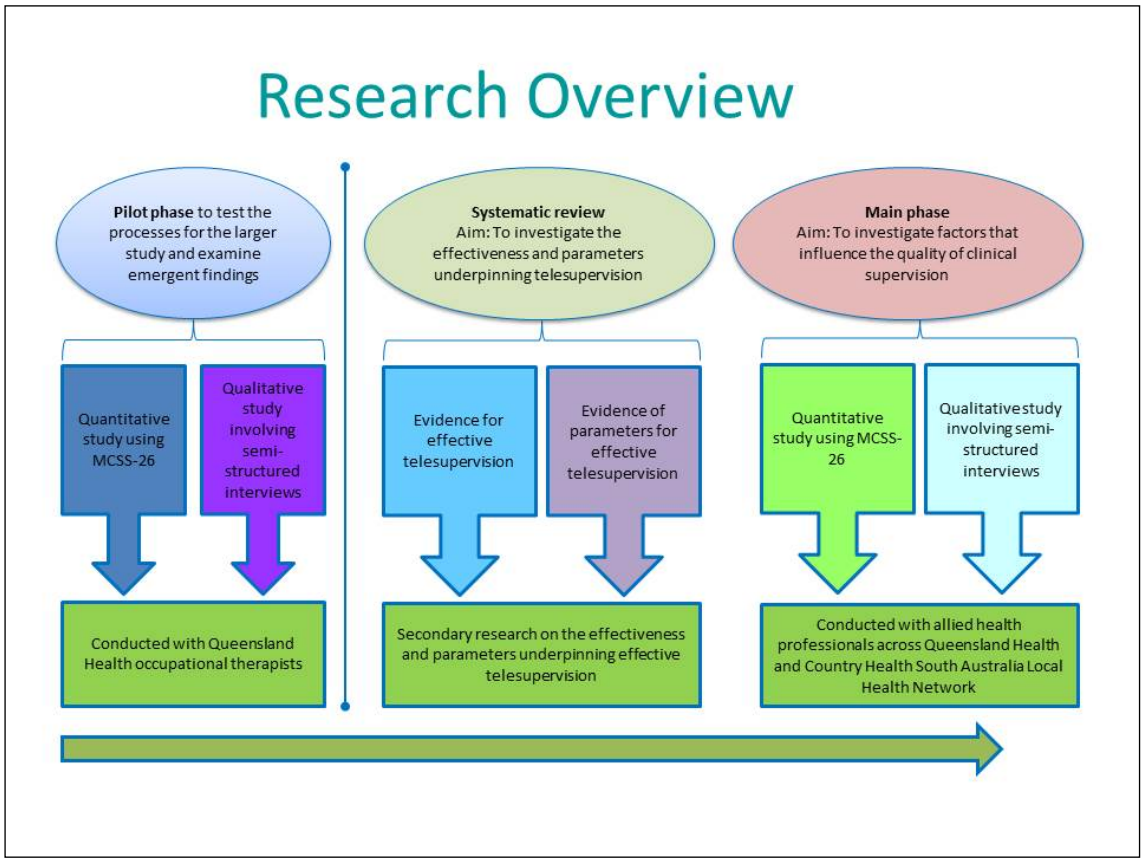

Figure 2: Diagrammatic overview of the research process

Thesis Outline

This thesis is a composite of traditional thesis chapters and publications in peer-reviewed journals. Chapters One and Eight are traditional thesis chapters whilst the other chapters are publications. Figure 3 is a diagrammatic representation of the outline of this thesis.

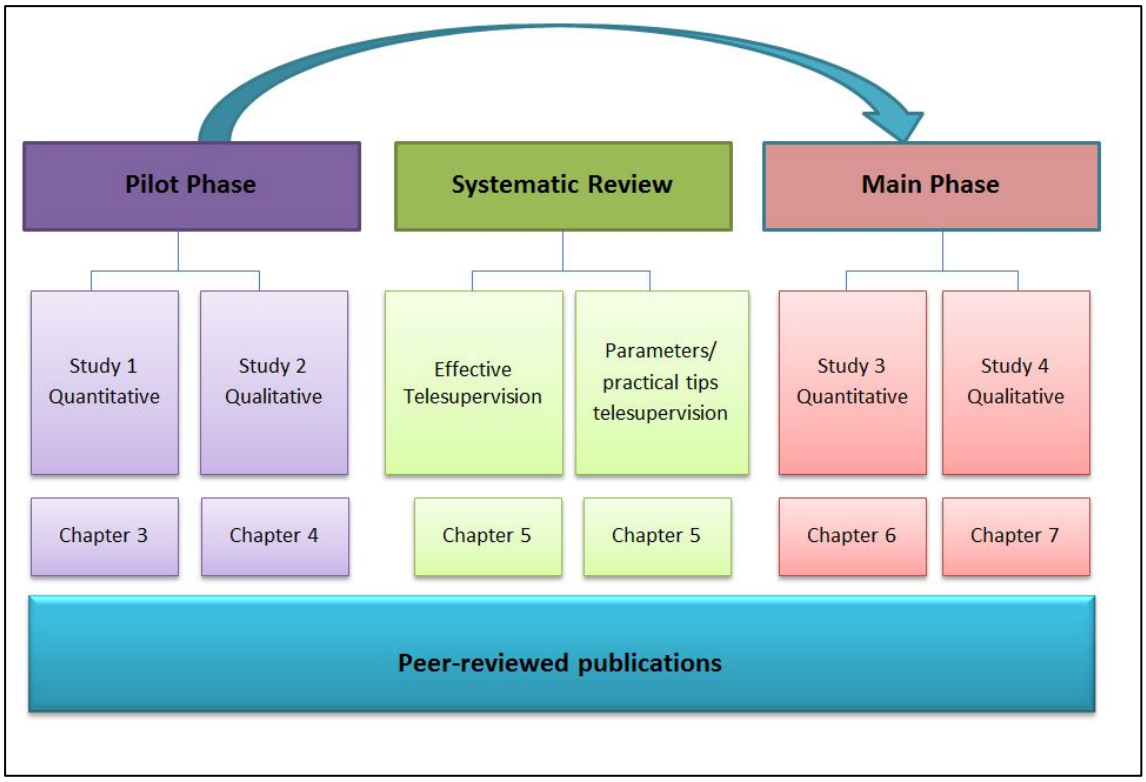

Figure 3: Thesis outline

2 Literature Review

Chapter Overview

This chapter includes one publication that defines and clarifies the term clinical supervision. Additionally, it includes a review of the literature on the quality and effectiveness of clinical supervision, benefits of clinical supervision, practice of clinical supervision in the health professions and the unique context of healthcare in rural and remote Australia and its impact on clinical supervision in those settings.

Publication: When I say clinical supervision

Publication Overview

The term clinical supervision means different things to different people. The variety of ideas, and different approaches/methods used within clinical supervision has resulted in diversity in thinking about this concept (Jones, 2006). This paper clarifies terminology around clinical supervision. It defines what clinical supervision is, differentiates it from other related forms of professional support and outlines the need for consistent terminology in this area.

Journal permission to include this paper in the thesis has been attached in Appendix E.

Citation Details

Martin, P., Kumar, S., & Lizarondo, L. (2017). When I say clinical supervision. *Medical Education,* Early online. doi:10.1111/medu.13258.

Journal metrics - IF – 4.005: JR – 2/41 (Education Scientific Disciplines); 11/90 (Healthcare Sciences & Services).

When I say . . . clinical supervision

Priya Martin,[1] Saravana Kumar[2] & Lucylynn Lizarondo[2]

Imagine this: you are a health professional working as part of a team when you notice a newly qualified health professional, a recent addition to the team, struggling to cope with the pressures of everyday health care service delivery. What can you do to support this newly qualified health professional specifically and to protect the health system more broadly? Clinical supervision may be the solution! It is not uncommon for health organisations to promote the clinical supervision of health professionals to enhance professional support as part of systemwide clinical governance processes.[1] However, although the popularity of clinical supervision is growing, its impact is difficult to quantify. Why? Often because of a lack of understanding of what clinical supervision actually is[1] and the ambiguity associated with its nomenclature.[2,3] The purpose of this short paper is to shed light on what clinical supervision is, and is not, in the context of continuing professional development.

Clinical supervision has been formally defined as: '. . .the formal provision, by approved supervisors, of an intensive relationship-based education and training that is work-focused and which manages, supports, develops and evaluates the work of colleague (s), which addresses the supervision functions of quality control, maintaining and facilitating the supervisee's competence and capability, and helping supervisees to work effectively.'[4]

The term 'clinical supervision' can often be interpreted differently, by different people, in different contexts.[2] Launer[3] identifies and differentiates various terminologies linked to clinical supervision including informal supervision, professional supervision, educational supervision, managerial supervision, mentoring, coaching and so on. The addition of further terms such as 'guided supervision' and 'intervision'[2] brings us into what is well and truly a minefield! It is particularly useful to differentiate clinical supervision from educational supervision. Educational supervision is regular supervision that occurs in the context of a recognised training in order to establish supervisee needs and review progress. This form of supervision is most common in the early years of postgraduate training,[3] whereas clinical supervision can be useful to all health professionals across the continuum (from newly qualified to experienced staff).

When different terms are used to denote one concept or when terms are used interchangeably, confusion arises about the concept itself. Like 'clinical supervision', the term 'mentoring' is widely misunderstood, which results in varied processes and outcomes in practice.[5] Without uniform understanding of what clinical supervision is, it is likely that diverse and variable practices will be implemented and will result in poor outcomes for everyone concerned. One cause of controversy goes to the very nature of clinical supervision: is it principally about professional development or about monitoring and standard setting?[3] Well, in essence, it is about both and, depending on the context, clinical supervision tends to incorporate both elements to different degrees.[3]

When we say 'clinical supervision' in the context of continuing professional development, we are talking about a professional support activity that is facilitative and that involves reflective thinking and discussion about professional development, clinical issues

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and interpersonal issues encountered in the workplace. We are talking about an ongoing, formal professional support process that involves a supervisor and a supervisee, for which there is an evaluative component. We are referring to a structured and planned activity whereby learning goals are set and documented to assist with the skill development of the supervisee.

There are tried and tested evidence-informed frameworks for clinical supervision, such as Proctor's tripartite model of clinical supervision. Proctor's model[6] focuses on the functions of clinical supervision and has been used in a number of health professions. The model consists of normative (administrative), formative (educational) and restorative (supportive) functions. Normative functions maintain high standards of practice by ensuring the supervisee's work stays within the organisational objectives (e.g. by reviewing an organisational policy or code of conduct). Formative functions develop the supervisee's skills, understanding and abilities, thereby enabling the individual to reflect on his or her practice, recognise strengths and weaknesses, and develop skills and knowledge (e.g. by learning a standardised assessment). Restorative functions provide the supervisee with opportunities to explore and vent feelings and address emotional responses (e.g. through debriefing following a complex or difficult patient situation). In practice there is considerable overlap among the functions, and the relative contribution of each component will vary in each supervisory relationship and across different settings and times.[6]

For clinical supervision to be effective, some critical factors must be considered. These include the protection of clinical supervision time, ensuring the supervisee has a choice in the selection of his or her supervisor, ensuring a positive supervisory relationship, the use of reflective practice, the provision of timely and balanced feedback and regular evaluation, and making sure that sessions are conducted outside the regular workplace so that clinical supervision and managerial supervision may be separated.[2] Getting clinical supervision right is critical as evidence shows that when it is done in the right way with the right people, its benefits extend to health professionals, patients and health organisations in terms of enhanced quality of service delivery, a more competent workforce and improved patient care.[1,2]

Given the increasing pressure on health care professionals within their work environments, clinical supervision, when done well and as part of professional support, can alleviate some of these pressures. William Shakespeare, in the timeless and iconic play *Romeo and Juliet*, wrote: 'What's in a name? That which we call a rose by any other name would smell as sweet.' Although this may hold true for a rose, it is not the case for clinical supervision. It is imperative that all health care stakeholders have a consistent understanding of clinical supervision, in the context of continuing professional development, so that uniform standards can be developed, appropriate professional support activities implemented and lessons learned about what works for whom, when and how. Ultimately, by doing this we can ensure clinical supervision is underpinned by best practice.

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Quality and effectiveness of clinical supervision

Based on the CS literature that has been reviewed to date, quality and effectiveness of CS have not been defined explicitly. Therefore, for the purpose of this research, information has been drawn from the context of quality in healthcare more broadly. Quality has been defined in a number of ways in healthcare (Campbell, Roland & Buetow, 2000). Definitions of quality are said to be either generic or disaggregated. Generic definitions of quality include excellence and expectations or goals being met. Disaggregated approaches recognise that quality is complex and multidimensional. The Institute of Medicine in its seminal report on *Crossing the Quality Chasm: A New Health System for the 21st Century*, states that "quality healthcare is safe, effective, patient-centred, timely, efficient and equitable" (National Academy of Sciences, 2000, p.39). This recognises quality healthcare to be multi-dimensional which consists of technical aspects of care (such as effectiveness, safety and efficiency) and functional aspects of care (such as equity, timeliness, and patient-centeredness). Campbell, Roland and Buetow (2000) argue that quality in healthcare is made up of two domains – access and effectiveness. They further propose that "quality of care for individuals is whether individuals can access the health structures and processes of care they need and whether the care received is effective". They define effectiveness as the "extent to which care delivers its intended outcome or results in a desired process, in response to need" (Campbell, Roland & Buetow, 2000, p.46). Therefore, effectiveness is considered as an essential component of quality.

The Manchester Clinical Supervision Scale (MCSS-26), the primary data collection instrument in the quantitative phase of this research, measures the quality and effectiveness of CS using these principles. Development of the MCSS-26 was based on Proctor's three-function interactive model of CS (Winstanley & White, 2003). This model consists of three domains: normative or managerial (e.g., promoting compliance with policies and procedures); formative or educational (e.g., knowledge and skill development); and restorative or pastoral support (e.g., understanding and managing emotional wellbeing). Therefore, it can be suggested that these three domains, or components, of the MCSS-26 also explore quality elements of CS including technical aspects (such as effectiveness as measured through formative functions) and functional

aspects (such as expectations and support as measured through normative and restorative functions).

Benefits of clinical supervision

Numerous research studies have demonstrated the benefits of CS. A study by Bambling, King, Raue, Schweitzer and Lambert (2006) of clients with major depression demonstrated that CS had a significant effect on symptom reduction and treatment of clients. Adding to this, a systematic review of twenty four articles on effect of CS on patient and residency education outcomes demonstrated improved patient- or education-related outcomes (Farnan et al., 2012). Martin and colleagues (2014) argue that CS is beneficial to the practitioner, the patient and the organisation. For practitioners, the benefits of CS include supporting sole practitioners (Clough, 2003), enhancing coping with work stress (Edwards et al., 2005), enhancing the competence and knowledge of the practitioner (Kleiser & Cox, 2008; Dawson, Phillips & Leggat, 2013b) and minimising burn-out (Edwards et al., 2006). For patients, CS has a positive effect on health outcomes and a lack of CS of health professionals is said to be harmful (Kilminster & Jolly 2000; Farnan et al., 2012). For the organisation, supervision improves multi-disciplinary teamwork and enhances the quality and safety of service delivery (Hunter & Blair, 1999). Given this prominent role of CS in ensuring effective and high quality healthcare (Bambling et al., 2006; Farnan et al., 2012), it warrants further investigation to determine the factors that make it effective. However, CS is not without criticisms. Some researches continue to highlight the equivocal evidence base underpinning CS. For example, a systematic review of eighteen studies that explored the impact of CS on the practice of counsellors and therapists, and the resulting impact on their clients, found that links between improved client outcomes and CS were only tentative (Wheeler & Richards, 2007). Similarly, another systematic review of twenty five empirical CS studies in psychiatric nursing found that conclusions regarding the effect of CS were only tentative (Buss & Gonge, 2009). These reviews highlighted the ongoing challenges in demonstrating the direct impact of CS on patient outcomes.

Clinical supervision in the health professions

Among health professions, nursing pioneered CS. The concept of experienced nurses guiding less experienced nurses has been around since the days of Florence Nightingale (Emmerton, 1999). The concept of CS (as defined above) developed in the late 1980s

and early 1990s, especially in social work and psychotherapy (Winstanley & White, 2003). More recently, tragic events reported by the Allitt Inquiry (which dealt with the unsupervised practice of a newly qualified nurse, Miss Beverley Allitt, which resulted in injuries or death of 13 children (Brykczynska, 1994)), in the UK gave rise to the "nationwide introduction of CS as central to clinical governance across all health professions" (Department of Health, 2000). Despite this, in Australia, Winstanley and White (2003) assert that the concept of CS is underdeveloped and that its implementation is patchy. Mental health practice areas, in addition to nursing, could be considered as early adopters of CS (White & Winstanley, 2010). Given the particularly sensitive, challenging and personally confronting nature of mental health practice areas, it is likely that the focus on CS is well established in this field (Spence et al., 2001; Kavanagh et al., 2003; Waugh, 2008; White & Winstanley, 2010) and marginally considered in others (Dawson et al., 2013a; Pearce et al., 2013).

Unique context of healthcare in rural and remote Australia

As of 2009, 31.4% of the Australian population resided outside metropolitan areas (NSF, 2012). The number of health professionals is substantially lower per capita in non-metropolitan Australia compared to metropolitan areas (Morell et al. 2014). This disparity has led to a high demand for healthcare, while those living in these areas continue to have poor health outcomes. For example, a person living in rural Australia is ten percent more likely than his/her metropolitan counterpart to be diagnosed with a mental health disorder at some point in life; a person between 55 and 74 years living in a rural area is nearly twice as likely to have no teeth compared to their city counterpart (NSF, 2012). This mismatch between the healthcare services and resources available, and the increased demand for healthcare due to poor health outcomes have meant that rural health practitioners need to be innovative, responsive and multi-skilled.

The unique rural and remote context also brings with it barriers to CS. There is a large body of evidence which highlights numerous barriers faced by health professionals in accessing continuing professional development opportunities, including CS (Stagnitti, Schoo, Dunbar & Reid, 2006; O'Toole, Schoo & Hernan, 2010; Martin, Abernathy & Kumar, 2013). These barriers include distance, travel time, increased cost and lack of resources to backfill positions while clinicians undertake professional development. Various strategies have been proposed and implemented to address these barriers and

improve professional support (including CS) for this group of health professionals. The Allied Health Professional Enhancement Program (Cunningham Centre, 2015; Ducat et al., 2016) is one such example. This program makes funding available for rural and remote allied health professionals to travel to a bigger centre to undertake work shadow placements with senior professionals or experts. Other ways of addressing these barriers include the use of technology such as videoconferencing or teleconferencing to undertake CS and other educational activities. While, historically, technology in these contexts has been used to promote CS, the evidence base underpinning this is unclear (with no systematic investigation of the literature to date) and hence requires further investigation. While the available body of evidence discussed above has highlighted the problem (i.e., lack of CS), there is a lack of research on current CS practices in the health professions in non-metropolitan areas. As the evidence available to date in this area was primarily anecdotal, this research aimed to build a body of evidence in this area in a systematic and rigorous manner.

Chapter Summary

This chapter included one publication that defined and clarified the term clinical supervision. Additionally, it included a review of the literature on the quality and effectiveness of clinical supervision, benefits of clinical supervision, practice of clinical supervision in the health professions and the unique context of healthcare in rural and remote Australia and its impact on clinical supervision in those settings.

3 Factors influencing the quality of clinical supervision of occupational therapists in one Australian State

Chapter Overview

This chapter presents the findings of the quantitative study in the pilot phase. This study investigated the factors that contributed to high quality clinical supervision in occupational therapy supervisees. (Pilot phase, study 1).

This paper was awarded the 2017 Health Services Research Association Australia New Zealand (HSRAANZ) *Best PhD Paper* Award at the HSRAANZ conference in Gold Coast on 1st November 2017.

Journal permission to include this paper in the thesis has been attached in Appendix E.

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Research Article

Factors influencing the perceived quality of clinical supervision of occupational therapists in a large Australian state

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***Background/aim*:** *Clinical supervision is important for effective health service delivery, professional development and practice. Despite its importance there is a lack of evidence regarding the factors that improve its quality. This study aimed to investigate the factors that influence the quality of clinical supervision of occupational therapists employed in a large public sector health service covering mental health, paediatrics, adult physical and other practice areas.*

***Methods*:** *A mixed method, sequential explanatory study design was used consisting of two phases. This article reports the quantitative phase (Phase One) which involved administration of the Manchester Clinical Supervision Scale (MCSS-26) to 207 occupational therapists.*

***Results*:** *Frequency of supervision sessions, choice of supervisor and the type of supervision were found to be the predictor variables with a positive and significant influence on the quality of clinical supervision. Factors such as age, length of supervision and the area of practice were found to be the predictor variables with a negative and significant influence on the quality of clinical supervision.*

***Conclusion*:** *Factors that influence the perceived quality of clinical supervision among occupational therapists have been identified. High quality clinical supervision is an important component of clinical governance and has been shown to be beneficial to practitioners, patients and the organisation. Information on factors that make clinical supervision effective identified in this study can be added to existing supervision training and practices to improve the quality of clinical supervision.*

KEY WORDS *professional education, supervision.*

Introduction

Clinical supervision has been defined as 'the formal provision, by approved supervisors, of relationship-based education and training that is work-focussed and which manages, supports, develops and evaluates the work of colleague/s' (Milne, 2007). Operationally, clinical supervision is defined as a process that provides time out and an opportunity, within the context of an ongoing professional relationship with an experienced practitioner. The aim of this partnership is to engage in guided reflection on current practice in ways designed to develop and enhance that practice in the future (Milne, 2007; Winstanley & White, 2003). This type of supervision involves reflective thinking, discussion regarding professional development issues, caseloads, clinical issues and staff interpersonal issues (Fone, 2006). For health professionals, the benefits of supervision have been discussed as supporting those working in isolation (Clough, 2003), assisting them to cope better with their work and workplace (Edwards *et al*., 2005), developing the competence and knowledge of the health professional (Kleiser & Cox, 2008) and reducing burn-out (Edwards *et al*., 2006). For patients, it has been suggested that supervision has a positive effect on patient outcomes and that a lack of supervision of health professionals can be harmful to patients (Farnan

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et al., 2012; Kilminster & Jolly, 2000). For the organisation, supervision is described as improving multi-disciplinary teamwork, enabling the development of clinical standards and enhancing the quality of service delivery (Hunter & Blair, 1999).

Benefits from clinical supervision have been identified for health professionals, patients and organisations (Martin, Copley & Tyack, 2014). When established and conducted effectively, supervision is proposed to provide an environment in which clinicians can safely appraise their practice, develop professional skills, question established practices and seek new approaches, thus improving the standard of patient care (Farnan *et al*., 2012; Hunter & Blair, 1999). Clinical supervision is not new in occupational therapy as noted by Hunter and Blair. It was first written about in relation to stress experienced by occupational therapists and recruitment to occupational therapy positions, with clinical supervision perceived as a coping strategy for stress in some studies (Craik, 1988; Ilott, 1998).

Despite the profession having embraced clinical supervision since the 1980s, it has been acknowledged in the literature that the quality of supervision received by occupational therapists has not been addressed sufficiently and requires further investigation (Hunter & Blair, 1999; Kilminster & Jolly, 2000). Sweeney, Webley and Treacher (2001a,b,c), explored supervisor and supervisee anxieties and dilemmas using grounded theory studies. Information from interviews of 30 supervisees and supervisors from the National Health Service in the South West of England informed these studies. The findings of these studies suggested that supervision within occupational therapy was not considered a comfortable experience for either the supervisee or the supervisor. This was mainly attributed to the confusion around supervision and a lack of clarity of tasks and techniques that are employed within supervision (Sweeney *et al*.).

There is emerging evidence that a range of factors influence clinical supervision including length, frequency and location of supervision. In a mental health study of 260 community nurses in the United Kingdom, Edwards *et al*. (2005), who had clinical supervision sessions that lasted for over 1 hour, took place at least monthly, who chose their supervisor and who had supervision sessions away from their workplace, perceived their supervision to be of higher quality than those that had less frequent, shorter supervision sessions, were allocated their supervisor, and had their supervision sessions within their workplace. The age of supervisees was not considered in that study. Another study of supervisee perceptions of the effectiveness of clinical supervision in allied health was conducted by Dawson, Phillips and Leggat (2012). The authors examined the supervisory practices of 30 allied health supervisees in a regional Australian setting. This study found that clinical supervision was perceived as being valued and important.

While the current evidence base is small with some limitations (sample size and limited generalisability), it highlights concerted efforts to address gaps in clinical supervision knowledge in the allied health professions. However, there is a paucity of clinical supervision studies spanning metropolitan, regional and rural areas (Bogo & McKnight, 2008), which is required in geographically diverse settings such as Queensland, Australia. Furthermore, the clinical supervision practices of occupational therapists need to be examined separately from other health professions and clinical supervision needs to be examined across a wider range of practice areas within occupational therapy (e.g. adult physical, paediatrics) than has occurred in the past. To address these gaps, this study aimed to investigate factors that influence the quality of clinical supervision received by supervisee occupational therapists across a range of practice areas including adult physical, paediatrics and mental health.

Method

Ethics

Ethics approval was obtained from the Metro South Hospital and Health Service Human Research Ethics Committee for multi-sites (Reference number: HREC/11/QPAH/322). Site specific approvals were obtained from the 17 hospital and health services in the state of Queensland.

Study design and participants

Overall, this study employed a mixed method sequential explanatory design. The sequential explanatory design is characterised by the collection and analysis of quantitative data in the first phase of research (termed Phase One which will be described in this paper), followed by the collection and analysis of qualitative data (Creswell, 2009) (termed Phase Two in this study). Results of Phase Two have been published elsewhere (Martin, Kumar, Lizarondo & VanErp, 2015).

In Phase One a prospective, cross-sectional design was used. Participants were occupational therapists employed by Queensland Health, the largest government health provider in Queensland. All registered occupational therapists working in Queensland Health were included. Participants who were not registered, who did not work for Queensland Health and those who had been working for less than 6-months were excluded, regarded by the investigators as being the time frame needed for participants to have had the opportunity to complete the six supervision sessions referred to in the Manchester Clinical Supervision Scale (MCSS).

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Procedure

The Manchester Clinical Supervision Scale (MCSS-26) and questions regarding demographics were distributed to occupational therapists employed by Queensland Health, using a bulk mail out by the state's occupational therapy Registration Board. Three reminder emails were sent to the occupational therapists using existing professional networks. Consent forms were collected separately from participant data in two self-addressed envelopes to maintain anonymity of the respondents. The participant data were not coded and did not contain identifiable information such as a name, address or date of birth thus was considered non-identifiable.

Outcome measures

The most recent 26-item version of the MCSS (MCSS-26) was used to measure the perceived quality of the clinical supervision received, as self-reported by supervisees. The MCSS-26 includes six factors termed trust/rapport, supervisor advice/support, improved care/skills, importance/value of clinical supervision, finding time, and reflection (Winstanley & White, 2011a). These factors correspond to the three components of Proctor's model of supervision on which the scale is based (Winstanley & White). High scores for total or subscale scores (factors) reflect better quality clinical supervision received than low scores (Edwards *et al*., 2005; Winstanley, 2000). Internal consistency and test–retest reliability have been found to be acceptable with coefficients above 0.7 (Chronbach's alpha = 0.86; Intraclass Correlation Coefficients = 0.78–0.87 respectively; Winstanley & White). Rasch modelling and factor analysis applied to MCSS data amalgamated from several clinical supervision evaluation studies of the original scale confirmed the validity of the response format of the scale, supported use of the MCSS-26 and the unidimensionality of the six subscale scores (Winstanley & White).

Demographic data collected included the supervisee's age, gender, postcode and work experience; the supervisor's age, gender, discipline and experience supervising others; and information on the supervision received such as the length, frequency, location, mode and type of supervision, existence of a supervision agreement and previous supervision training. These questions were used for comparison with results obtained from the MCSS-26. The response categories for the demographic questions are documented in Tables 1 and 2. The demographic questions were piloted with 10 occupational therapists who had experience in developing and/or completing research surveys. Feedback was sought on the structure, content and ease of use of the survey which was used to modify the questions prior to distribution of the survey. Spacing between the questions was increased to promote readability of the survey and a section on additional comments was included for participants following the pilot phase.

TABLE 1: *Demographic characteristics of supervisees and supervisors* (n = *205)*

Demographic characteristics	*n* (%)
Gender	
Male	9 (4.4)
Female	193 (94.1)
No response	3 (1.5)
Age range	
21–25 years	29 (14.1)
26–30 years	72 (35.1)
31–35 years	32 (15.6)
36–40 years	18 (8.8)
41–45 years	20 (9.8)
46–50 years	14 (6.8)
51–55 years	12 (5.9)
56–60 years	5 (2.4)
61–65 years	1 (0.5)
No response	2 (1.0)
Work base	
Hospital	95 (46.3)
Community	81 (39.5)
Both	29 (14.2)
Practice area	
Adult Physical	127 (62.0)
Paediatrics	51 (24.9)
Mental Health	18 (8.8)
Education/research/other	9 (4.4)
Geographical location	
Metropolitan area	106 (51.7)
Non-metropolitan area	88 (42.9)
No response	11 (5.4)
Gender of supervisor	
Male	17 (8.3)
Female	182 (88.8)
No response	6 (2.9)
Approximate age of supervisor	
21–25	2 (1.0)
26–30	41 (20.0)
31–35	45 (22.0)
36–40	41 (20.0)
41–45	30 (14.6)
45–50	17 (8.3)
51–55	4 (2.0)
56–60	4 (2.0)
61–65	0 (0.0)
No response	21 (10.2)
Group and peer supervision	51 (24.9)
Did not receive supervision	14 (6.8)

Data analysis

Descriptive statistics such as percentages, medians, means and standard deviations were used to describe the

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TABLE 2: *Characteristics of supervision sessions*

Characteristics of supervision	*n* (%)
Choice of supervisor	
Allocated	153 (74.6)
Chosen	44 (21.5)
Other	8 (3.9)
Frequency of supervision	
Weekly	23 (11.2)
Every 2 weeks	34 (16.6)
Monthly	97 (47.3)
2–3 months	32 (15.65)
> 3 months	9 (4.4)
No response	10 (4.9)
Location of supervision	
Within the workplace	160 (78.0)
Away from the workplace	10 (4.9)
Both within and away from the workplace	29 (14.1)
No response	6 (2.9)
Time in present position (months), mean (SD)	39.75 (44.73)

sample. Nominal predictors including gender of the supervisor and supervisee (male, female), type of clinical supervision (one-to-one, peer, other), location of supervision (whether the supervision took place in the community, hospital or both), choice of supervisor (whether the supervisor was chosen or not), practice area (adult physical, paediatrics, mental health, other) and whether the supervisee supervised others were dummy coded prior to being entered into regression models. Data were screened for outliers, linearity between the predictor variables, multicollinearity and heteroscedasicity. Multicollinearity was examined as part of the regression analyses with the criteria of correlations above 0.9 between at least one set of predictors used to judge multicollinearity as being present (Tabachnick & Fidell, 1996).

Multiple linear regression was used to examine the relationship between the predictors and the six MCSS subscales; in separate regression analyses for each subscale. Only participants with complete datasets were used for the regression analyses. The predictors initially entered into all of the models were age and gender of the supervisee and supervisor, type of clinical supervision, length of supervision, frequency of supervision, location of supervision, choice of supervisor, time in the supervisee's current position, and whether the supervisee supervised others. In the final regression models only predictors with a significant influence on at least one of the six subscales were selected and entered. The residuals of the models were checked using P-plots, histograms and scatterplots to determine whether the assumptions of normality were met. The Durbin Watson statistic was used to test the independence of errors. No adjustment was made for multiple comparisons. The level of significance for all analyses was set at $P < 0.05$. Statistical analyses were performed using SPSS Statistics for Windows, Version 21.0 (IBM Corporation, Armonk, NY, USA).

Results

Participants were 207 occupational therapists who responded to the mail out of a total of 863 occupational therapists who were mailed the MCSS-26 and demographic questions. Thus, a response rate of 24% was obtained. Two participants did not complete the MCSS-26 and were subsequently removed from data analysis involving the MCSS-26. The majority (94%, $n = 193$) of the respondents were female. The median age of participants was 31–35 years. The median years of clinical experience of the participants was 5–10 years and 61.5% ($n = 126$) of the participants provided supervision for other staff members. Further information regarding the demographic characteristics of the respondents is reported in Table 1.

The majority of the participants reported their supervisors as female with a median age of 31–35 years. The majority of the supervisors were occupational therapists (92.7%). Other supervisors were social workers ($n = 3$), nurses ($n = 3$) and dieticians ($n = 1$). The majority of participants reported that their supervisor was allocated to them (74.6%) as opposed to being chosen by them (21.5%).

Supervision sessions occurred monthly for the majority of the participants (47.3%) and fortnightly for 16.6% of the participants. The median duration of clinical supervision sessions ranged from 46 to 60 minutes for the majority of the participants (61.5%), with only nine participants (4.4%) reporting clinical supervision sessions lasting 15–30 minutes. The majority of participants (78%) received supervision within their workplace and 64.4% of participants received one-to-one supervision, whereas 3.4% received peer supervision and 6.8% reported not receiving any supervision at the time of the study. Furthermore, 66.8% of participants reported to have undertaken prior supervision training and 59% reported to having an existing supervision contract or agreement in place.

The subscale with the highest mean subscale score was 'importance/value of clinical supervision' (mean = 16.17 ± 2.8) followed by supervisor advice/support, trust/rapport, improved care/skills, reflection and finding time. Mean subscale scores for the six MCSS-26 subscales are reported in Table 3.

Data from two participants who responded but did not complete the MCSS-26 were removed prior to analysis leaving data on 205 participants. There were missing data for the predictors of age and gender of the supervisee (1.5% and 1%) and supervisor (2.9% and 10.2%), choice of supervisor (3.9%), frequency of supervision (4.9%), location (2.9%) and length of supervision (2.9%).

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TABLE 3: *MCSS-26 subscale scores* (n = *205)*

Subscale	MCSS-26 minimum to maximum score range	Score range of study participants	Mean (SD)
Importance/value of clinical supervision	0–20	2–20	16.17 (2.85)
Finding time	0–16	0–15	7.96 (3.16)
Trust/rapport	0–20	3–20	14.45 (3.28)
Supervisor advice/support	0–20	5–20	14.49 (3.57)
Improved care/skills	0–16	1–16	12.05 (2.73)
Reflection	0–12	0–12	9.42 (2.12)

Data from a number of participants that were outliers were removed prior to regression analyses (three outliers for the importance/value of supervision, two outliers on the finding time subscale, one outlier for improved care/skills and two outliers on the reflection subscale). The variable of time in the present position was dichotomised to zero to 2 years and 2 years or more, and the variable of age of the supervisee was dummy coded for the regression analyses, due to skewness. Screening of the data and checking the residuals indicated that the assumptions of normality and independent errors were acceptable (Durbin-Watson value = 2.00–2.19).

Significant predictors in the final regression models are presented in Table 4. Predictor variables with a positive and significant influence on at least one of the subscales of the MCSS included the type of supervision received (one-to-one vs. other types of supervision), frequency of supervision and the supervisor being chosen. One-to-one supervision had a greater influence on finding time for supervision than peer or other types of supervision. The supervisor being chosen had a greater influence on trust/rapport, advice and support, improved care/skills and reflection; than having a supervisor allocated or other forms of obtaining a supervisor.

Predictor variables with a negative and significant influence on at least one of the subscales of the MCSS included age of the supervisee, length of supervision and practice area. Participants aged 51–55 years received supervision that was perceived as lower quality in the areas of the importance or value placed on supervision, trust or rapport, supervisor advice or support and improved care or skills; than for participants of other ages. Participants who received a short length of supervision of 15–30 minutes had lower trust or rapport than participants who received longer lengths of supervision of 60 minutes or more. More frequent supervision had a greater influence on trust and rapport, supervisor advice and support, improved care/skills and reflection than less frequent supervision using the frequency range of weekly to less than 3-monthly. Occupational therapists working in the practice area of adult physical had lower trust or rapport, supervisor advice or support and reflection than occupational therapists working in mental health.

Overall the factors entered in the final models accounted for between 11% and 27% of the variation in the perceived quality of clinical supervision across the six clinical supervision subscales ($R^2 = 0.11$, $F(10, 179) = 2.31$, $P = 0.02$ for finding time to $R^2 = 0.27$, $F(10, 181) = 6.66$, $P < 0.001$ for advice/support). The most frequent significant predictors across the models were the supervisor being chosen and the frequency of supervision followed by practice area. The frequency of supervision was the strongest predictor in three of the four models where it was a significant predictor (advice/support, improved care/skills and reflection).

Discussion

This study provides new evidence regarding factors that influence the quality of clinical supervision received by occupational therapists. Specifically, this is the first known study in occupational therapy to look at the influence of practice area on the perceived quality of supervision. The results indicated that those who worked in an adult physical practice area reported lower trust or rapport, lower supervisor advice or support, lower improved care or skills and lower reflection compared to those who worked in a mental health practice area.

The higher quality of clinical supervision received by mental health staff members may have arisen as these staff members were early adopters of clinical supervision in Australia, underpinned by professional and regulatory requirements (White & Winstanley, 2010). In mental health, established programs may have been refined over time to maximise the quality of supervision. In other areas such as adult physical practice, where occupational therapists work in acute or rehabilitation settings, supervision may occur less frequently due to competing clinical priorities, particularly during periods of increased caseloads. This is supported by a number of studies which used the MCSS (Dawson *et al.*, 2012; Edwards *et al.*, 2005), where participants reported

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TABLE 4: *Significant predictors in the multi-variate linear regression models for MCSS subscales*

Final models*†	Correlation with DV	β	B	SE	95% CI for B	*P* value	R^2
1. Importance/value of clinical supervision subscale (*n* = 189)							
Aged 51–55 years (supervisee)	−0.17	−0.14	−1.89	0.94	−3.76 to −0.03	0.05	0.14
2. Finding time subscale (*n* = 190)							
One-to-one clinical supervision	0.18	0.19	1.23	0.48	0.29–2.17	0.01	0.10
3. Trust/rapport subscale (*n* = 192)							
Aged 51–55 years (supervisee)	−0.13	−0.16	−2.30	1.01	−4.23 to −0.60	0.02	0.19
Length of supervision 15–30 minutes	−0.20	−0.17	−2.91	−0.17	−5.23 to −0.60	0.01	
Frequency of supervision	0.14	−0.14	0.45	0.23	0.90–0.01	0.05	
Supervisor chosen	0.17	0.14	1.11	0.56	0.00–2.22	0.05	
Practice area of adult physical	−0.27	−0.22	−1.45	0.53	−2.50 to −0.40	0.007	
4. Supervisor advice/support subscale (*n* = 192)							
Aged 51–55 years	−0.17	−0.19	−2.95	1.03	−4.28 to −0.31	0.005	0.28
Frequency of supervision	0.32	0.32	1.14	0.24	1.60–0.67	< 0.001	
Supervisor chosen	0.20	0.20	1.73	0.57	0.60–2.86	0.003	
Practice area of adult physical	−0.24	−0.20	−1.45	0.55	−2.52 to −0.37	0.009	
5. Improved care/skills subscale (*n* = 190)							
Aged 51–55 years (supervisee)	−0.16	−0.18	−2.03	0.77	−3.54 to −0.52	0.009	0.22
Frequency of supervision	0.25	0.45	0.60	0.17	0.95–0.25	0.001	
Supervisor chosen	0.23	0.24	1.47	0.43	0.63–2.31	0.001	
6. Reflection subscale (*n* = 190)							
Frequency of supervision	0.21	0.20	0.40	0.14	0.68–0.12	0.006	0.16
Supervisor chosen	0.21	0.18	0.87	0.35	0.19–1.56	0.01	
Practice area of adult physical	−0.23	−0.18	−0.73	0.33	−1.38 to −0.07	0.03	

Note DV = dependent variable; β = standardised coefficient; B = unstandardised coefficient; SE = standard error; CI = confidence interval.

*Dependent variables are indicated in italics, predictor variables are indented, and numbers are shown for each model.

†Reference variables for the dummy coded predictors were all other ages for the predictor aged 51–55 years, > 60 min for the predictor of length of supervision, supervisor allocated or provided through other methods for the predictor of supervisor chosen, a supervisor allocated or provided through other methods for the predictor of one-to-one supervision, and practice area of mental health for the predictor of practice area of adult physical.

time as a key barrier to receiving any form of supervision. Participants in the Dawson *et al.* study perceived clinical supervision as time consuming, with time demands increasing the perception that work pressures interfered with clinical supervision. This is consistent with reports in the literature citing time as a key barrier to engaging in quality supervision (Butterworth *et al.*, 1997; Gilmore, 2001). Despite time being recognised as a critical barrier to high quality clinical supervision, there are strategies that may be employed to facilitate clinical supervision in a time-poor environment. Employing additional clinical staff members to cope with increased clinical workloads during peak periods can ensure that clinical demands are met and that there is adequate time for undertaking effective supervision. Allocating a dedicated person for supervision or having a supervisor with a small clinical caseload is likely to allow time for supervision (New South Wales (NSW) Interdisciplinary Clinical Training Networks, 2013). Management support is also very important to prioritise time for supervision particularly in acute settings.

Some of the study findings were consistent with those of previous studies of clinical supervision. Our findings indicated that occupational therapists who chose their supervisor had greater trust or rapport with their supervisor, received greater support or advise from their supervisor, had improved care or skills, and greater reflection than occupational therapists who did not choose their supervisor. These findings were consistent with Edwards *et al.* (2005) study where higher MCSS scores were reported by community nurses in the UK who had chosen their supervisor. As highlighted by Edwards *et al.*, it may be that when supervisees are able to choose their supervisor, the level of trust increases and supervisees feel supported to discuss sensitive and confidential issues. There may also be similarities in personalities resulting in shared understanding of each other's feeling or ideas. This is consistent with the

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findings of an action research study which explored the role of relationships in effective clinical supervision (Cerinus, 2005). Cerinus highlighted the importance of choice in gaining comfort, trust and confidence which are all fundamental to an effective clinical supervision relationship. Given the importance of choosing a supervisor, it was surprising that in the current study only 21.5% of supervisees chose their supervisor, which is lower than reported elsewhere in the literature (26.7% in Dawson *et al.* (2012) and 62% in Edwards *et al.* studies). As choosing a supervisor was found to be one of the most frequent predictors of the quality of clinical supervision in the current study; it could be considered a critical success factor to high quality clinical supervision of occupational therapists. Thus, strategies to improve the ability of occupational therapists to choose their own supervisor are important. These may include a mutual discussion and agreement between the line manager and supervisee to identify a suitable supervisor, encouraging the supervisee to choose their supervisor based on identified supervision needs, working and learning styles and the supervisee having access to more than one potential supervisor to choose from.

The current study found that more frequent supervision predicted higher quality supervision across four of the factors of the MCSS-26 than less frequent supervision. This finding is consistent with the nursing literature which suggests that higher frequency supervision is associated with positive evaluations from supervisees (Edwards *et al.*, 2005; Jenkins, Rafferty & Parke, 2000; Winstanley & White, 2003). While the nursing literature supports 'the more, the better' approach when it comes to clinical supervision, the evidence is mixed when it comes to the ideal frequency for sessions. Edwards *et al.* identified that sessions that took place at least once every month were found to be more effective than sessions that occurred less frequently. Rafferty, Llewellyn-Davies and Hewitt (2007), on the other hand, reported that the ideal frequency should be as often as once a week; however, this was also deemed impractical given the time constraints inherent in many areas of nursing practice (Rafferty *et al.*), which are similar to the time constraints experienced in many areas of occupational therapy practice. Even though the current study found that more frequent supervision sessions have a greater influence on the perceived quality of supervision than less frequent supervision, the clinical supervision plan should reflect a balance between the need for supervision and practitioners' (i.e. supervisees') characteristics. Practitioners new to their practice or those who handle more complex cases may typically require more frequent supervision than experienced practitioners or those that deal with less complex cases. In other words, a 'one size fits all' approach may not be best and the optimal frequency of supervision may be a complex interaction of factors such as experience of the supervisee, level of training, competence, confidence, workload, nature and scope of practice and area of practice which were beyond the scope of this study.

Limitations

While there is no gold standard in terms of response rate for surveys, the response rate of 24% was lower than anticipated but not unusual based on survey responses for health professionals (Cook, Dickinson & Eccles, 2009). Similar response rates have been found in several national surveys of occupational therapists. Brown, Rodger, Brown and Roever (2007) obtained a 27% response rate in a Canadian survey of paediatric occupational therapy practice and Mu, Lohman and Scheirton (2006) obtained a 25% rate in a national survey of American occupational therapists. As the data collected in our study were non-identifiable, non-respondents were unable to be followed up as means of improving the response rate. The response rate could have been influenced by a number of statewide research projects that were known to be taking place around the same time with occupational therapists, thereby leading to possible survey fatigue. The low response rate may mean that those who did not respond may have had characteristics different to the study sample resulting in non-response bias. However, the sample was still sufficiently large for the chosen analyses.

Another limitation of this research was the finding that the chosen factors only accounted for a small amount of variation in the quality of clinical supervision as measured using the subscales of the MCSS-26. Therefore, other factors that predict the quality of clinical supervision remain unaccounted for and require further exploration. These factors may include, but are not limited to, organisational culture, work-environmental factors (such as supportive work and peer influences), supervisor-supervisee relationship and personality, past experience of clinical supervision, individual characteristics of the supervisor and the learning style of the supervisee. Interactions between factors should also be considered. Furthermore, the influence of age on the perceived quality of clinical supervision warrants further investigation.

Conclusions

There is consistent evidence on the impact and value of clinical supervision in health-care. In terms of what constitutes quality supervision, factors such as the length of supervision sessions, frequency of supervision sessions, choice of supervisor, the type of supervision (i.e. one-to-one), and age of the supervisee were found to influence on the quality of clinical supervision. The findings from this research, for the first time, recognise both positive and negative influences on the quality of clinical supervision among occupational therapists across a range of

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practice areas. By doing so, the findings from this research can influence clinical supervision training, organisational policies and procedures and the delivery and conduct of clinical supervision in health-care settings.

Implications for practice

High quality supervision has been associated with improved patient outcomes, enhanced staff members well-being and satisfaction, as well as improved organisational outcomes (Fitzpatrick, Smith & Wilding, 2012; Martin *et al.*, 2014). Therefore, it is essential that a culture of valuing supervision and quarantining time for supervision is built amongst staff members and organisations. Despite the pressure of clinical workloads, it should be recognised that clinical supervision is an essential component of practice that has clear benefits not just for occupational therapists but for the organisation in general. As such, this activity should be maintained and strengthened, and protected supervisor-supervisee time must be incorporated as part of routine work. As choosing one's supervisor was found to be associated with high quality clinical supervision, where possible, supervisees must be provided a choice in supervisor.

There was underrepresentation of occupational therapists from rural and remote parts Queensland in this study. It is clear in the literature that this particular group of health professionals including occupational therapists face numerous geographical and access barriers (Martin, Kumar & Abernathy, 2013), resulting in the possibility of unmet professional needs. However, without sufficient data from this group, it is unclear how and through what processes, if any, these unmet needs are being addressed. Further targeted research on clinical supervision for occupational therapists from rural and remote areas is required to address this knowledge gap. Further research is also required to determine the ideal frequency of supervision in light of potential influences such as the experience and training of the supervisee and supervisor.

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Chapter Summary

This chapter presented the findings of the quantitative study in the pilot phase which investigated the factors that contributed to high quality CS in occupational therapy supervisees (Pilot phase, study 1). It was evident from this study that the MCSS-26 was a suitable CS measurement tool to use in studies with allied health professionals. It is noteworthy that the distribution of the MCSS-26 data was not normal due to a few observations at the extremes of the MCSS-26 scales. These outliers were removed to ensure that the distributions of the scales were normal and linear regression could be implemented. One of the challenges in this study was obtaining sufficient representation of health professionals from rural and remote sites. It appears that blanket recruitment strategies employed in state-wide studies are not ideal if representation of health professionals in rural and remote settings is desired. To address this gap, the main phase will focus specifically on rural and remote health professionals.

4 Enablers of and barriers to high quality supervision among occupational therapists across Queensland in Australia: findings from a qualitative study

Chapter Overview

This chapter presents the findings of the qualitative study in the pilot phase. This study explored the enablers of and barriers to high quality clinical supervision in occupational therapy supervisees. (Pilot phase, study 2). This study was built on the findings of the previous study (Pilot phase, study 1) and was used to clarify some findings from that study. The interview guide for this study was developed using information in the literature, as well as study findings from the previous study (Pilot phase, study 1). For example, a number of participants in Study One commented on the challenges around dual roles, where clinical supervision was also provided by the operational manager. To understand this better, a question on this was therefore added in the semi-structured interview guide (see Appendix G) to further explore this. Findings pertaining to this can be found on page 30 (the section on dual roles).

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Enablers of and barriers to high quality clinical supervision among occupational therapists across Queensland in Australia: findings from a qualitative study

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Abstract

Background: Health professionals practising in countries with dispersed populations such as Australia rely on clinical supervision for professional support. While there are directives and guidelines in place to govern clinical supervision, little is known about how it is actually conducted and what makes it effective. The purpose of this study was to explore the enablers of and barriers to high quality clinical supervision among occupational therapists across Queensland in Australia.

Methods: This qualitative study took place as part of a broader project. Individual, in-depth, semi-structured interviews were conducted with occupational therapy supervisees in Queensland. The interviews explored the enablers of and barriers to high quality clinical supervision in this group. They further explored some findings from the initial quantitative study.

Results: Content analysis of the interview data resulted in eight themes. These themes were broadly around the importance of the supervisory relationship, the impact of clinical supervision and the enablers of and barriers to high quality clinical supervision.

Discussion: This study identified a number of factors that were perceived to be associated with high quality clinical supervision. Supervisor-supervisee matching and fit, supervisory relationship and availability of supervisor for support in between clinical supervision sessions appeared to be associated with perceptions of higher quality of clinical supervision received. Some face-to-face contact augmented with telesupervision was found to improve perceptions of the quality of clinical supervision received via telephone. Lastly, dual roles where clinical supervision and line management were provided by the same person were not considered desirable by supervisees. A number of enablers of and barriers to high quality clinical supervision were also identified.

Conclusion: With clinical supervision gaining increasing prominence as part of organisational and professional governance, this study provides important lessons for successful and sustainable clinical supervision in practice contexts.

Keywords: Clinical supervision, Occupational therapy, Qualitative methods

Background

There are multiple challenges inherent in ensuring effective service delivery in highly dispersed populations such as those found in Queensland, Australia [1, 2]. Queensland is a geographically large state with a highly dispersed population of 4.5 million [3]. Public health services in Queensland are offered by 16 Hospital and Health Services where almost 5000 professionals from 16 discipline groups are employed [4]. Occupational therapy is one of the larger professions with services being provided across metropolitan, regional, rural and remote parts of the state. Health professionals including occupational therapists practising in non-metropolitan areas of the state often practise in professional isolation with the nearest professional colleague hundreds or thousands of kilometres away [5]. Clinical supervision (CS) is a key method of accessing professional support in such instances.

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CS can sometimes be considered an ill-defined activity [6]. In this study, CS is defined as "the formal provision, by approved supervisors, of relationship-based education and training that is work-focused and which manages, supports, develops and evaluates the work of colleague/s" [7]. This type of supervision involves reflective thinking, discussion regarding professional development issues, caseloads, clinical issues, and staff interpersonal issues [8]. This is sometimes referred to as "supportive supervision" where there is joint problem-solving and two-way communication [6].

Within the Queensland public health service CS is widely recognised and encouraged. The credentialing and defining the scope of clinical practice Health Service Directive [9] and the associated Health Service Directive Guideline [10] provide direction and guidance to health professionals including occupational therapists regarding CS. Accordingly, newly graduated allied health professionals with less than two years full-time experience are expected to undertake one hour of formal CS per week; those with two to five years full time experience, a minimum of one hour per fortnight; and those with over five years experience, a minimum of one hour per month. While these requirements are made known to all allied health professionals, little is known about how CS is conducted or what makes it effective.

Most of the CS studies reported in the literature have focussed on nurses [11, 12]. A review of the CS literature has revealed key gaps such as a lack of agreement regarding methods of determining the quality of the CS process [13] and a lack of high quality studies investigating the quality and effectiveness of CS provided or received, especially among allied health professionals [11, 12, 14–16]. It has also been acknowledged in the literature that there is a lack of rigorous primary research studies into CS of non-metropolitan health staff in countries such as Australia [17].

Benefits of clinical supervision

Historically, CS has been subjected to some criticism in the literature due to a lack of robust causal evidence linking it to improved clinical outcomes. For example, a systematic review of 18 studies that explored the impact of CS on counsellors and therapists, their practice and their clients found that links to improved client outcomes were only tentative [16]. Similarly, another systematic review of 25 empirical CS projects in psychiatric nursing found that only tentative conclusions were able to be made regarding the effect of CS [18].

Despite these limitations, there is some evidence for the effectiveness of CS. A study by Bambling et al. [19] of clients with major depression demonstrated that CS had a significant effect on a range of factors such as symptom reduction and treatment of clients. Furthermore, CS has been shown to benefit the practitioner, the patient and the organisation [20]. Reported benefits for practitioners include reduced isolation and burnout, improved coping at work and enhanced competence [21–24]. Reported benefits for patients include improved patient outcomes and better quality of care [25, 26]. Reported benefits of CS to the organisation include improved team work, improved clinical standards and enhanced quality of service delivery [19, 27]. Given the role CS plays in effective and high quality health care [19, 26] it warrants further investigation to determine what factors make it effective.

This qualitative study, with a specific focus on enablers of and barriers to high quality CS, was undertaken as part of a larger mixed methods study of the factors that contribute to high quality CS in occupational therapy across Queensland in Australia. The findings from the quantitative arm of this research will be reported in due course. The focus of this research was occupational therapists, as they are a well-established allied health profession and as CS forms an integral part of the localised governance framework.

Methods

Ethics

Ethics approval was obtained from the Metro South Hospital and Health Service Human Research Ethics Committee for multi-sites [Reference number: HREC/11/QPAH/322, Approval date: 6th September 2011]. Following this, site specific approvals were obtained from 17 Hospital and Health Services in the state of Queensland.

Design

This qualitative study was undertaken as part of a mixed methods sequential explanatory research study [28]. The qualitative study consisted of individual, in-depth, semi-structured interviews with supervisee occupational therapists.

Setting

This study was conducted in the public health service organisation in Queensland comprising of 17 Hospital and Health Services (which have now been re-organised into 16 Hospital and Health Services) [4].

Participants

As with any qualitative research, the purpose of sampling and sample size is not to represent the population. Sampling and sample size in qualitative research is influenced by methodological and practical considerations. Practical considerations include time, costs and resources required to undertake data collection and analysis. Methodological considerations include data saturation and variability within the target population. Taking these into account, participants for this research were recruited using a purposive maximum variation sampling strategy [29].

This sampling strategy captures diverse variations and helps identify common patterns that cut across variations [29]. Directors of occupational therapy and clinical education support officers across metropolitan, regional, and rural Hospital and Health Services were contacted and requested to nominate potential participants for the interviews. They were particularly asked to nominate staff from a broad range of experience and nature of role to capture diverse perspectives. Staff nominated had to be occupational therapists employed with Queensland Health and currently receiving CS. Those nominated were then contacted to obtain informed consent for the interviews.

Procedure

Nine individual, in-depth, semi-structured interviews were completed. The interviewees generally characterised the target population. In addition to practical considerations like cost and time, it became apparent that at the end of nine interviews no new information was forthcoming and the concepts emerging became similar and repetitive making any further data collection redundant [30].

An interview guide was developed based on the results from the quantitative study and literature findings. The quantitative study consisted of a survey of 207 supervisee occupational therapists in Queensland. A demographic questionnaire and the Manchester Clinical Supervision Scale were completed by the participants. Information about what factors influenced the quality of CS were obtained. Participants also had the opportunity to include free text comments about their CS experience in general.

The interview guide consisted of a comprehensive set of open-ended questions and additional relevant prompts. The purpose of the guided interviews were to elicit the participant's worldview. As per this method, the researcher identified a few broad topics (framed as questions) to help uncover the participant's meaning or perspective but otherwise respected how the participants framed and structured responses. The researcher posed open-ended questions followed by requests for elaboration [31]. Some of the categories and questions included in the interview guide were on supervisory relationship, enablers of and barriers to CS, dual relationships and telesupervision. Appendix A lists the categories and questions that were included in the interview guide. All interviews were conducted via telephone.

Data analysis

The interview data were recorded with permission, transcribed verbatim and subject to inductive content analysis. The approach while using inductive content analysis was to move from the specific to the general to observe particular instances and combine them into a larger whole [32]. Qualitative content analysis and thematic analysis are two analysis approaches frequently used in qualitative descriptive approaches [33]. Although both content and thematic analyses cut across data and search for patterns and themes, content analysis provides the opportunity for quantification of data [33]. Content analysis also allows the researcher to measure the frequency of different categories and themes [33] and hence was chosen as the preferred method of analysis.

A range of techniques were employed to enhance the research rigour of the qualitative data analysis and interpretation processes. Strategies used to promote credibility, transferability, dependability and confirmability of the data analysis and interpretation processes included adherence to the semi-structured interview guide, audiotaping interviews, transcribing verbatim by an independent typist, coding by more than one investigator, cross checking between coders and member checking of a proportion of the data [31, 34–36]. Data were de-identified to promote trustworthiness of the analysis process. To avoid conflicts of interest, threats to accuracy of data and to maintain confidentiality, a potential interview participant that was nominated was excluded as that participant was in a previous CS partnership with the principal investigator.

Results

The interview participants were from work places that represented a range of geographical areas in Queensland such as metropolitan, regional, rural and remote. Position classification of the participants and experience levels in the profession and the role also varied broadly. Participants reported receiving one-to-one CS, peer group supervision and/or mentoring in their current roles. Further demographic details of the participants have been included as Table 1. Content analysis of the interview data resulted in the following eight themes:

Supervisor-supervisee matching/fit is important

A predominant theme arising from the interviews was that supervisee-supervisor matching and fit were important. When the supervisee was matched carefully with a suitable supervisor, the supervisory relationship was reported to be more positive and effective. Being provided with a choice of supervisor was considered desirable by most participants. One supervisee commented thus:

> "I am actually really happy with the supervision I am getting at the moment. I was very, very lucky to get the supervisor I have right now. I proactively sourced my supervisor in order to get somebody who was suited to not only my background but also my clinical level, so yeah, I'm really pleased with it"

Table 1 Participant demographics and information about CS received ($n = 9$)

Demographic characteristics	Number
Gender	
Male	0
Female	9
Workplace Location	
Metropolitan	3
Regional	2
Rural	2
Remote	2
Nature of role	
Clinical	8
Non-clinical	1
Position Classification	
Health Practitioner level 3	5
Health Practitioner level 4	2
Health Practitioner level 5	2
Mode of CS	
Face-to-face	3
Telephone	6
Relationship with the supervisor	
Knew supervisor beforehand	4
Did not know the supervisor beforehand	3
Choice of supervisor	
Chose their supervisor	4
Supervisor was allocated	5

Supervisory relationship affects supervisee perceptions of the effectiveness of CS

When the supervisory relationship was reported to be positive and supportive, CS was considered to be effective. All participants that reported a positive supervisory relationship also reported satisfaction with their CS arrangements. One participant described the supervisory relationship with her supervisor as supportive, considerate, understanding and positive. When this participant was asked about the ways in which such a supervisory relationship affected her supervision she said:

> "It affects it in a positive way, like you definitely make the time to have that regular supervision and you make the time to sit down and obviously do things as a result of your supervision. So yeah, it leaves you with a more positive work environment for yourself"

Availability of supervisor between CS sessions enhances the perceived effectiveness of CS

Many participants considered having access to the supervisor between CS sessions as desirable. Those that reported having access to their supervisors and felt comfortable contacting them in between sessions when required, reported their CS to be effective. One participant remarked:

> "…It's handy to have the other person (supervisor) there. I email her in between times to ask questions…"

Validation is an important function of CS

Participants generally regarded validation as an important function of CS. They reported that CS provides them with a chance to hear someone else's perspective and obtain feedback on their practise. One participant said:

> "….I actually really enjoy it (CS)…. I find it really affirmative…. I think probably the sense of security I get with having that relationship is what I value the most".

There is a general sense of confusion regarding CS

Many participants appeared to be confused about what CS entailed. Confusion was especially noted around terminologies related to supervision. Some participants found it difficult to differentiate CS from peer group supervision and mentoring. Few participants reported receiving more than one type of supervision and were unable to differentiate one form the other. One participant said:

> "….to be really honest, I think it's more about clarification of what you mean by supervision… because there is supervision and there is supervision. There is supervision with constructive feedback , there is supervision with you know actually assisting you to know as a clinician and challenge your thoughts….and there is supervision to make sure your mandatory training is up to date…."

Dual roles are not considered optimal

All participants agreed that they would like to keep their CS separate from line management. When asked about CS and line management being offered by the same person, one participant said:

> "I don't think I would like that arrangement because sometimes you might want to discuss things, you know, professional issues you have, that may involve your line manager or you want advice on how to tackle that or talk about that to your line manager and that would be pretty hard when your line manager is your supervisor"

Another participant that was receiving CS from her team leader/manager said:

"Supervision is affected by other points I mentioned before because it is not 100 % focused on me and my goals, it is often focused on the department goals or her goals"

Some face-to-face contact is considered to make CS via telephone more effective

There was general consensus that adjunct face-to-face contact with the supervisor or prior face-to-face interaction with the supervisor even if outside the supervision context, made CS received over the telephone more effective.

A participant that was receiving CS from a supervisor she had never met face-to-face expressed numerous concerns about the effectiveness of CS received and the supervisory relationship. She said:

"…I think it is really difficult, especially when you are starting to get to know someone…yeah it's really tricky because you don't have any of that, you know, body language or you know facial expressions to sort of get some feedback on what you are saying and I think that is difficult…just not being able to see someone it's difficult, probably more difficult to develop rapport"

On the other hand, another participant that received CS from a supervisor known to her from before entering the CS partnership stated:

"… It does help that I have met her face-to-face, you know that makes a huge difference to me…I don't think I could do it as well if I hadn't met the person face-to-face…"

Enablers of and barriers to effective CS

Participants were asked about the different enablers of and barriers to CS they encountered. Enablers of effective CS reported include face-to-face mode of supervision, good supervisor-supervisee fit, CS sessions being supervisee-driven, structured sessions, use of agendas, having an action plan for follow-up after sessions, being organised, having clear expectations, having flexibility, and open communication with the supervisor. Some of the barriers to effective CS reported include lack of time, other workload commitments, being located in a non-metropolitan area, dual roles, supervisor being unavailable and unwelcoming, unstructured sessions, lack of confidential space to hold sessions, having a different learning style to that of the supervisor and having a negative supervision culture in their work unit where CS is not valued.

When asked about the facilitators of effective CS, one participant reflected on a previous CS partnership that she described as the 'best' supervision experience she had so far. She said:

"… my supervisor and I had the same learning styles, we were both reflective learners, we set clear goals at the very start of supervision…. Everything was very structured…we had lots of debriefs….. my supervisor was always available to talk about the challenges on the ward….at the end of the rotation, I could see where I had started and where I had finished and what I had achieved… it was very neat and effective"

Another participant while commenting on barriers to effective CS said:

"…one of the critical things is the barrier when people aren't clear about what they want, and what they get supervision for… so it becomes a catch up coffee shop stop and I do lots of supervision in a coffee shop but that doesn't mean you don't have a clear vision of what your agenda is and why you are doing it"

Discussion

There is a growing body of evidence on the impact of CS across a range of health professions [20] and the important role CS can play, including in non-metropolitan settings [36]. As this research spans across metropolitan and non-metropolitan regions, it provides insight into the factors that contribute to high quality CS across a range of geographical areas. As CS has been under-researched in some allied health professions, such as occupational therapy, findings from this study are expected to contribute to the evidence-base in this area.

Findings pertaining to the importance of supervisor-supervisee matching and fit concur with previous research findings by Ducat et al. [36]. Findings from that multi-disciplinary study highlighted that a good supervisor-supervisee fit was of critical importance. Results indicated that a poor match often resulted in ineffective CS. The participants in that study reported that a good supervisor-supervisee fit resulted in a positive relationship that was reciprocal [36]. A good supervisor-supervisee fit influences the supervisory relationship which has been identified as the single most important factor for effective CS in many empirical studies [14, 37, 38]. Findings from this study reinforce the importance of the supervisory relationship as those participants that reported positive, supportive relationships also reported that their CS was effective.

Dual roles were not considered desirable by most participants in this study. When CS and operational or line management are provided by the same person, there is a risk of departmental issues taking priority over the supervisee's learning needs. This is consistent with an allied health study by Dawson et al. [39] which reported that supervisees' expressed desire to better separate line management and CS. It appears that CS is more effective when provided by someone other than the supervisee's manager. This is

because such an arrangement promotes a confidential environment for the supervisee where they are better able to disclose information and discuss issues of concern without 'guarding'. It is also likely that if CS and operational or line management were provided by the same person, due to clinical priorities and competing work demands, CS may be seen a "poor cousin" in the work context and hence pushed down the list of priorities.

A number of participants in this study received CS via telephone. There was general consensus that this arrangement worked better when they had some prior interaction with the supervisor (before entering the CS partnership) or had met the supervisor face-to-face. CS via telephone denies the supervisee access to the supervisor's non-verbal communication. The effect of this appears to be more detrimental when the supervisee has not had prior face-to-face interactions with the supervisor. These findings highlight supervisees' need for supplemented face-to-face contact while receiving CS via telephone. This is consistent with the telehealth model for CS proposed by Wood, Miller and Hargrove [40]. As per this model, telesupervision supplemented with on-site face-to-face CS is considered helpful for trainees and new practitioners. However, it must be acknowledged that it is not always possible for rural and remote health practitioners to have supplementary face-to-face CS to adjunct telesupervision. This is due to barriers such as geographical issues, time, resources available for travel and competing workload and clinical priorities. Despite this, as many health professionals, especially in rural and remote settings, use technology to receive CS, ongoing further research is warranted to explore the uptake of and the impact from the use of technology to receive CS.

Limitations

Despite generating new knowledge about important issues pertinent to CS in occupational therapy, there are some limitations to this research. This research was conducted with nine participants, all female, from one geographical location in Australia (Queensland). While this may be considered as a limitation as the findings cannot be generalised to the broader population of occupational therapists, they nevertheless provide some useful insight into CS issues that require ongoing exploration and research. While the qualitative arm of the study explored the quality of CS from a supervisee's perspective, it did not explore the supervisor's perspective. Further studies are required to explore this. Whilst this study provides rich information about CS in occupational therapy, it does not provide a multidisciplinary perspective. Further research is required especially in a range of allied health professions to investigate what factors make CS effective.

Conclusions

Health professionals such as occupational therapists practising in highly dispersed geographical locations such as in Queensland, Australia rely on CS for professional support and guidance. While policies and guidelines exist in organisations such as Queensland Health regarding minimum CS requirements, little was known about how CS was actually conducted and what factors impacted the quality of CS received by supervisees. This study explored the enablers of and barriers to high quality and effective CS of occupational therapists in Queensland from a supervisee perspective.

The findings from this study contribute to the growing evidence base for CS in allied health. The findings from this study indicate that a number of factors were perceived to be associated with high quality CS. Supervisor-supervisee matching and fit, supervisory relationship and availability of supervisor for support in between CS sessions appeared to be associated with perceptions of higher quality of CS received. Some face-to-face contact appeared to improve perceptions of the quality of CS received via telephone. Supporting previous literature findings, the findings from this study also highlight a general sense of confusion regarding supervision and the associated terminology. Lastly, dual roles, where someone received CS and line management from the same person, were not considered desirable. A number of enablers of and barriers to high quality CS have also been identified. As CS gains prominence as part of organisational and professional governance, it is imperative that implementing best practice CS is underpinned by current best evidence regarding "what works" in practice contexts. The findings from this study provide important lessons for successful and sustainable CS implementation in practice contexts.

Appendix A

Interview guide

Some of the categories and questions included in the interview guide were:

a) Clinical supervision (CS)
   - Tell me about the CS you receive
   - How do you find the CS you receive?
   - Is your supervisor also your line manager?
   - What would you like to say about dual relationships where a supervisee's clinical supervisor is also their line manager?

b) Supervisory relationship
   - Tell me about your relationship with your supervisor?
   - How does this relationship affect your CS?

c) Facilitators of and barriers to effective CS

- Let us think about what you would ideally like your CS to be like. What would you like it do for you?
- If you could make your CS exactly how you would like it to be, what would it be like? What would make it more effective?
- Think about the ideal things that you just talked about. Are there things that get in the way of achieving that type of CS?

d) Telesupervision

- Do you receive CS via telephone?
- How do you find the CS you receive via telephone?
- Are there things that make the telesupervision arrangement less effective for you?

Abbreviations
CS: Clinical supervision.

Competing interests
The authors declare that they have no competing interests.

Authors' contributions
PM designed the project, obtained ethics approval and led the research project. SK assisted with data collection, analysis and the conceptualisation of the manuscript. PM, SK, LL and AvE contributed to drafting and finalising the manuscript. All authors read and approved the final manuscript.

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Complementary Publication: Twelve tips for effective clinical supervision based on a narrative literature review and expert opinion

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Publication Overview

This publication arises from the literature review on the factors that influence high quality clinical supervision in health professionals. It outlines twelve practical strategies for health professionals to enhance the quality of clinical supervision at the coal face.

Journal permission to include this paper in the thesis has been attached in Appendix 5.

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TWELVE TIPS

Twelve tips for effective clinical supervision based on a narrative literature review and expert opinion

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Abstract

Background: Clinical supervision has gained wide recognition in recent years as an essential component of a practitioner's continuing professional development. However, confusion exists in professional literature regarding the most effective models, styles, processes and methods of clinical supervision.

Aim: This article outlines the elements required to establish and sustain an effective clinical supervision arrangement for health professionals, based on current evidence and the author's expert opinion.

Conclusion: A set of practical strategies are proposed to assist practitioners to establish an ongoing, effective clinical supervision partnership.

Introduction

The term clinical supervision has been used in a variety of ways. There is diversity in thinking about clinical supervision as it encompasses various ideas, different approaches and methods (Jones 2006). It has been acknowledged that the term clinical supervision itself is problematic as it is interpreted differently by different groups depending on the origin/historical use of the word, dynamic changes, relevance of the concept to different cultural groups, the language spoken and the meaning attached to this language (Walsh et al. 2003; Shanley & Stevenson 2006). Bogo and McKnight (2008) strongly recommend the use of consistent terms in regards to supervision in order to facilitate communication about this area. In this article, the term clinical supervision is defined as a formal process of professional support and learning which enables individual practitioners to develop knowledge and competence, and is acknowledged to be a life-long process (Edwards et al. 2005; Simpson & Sparkes 2008). This type of supervision involves reflective thinking, discussion regarding professional development issues, case-load, clinical issues, and staff interpersonal issues (Fone 2006). Therefore, the term clinical supervision in this article does not include supervision of subordinate personnel or assistants. Clinical supervision as defined here may be equated with terms such as "guided supervision," "professional supervision" or "intervision."

Clinical supervision is an essential component of a clinician's continuing professional development (Kilminster & Jolly 2000; Fone 2006; Herkt & Hocking 2007; Cox & Araoz 2009; Hall & Cox 2009). Clinical supervision differs from related activities, such as mentoring and coaching by incorporating an evaluative component (Milne 2007). Mentoring is usually a voluntary, non-reporting relationship with a more experienced health professional while clinical supervision is non-voluntary as it is a requirement of many organisations and registration bodies (Strong 2008). On the other hand, coaching is used as a method for improving instruction and teaching strategies, experimenting with new approaches and techniques, problem solving, and building collegial relationships (Gallacher 1997).

Clinical supervision has been shown to benefit the practitioner, the patient and the organisation. For practitioners, the benefits of clinical supervision include supporting those working in isolation (Clough 2003), assisting practitioners to cope better with their work and workplace (Edwards et al. 2005), developing the competence and knowledge of the practitioner (Kleiser & Cox 2008) and reducing burn-out (Edwards et al. 2006). For patients, it has been suggested that supervision has a positive effect on patient outcomes and that a lack of supervision of health professionals can be harmful to patients (Kilminster & Jolly 2000; Farnan et al. 2012). There is general agreement that the purpose of supervision, whether stated or implied, is to improve the patient care experience (Kilminster & Jolly 2000; Spence et al. 2001). When established and conducted effectively, supervision is proposed to provide an environment in which clinicians can safely appraise their practice, develop professional skills, question established practices and seek new approaches, thus improving the standard of patient care (Hunter & Blair 1999; Farnan et al. 2012). For the organisation, supervision is described as improving multi-disciplinary teamwork, enabling the development of clinical standards and enhancing the quality of service delivery (Hunter & Blair 1999).

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Evidence suggests that irrespective of professional and theoretical background, supervisors engage in very similar supervisory practices (Rich 1993; Ladaney et al. 1999). There appear to be far more similarities than differences across many professional groups (such as social work, psychology, speech pathology and occupational therapy) in the aims, processes, and methods of supervision (Spence et al. 2001).

Despite the importance of clinical supervision to professional development and practice, there is a lack of research regarding how it is best conducted (Jones 2006). Furthermore, lack of awareness among practitioners regarding effective supervisory strategies has been said to lead to confusion regarding the supervision process (Sweeney et al. 2001a; Buus & Gonge 2009).

This article aims to outline some practical tips that would enable a practitioner to establish an effective clinical supervision partnership. As this review is based on literature from several disciplines including nursing, medicine, psychology, psychotherapy, counselling, social work, physiotherapy, occupational therapy and speech pathology, it is expected to address the needs of practitioners from multiple health professions.

Tip 1

Identifying a suitable clinical supervisor

Findings from a number of studies indicate that choosing one's own supervisor enhances the quality of the supervisory relationship and hence promotes the overall quality and effectiveness of clinical supervision (Sweeney et al. 2001a; Edwards et al. 2005; Cutcliffe & Hyrkas 2006; Hall & Cox 2009). This is related to the finding that choosing one's own supervisor enhances the trust and rapport between the supervisor and the supervisee (Edwards et al. 2005).

Tip 2

Deciding on the most suitable type of supervision

Three types of clinical supervision delivery often cited in the literature are one-to-one supervision, peer group supervision or a combination of both (Edwards et al. 2006; Horton et al. 2008; Cox & Araoz 2009). There are mixed views in the literature regarding the preferred type of supervision (Spence et al. 2001; Abbott et al. 2006; Clough 2003). The preferred type of supervision tends to vary according to the discipline, with some disciplines such as occupational therapy and psychology traditionally preferring the one-to-one method (Cox & Araoz 2009; Palomo et al. 2010) and disciplines such as speech-and-language therapy preferring the group method (Horton et al. 2008).

Peer supervision is different from one-to-one supervision and emphasises mutual respect and collegial support (Spence et al. 2001). Winstanley and White (2003) surveyed over 1000 respondents in the UK and found that supervisees in group sessions felt that the advice and support given by their supervisor was more effective than supervisees receiving clinical supervision in a one-to-one situation. In a study of 260 nurses in the UK, Edwards et al. (2005) found that the type of clinical supervision received did not impact on the effectiveness of clinical supervision. Peer supervision is said to be appropriate for experienced practitioners, staff for whom a senior is unavailable, or when used as an adjunct to one-to-one supervision (Spence et al. 2001).

It therefore appears that the important considerations for practitioners when deciding upon the most suitable type of supervision are their experience within the profession, their experience in the specific clinical role they are assuming and the remoteness of their location.

Tip 3

Establishing a supervision agreement/contract and using a supervision agenda

Utilising a supervision agreement or contract is promoted as a key component of an effective supervision process (Hunter & Blair, 1999; Sweeney et al. 2001a; Herkt & Hocking 2007; Gaitskell & Morley 2008). A supervision contract, negotiated between supervisor and supervisee, is used to form the boundaries within which both parties can work within. Using a contract helps both parties to be aware of their expectations, to examine respective hopes and fears for the relationship and to negotiate supervision needs. Specific details such as venue, frequency, duration, professional accountability and confidentiality can also be documented. It is recommended that such a contract is completed by the supervisee and supervisor collaboratively (Hunter & Blair 1999; Sweeney et al. 2001c; Clough 2003; Fone 2006).

Maintaining records of supervision meetings and outcomes is also considered an important part of the supervision process. Meeting agendas need to be set by the supervisee in consultation with the supervisor, linking the content to the supervision contract (Spence et al. 2001).

Tip 4

Choosing a venue away from the supervisee's workplace to conduct supervision sessions

Use of unsuitable space in clinical areas, or holding meetings too close to work units, have been shown to increase the likelihood of being interrupted, thus impeding the successful implementation of clinical supervision (Gilmore 2001). A survey of the perceptions of 260 nurses indicated that the level of rapport with the supervisor was higher and reflective practice of the supervisee better if the sessions were held away from the workplace (Edwards et al. 2005). In addition, having sessions away from the workplace increased the tendency of the supervisee to discuss issues of a sensitive and confidential nature. The supervisees in this study felt more supported whilst reflecting on complex clinical scenarios when sessions were held away from their usual workplace (Edwards et al. 2005).

Tip 5

Deciding on the optimal meeting length and frequency

Recommendations made by experts in the field of clinical supervision include scheduling supervision sessions regularly and for a sufficient length of time to be effective (Edwards et al. 2005; Cox & Araoz 2009). In a study of social workers (Kilminster & Jolly 2000), the amount of supervision received was significantly correlated with supervisee satisfaction with supervision. A study of mental health professionals in Queensland (Kavanagh et al. 2003), found that supervision frequency had a positive relationship with the perceived impact of supervision on clinical practice, particularly when the supervisor was from the same discipline ($r = 0.28$, $p < 0.001$).

Butterworth et al. (1997) recommended that clinical supervision sessions should occur for no less than 45 min every four weeks. Winstanley (2003) recommended that each clinical supervision session should be a maximum of one hour for hospital-based nursing staff in order for it to be of use, whereas for community-based nursing staff extending sessions to more than one hour was needed to be perceived beneficial by the supervisee. Edwards et al. (2005), in their study of 260 community nurses using the Manchester Clinical Supervision Scale, found that supervisees whose sessions lasted for over an hour in length achieved the highest score on the measure.

Most individual organisations and professional regulating bodies have recommended supervision implementation standards and guidelines (e.g. Making a difference: clinical supervision in primary care, Department of Health, London 2000; Queensland Health allied health professional support guidelines, 2012; American Occupational Therapy Association's guide for supervision of occupational therapy personnel, AOTA 2004). Many of these guidelines contain minimum requirements which are to be met by employees. It is recommended that those with lesser experience, those newer to their role, and those working in isolation will benefit from more frequent, longer supervision sessions, compared to those who are experienced in their role and well-networked.

Tip 6

Using effective communication and feedback

Feedback is a two-way interaction and is a critical component of any successful supervisory relationship (Sweeney et al. 2001c; Gaitskell & Morley 2008; Fowler 2011). Giving and receiving constructive feedback on a regular basis has been cited as the most powerful but underused strategy in supervision (Hunter & Blair 1999). To be effective, feedback should be clear, regular, balanced with both positive and constructive elements, non-threatening, and specific (Sweeney et al. 2001c; Cox & Araoz 2009). In addition to the supervisor giving feedback on the supervisee's performance, the supervisor should request and respond to feedback from the supervisee about the process of supervision, his/her style as a supervisor, and the content and climate of supervision sessions (Sweeney et al. 2001c). In a study of 18 therapists conducted in the UK, audio-taped therapy sessions of the supervisee conducting client assessment or treatment sessions have been shown to be of use to assist the supervisor in providing feedback about the supervisee's performance (Cox & Araoz 2009).

Tip 7

Facilitating reflective practice

Reflective practice is an integral part of effective clinical supervision and is part of the normative or educative function of clinical supervision. Normative function is a component of the tripartite model of supervision described by Proctor. This includes discussion regarding the norms, the policies and the procedures of the workplace. It can also include education regarding the professional standards and ethics (Clough 2003; Richardson et al. 2003; Winstanley & White 2003; Herkt & Hocking 2007; Simpson & Sparkes 2008; Cox & Araoz 2009; Hall & Cox 2009; Fowler 2011). In a study conducted by Cox and Araoz (2009) with therapists in the UK, 86% of the participants reported using reflective practice within their supervision sessions. Results from another study of 558 nurses in the UK showed that participants expected that clinical supervision would take on a reflective nature: 89% reported that clinical supervision that involved reflective practice would help them to focus on and improve patient care; 91% thought it would help them focus on their strengths; and, 90% thought it would help them focus on their weaknesses (Fowler & Chevannes 1998).

Reflective practice is enhanced by the use of specific reflective processes, logs, diaries, the exchange of ideas, dialogue and discussion (Cox & Araoz 2009). Reflective practice also involves thinking through previous events, experiences and ideas; and writing them down (Hall & Cox 2009).

For the experienced practitioner, reflecting on their practice may be easy for routine tasks (Fowler 1998). In a study of experienced occupational therapists, Herkt and Hocking (2007) found that reflective practice in supervision was used by some therapists as an opportunity to raise their self-awareness. For the supervisee with minimal experience, reflective skills may need to be developed. Supervisors are encouraged to direct supervision sessions and to facilitate supervisee's reflection to avoid supervisee frustration that may arise from not being able to reflect spontaneously (Fowler & Chevannes 1998).

Fone (2006) describes some practical strategies to assist the supervisor in facilitating reflective thinking of the supervisee. These include encouraging the supervisee to complete self-appraisal and debriefing; asking the supervisee what led them to making a decision and what they could have done differently; asking the supervisee to verbalise a sequence of thoughts and decisions; paraphrasing what the supervisee says; and encouraging the supervisee to practise verbalising clinical reasoning.

Tip 8

Considering use of more than one mode for distance clinical supervision

Literature reports the use of both face-to-face and distance supervision methods. Face-to-face supervision can include observation, modelling, co-treatment, discussion, teaching and instruction (Sweeney et al. 2001a). Many of these methods are difficult to engage in during distance supervision which can be via tele-conference, video-conference, e-mail and other computer-based technologies. Distance from supervisors is perceived by supervisees as a barrier to effective supervision, with some studies reporting a strong preference for face-to-face delivery (Clough 2003; Kavanagh et al. 2003; Cox & Araoz 2009).

Lack of face-to-face supervision is a particular issue in countries with a large geographical area and a relatively small and dispersed population, such as Australia (Spence et al. 2001). This is due to the shortage of qualified practitioners in regional, rural and remote areas (Spence et al. 2001; Kavanagh et al. 2003). Given the nature of distance supervision, with lack of face-to-face contact making it less desirable, it would appear that more than one mode of contact may be necessary. While further research is required to determine the effectiveness of supervision using computer-based technologies, video-conferencing and tele-conferencing (Spence et al. 2001), the first author recommends the use of more than one mode for distance supervision where possible. This recommendation is based on the health service process evaluation and the first author's experience supervising practitioners from a distance in regional and rural Queensland. In the initial phase of establishing the supervision relationship, alternating tele-conferencing with video-conferencing (when available), helps to break down barriers and to improve rapport between the supervisee and supervisor. Making use of other opportunities (e.g. attending a workshop or a conference) to meet face-to-face with the supervisor/supervisee is also recommended.

Tip 9

Building a positive supervisory relationship

A good supervisory relationship is described in the literature as one that is positive, supportive, trustworthy, non-judgemental and encouraging (Hunter & Blair 1999; Spence et al. 2001; Herkt & Hocking 2007; Hall & Cox 2009). Empirical studies have identified that the quality of the supervisory relationship is the single most important factor for effective supervision (Hunter & Blair 1999; Kilminster & Jolly 2000; Spence et al. 2001; Kavanagh et al. 2003; Herkt & Hocking 2007; Cox & Araoz 2009; Karpenko & Gidycz 2012). These findings have been consistent across professions including social work, psychology, psychotherapy, occupational therapy and nursing (Hunter & Blair 1999; Kilminster & Jolly 2000; Spence et al. 2001; Kavanagh et al. 2003; Herkt & Hocking 2007; Cox & Araoz 2009). A particularly important feature of the supervisory relationship which emerged from a study of the perceptions of allied mental health practitioners in Queensland is the positivity of the supervisory relationship, which involves mutual respect for each other (Kavanagh et al. 2003).

A wide range of ineffective supervisory behaviours have been described in the literature as barriers to a positive supervision relationship. These behaviours include rigidity, failure to consistently track supervisee concerns, failure to teach or instruct, being indirect and intolerant, being closed, lacking respect for differences, being sexist; and emphasising evaluation, weakness and deficiencies (Kilminster & Jolly 2000; Spence et al. 2001). Being non-collegial, lacking in praise and encouragement and providing low empathy and support have also been described as ineffective behaviours that act as barriers to a positive supervision relationship (Kilminster & Jolly 2000; Spence et al. 2001). Clinical supervisors who are inconsistent, overly demanding, condescending, uncaring, or disrespectful have been shown to impede learning in the clinical setting (Plack 2008). In addition, a study of occupational therapists by Sweeney et al. (2001a) identified that a lack of disclosure of practice issues by supervisees, such as not feeling confident in administering a particular test or completing an assessment, as a barrier from the supervisor perspective.

Tip 10

Separating clinical supervision from line management

Clinical supervision is complementary to, yet separate from, other forms of supervision (e.g. managerial supervision or line management) (Winstanley 2000). There has been much debate in the literature regarding the effectiveness of clinical supervision provided by a line manager (Spence et al. 2001; Sweeney et al. 2001a,b,c; Landmark et al. 2003; Abbott et al. 2006; Herkt & Hocking 2007; Kleiser & Cox 2008). A critical literature review on the integration of clinical and managerial supervision by Kleiser and Cox (2008) found that some authors acknowledge that managers can operate effectively as supervisors. However, when line management and clinical supervision is provided by the same person, evidence suggests that supervision time is frequently taken up in discussion of administrative issues, rather than clinical matters (Spence et al. 2001; Kleiser & Cox 2008).

In some instances, administrative supervision/line management is linked to performance evaluation of the employee. When this happens, there are a range of ethical and practical issues surrounding this combination of roles (Spence et al. 2001; Herkt & Hocking 2007). For example, in a study of occupational therapists by Herkt and Hocking (2007), practitioners who were clinically supervised by their line managers constantly raised the issue of power imbalance in the supervision relationship. They expressed concerns about being seen as incompetent if they discussed issues regarding their work skills and performance. This influenced what concerns the occupational therapists mentioned in supervision as they felt that disclosure of perceived incompetency or performance below an expected standard would impact on them within the workforce. These supervisees used a range of

actions termed as "guarding," where they consciously or unconsciously protected themselves using cognitive avoidance strategies or by physically avoiding supervision. The results of this study further suggested that when participants used guarding, there was a strong negative impact on the supervision outcome. That is, if the supervisee did not disclose issues of perceived incompetence, an opportunity to reflect and learn was lost. This leads to a poor supervision outcome as well as supervisee frustration as issues meaningful to the supervisee are neither discussed nor resolved. Cutcliffe and Hyrkas (2006) reported that of 74 multi-disciplinary health professionals in the US, 90% of the participants held the attitude that their supervisor should not also be their line manager.

Where individual circumstances/organisational processes do not permit access to a clinical supervisor who is different to the line manager, it is recommended that supervision issues be clearly separated from line management issues. A clearly-structured supervision contract outlining separate clinical supervision and managerial agendas is recommended. Regular reviews and feedback from the supervisee are crucial in such arrangements.

Tip 11

Undertaking training in supervision

Different ways of learning about clinical supervision include reading books and articles on supervision, reflecting on the supervision provided and received or completing a training course on supervision (Geller & Foley 2009). Of these methods, completing a training course on clinical supervision has been the most frequently cited method in the literature of building supervision skills (Hunter & Blair 1999; Kilminster & Jolly 2000; Spence et al. 2001; Sweeney et al. 2001c; Gaitskell & Morley 2008).

Training in clinical supervision for both the supervisee and the supervisor may maximize the use of the clinical supervision process (e.g. the supervisor and supervisee are likely to become aware of the best practice guidelines in regards to effective clinical supervision). In addition, training may assist both parties in keeping up to date with evidence regarding effective clinical supervision practices (Hunter & Blair 1999; Kilminster & Jolly 2000; Spence et al. 2001; Sweeney et al. 2001c; Gaitskell & Morley 2008).

For the supervisee, training aims to enable the supervisee to understand how best to receive supervision, to increase awareness of the issues that can potentially have an impact on supervision and to provide an awareness of the demands on and the limitations of the supervisor. In addition, training also aims to provide clarification of the supervisee's own needs and expectations; to promote an understanding of the role, function, strategies and techniques of supervision, and to provide an introduction to appropriate theoretical and practice-led literature on supervision (Sweeney et al. 2001c).

Lack of training in supervision and a lack of exposure to theoretical models of supervision is said to contribute to confusion regarding the supervision process in disciplines such as occupational therapy (Sweeney et al. 2001c). A study of senior medical consultants in Norway found that training positively affected motivation, increased awareness about learning needs and increased interpersonal and communication skills within the supervision process (Lycke et al. 1998). Although many authors describe the importance of training, a systematic review on translation of knowledge strategies by Scott et al. (2012) suggests that training can be ineffective in changing behaviour. This emphasises the importance of reflective practice in combination with training.

Tip 12

Evaluating clinical supervision

Evaluation of the supervision offered and received is integral to ensuring that supervision sessions are effective. A range of formal and informal methods can be used to evaluate clinical supervision (Jones 2006). Formal evaluation methods that have been reported in the literature include focus group interviews, semi-structured interviews and self-report questionnaires (Winstanley & White 2003). Tools are available to measure a number of different aspects of clinical supervision, including the quality and effectiveness of clinical supervision (e.g. Manchester Clinical Supervision Scale), the supervisory relationship (e.g. Supervisory Relationship Questionnaire) and the supervisory style (e.g. The Supervisory Styles Inventory). Discipline-specific tools are also available such as the Nursing in Context Questionnaire for nurses and Clinical Supervision Evaluation Questionnaire for Speech and Language Therapists. Some of the most widely cited clinical supervision measurement tools are the Manchester Clinical Supervision Scale (Winstanley 2000), the Clinical Supervision Evaluation Questionnaire (Horton et al. 2008) and the Supervision Attitude Scale (Kavanagh et al. 2003).

Informal methods of evaluating clinical supervision include the use of feedback and regular reviews. It is recommended that supervisees and supervisors evaluate their sessions on a regular basis. Factors such as the style of supervision, whether the needs of the supervisee are being met, the effectiveness of feedback provided and the nature of the supervisory relationship, should be evaluated. This should be followed by changes to the clinical supervision contract or arrangement if required.

Conclusions

Clinical supervision has been adopted by various disciplines as a means to support health practitioners as well as to uphold the quality of patient care. Based on research findings to date and the authors own experience supervising practitioners, this article outlines practical guidelines to assist practitioners to set up an ongoing effective clinical supervision arrangement.

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Chapter Summary

This chapter presented the findings of the qualitative study in the pilot phase which explored the enablers of and barriers to high quality CS in occupational therapy supervisees. (Pilot phase, study 2). Data collection and analysis were undertaken side-by-side; and data was read and re-read several times during the analysis, thereby using an iterative process. Content analysis of the data resulted in the development of eight themes that were broadly around the importance of the supervisory relationship, the impact of CS, enablers of and barriers to high quality CS. This pilot qualitative study enabled testing of the interview guide used to conduct individual, semi-structured interviews, as well as the content analysis process. This chapter also included a paper outlining 12 tips for effective CS to provide practical pointers to supervisees and supervisors at the coal face.

5 A systematic review of the factors that influence the quality and effectiveness of telesupervision for health professionals

Chapter Overview

This chapter includes a published systematic review on factors that lead to effective and high quality telesupervision. Additionally, it includes a complementary publication on ten practical tips for health professionals to enhance the quality and effectiveness of telesupervision. The literature review and pilot phase highlighted the lack of literature on the factors that contribute to high quality CS in rural and remote healthcare settings. The pilot phase highlighted that telesupervision (CS using technology) was common practice in rural and remote settings. Although telesupervision is common practice, it remains under-researched. Subsequently, there is a lack of evidence-informed guidelines on what makes it high quality. This systematic review was undertaken to address this gap.

Journal permission to include this paper in the thesis has been attached in Appendix E.

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A systematic review of the factors that influence the quality and effectiveness of telesupervision for health professionals

Priya Martin[1,2], Lucylynn Lizarondo[3] and Saravana Kumar[1]

Abstract

Introduction: Whilst telesupervision (clinical supervision undertaken using communication technology) is being used more frequently, there is limited information on what factors influence its effectiveness and quality. We undertook this systematic review to address this gap.

Methods: Eligible telesupervision studies were identified following targeted search of electronic databases and the grey literature. Data were synthesised thematically, resulting in development of core themes.

Results: We identified 286 papers for initial relevancy screening by title and abstract. The full text of 36 papers were then retrieved and assessed for further relevance. A total of 11 papers were included in the final analysis. We identified eight themes that contribute to effective and high-quality telesupervision: supervisee characteristics, supervisor characteristics, supervision characteristics, supervisory relationship, communication strategies, prior face-to-face contact, environmental factors and technological considerations.

Conclusion: From the available evidence, telesupervision can be a feasible and acceptable form of clinical supervision if set up well. Further studies with robust designs are required to strengthen the existing evidence on what makes telesupervision effective, as well as to examine its cost-effectiveness.

Keywords

Tele-education, clinical supervision, telesupervision, continuing professional development

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Introduction

Clinical supervision is increasingly being acknowledged as an essential aspect of clinical governance to ensure safety and quality in health care.[1,2] It has wide-ranging benefits to patients, health professionals and organisations.[3] Benefits of clinical supervision to patients, including better outcomes, have been demonstrated in recent studies.[4,5] Lack of supervision is considered potentially harmful to patients.[5,6] Evidence of benefits of supervision to health professionals are well-documented, including supporting those working in isolation, assisting staff to cope better in their roles, reduced burnout and developing knowledge and competence.[7–10] For organisations, supervision improves multidisciplinary teamwork, enables the development of clinical standards and enhances the quality of service delivery.[11]

Clinical supervision is an important mechanism for professional support of health practitioners.[12] In countries with highly dispersed populations, such as Australia, health practitioners are known to experience professional isolation.[10,13] Clinical supervision is one way of promoting networking and professional interaction of health practitioners working outside bigger metropolitan centres to reduce isolation.[10,12,14] In many of the non-metropolitan centres, suitable peers or experienced staff are unavailable to provide face-to-face clinical supervision. In these instances, technology is used to overcome geographical barriers to connect with clinical supervisors.

Milne defined clinical supervision as the 'formal provision by approved supervisors, of relationship-based education and training that is work-focussed and which manages, supports, develops and evaluates the work of colleague/s'.[15] This professional partnership has historically been undertaken face-to-face. However, with the

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recent rise in the use of technology in health care, many health practitioners are beginning to undertake clinical supervision using communication technology.[16] Distance supervision or telesupervision refers to clinical supervision conducted by using technology such as telephone, email or video conferencing.[17] With the rise of social media, tools such as blog, micro-blog, wiki, video chat, virtual world, podcast and social networks can also play a role in telesupervision.[18] It is important to recognise that telesupervision is not the same as tele/distance education (which also uses technology). While tele/distance education has a particular focus on teaching and learning and as such has been researched extensively,[19,20] the use of technology to support health professionals, through provider-to-provider telehealth, is the focus of telesupervision.

Although use of technology in clinical supervision is on the rise, there is a lack of clear guidelines on what factors make it effective and of high quality.[12,21–24] Although Manosevitz[22] highlighted the dearth of information on telesupervision and called for further work in this area many years ago, a recent systematic review of professional supervision experiences of allied health practitioners in non-metropolitan settings[12] highlighted the continuing lack of information in this area. Whilst telesupervision has the potential to achieve the same benefits as face-to-face clinical supervision, information on factors that make it effective and of high quality continues to be unavailable. This systematic review was undertaken to identify the factors that influence the quality and effectiveness of telesupervision. This information can assist health-care practitioners to become better informed and more confident when undertaking telesupervision.

Method

Inclusion and exclusion criteria

Studies from published and unpublished sources, which were conducted with health professionals, where clinical supervision was undertaken using communication technology, including telephone and videoconference, conducted using quantitative, qualitative or mixed methodologies and reported in the English language were included. Studies which described factors that influenced the quality and effectiveness of telesupervision using objective measures and/or self-reported tools to capture participant attitudes and perceptions were included. Most of the identified studies report perspectives of supervisees and supervisors which is consistent with the broader clinical supervision literature. Studies conducted with non-health professionals, students and interns, opinion pieces, editorials and reported in the non-English language were excluded.

Search strategy

The following databases were systematically searched: Allied and Complementary Medicine Database (AMED), The Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, Education Resources Information Centre (ERIC), Excerpta Medica dataBASE (EMBASE), Informit e-library, Medline, PsycARTICLES, PscyINFO, Turning Research into Practice database (TRIP) and Scopus. In addition, Google Scholar and grey-literature searches were also undertaken.

Three concepts were developed to inform the initial search terms, and truncation symbols and Boolean operators were used as required. The key terms utilised for this search were: concept 1—allied health personnel, health professional, health personnel, nurse, doctor, medical practitioner, physician, physiotherapist, physical therapist, occupational therapist, speech pathologist, speech and language pathologist, dietician, nutritionist, podiatrist, radiographer, social worker, or psychologist; concept 2—clinical supervision, professional supervision, telesupervision, distance supervision, supervision; and concept 3—tele, videoconference, telephone, technology, Skype, distance, rural, remote.

In addition, pearling of the reference lists of eligible studies (secondary searching) was undertaken to identify any additional studies. No limitation was placed on the time period for the search. The original search was completed on 14 June 2016 and updated in December 2016. The search strategy was reviewed and feedback provided by independent reviewers and academic librarians. The full search strategy used in PsycINFO is provided in Appendix A.

Study selection

The title and abstracts of all studies identified as potentially relevant were screened by the first two authors (PM and LL). Following this, studies that met the selection criteria were shortlisted. These studies were then critically appraised for methodological quality.

Critical appraisal

The included quantitative studies were appraised using the McMaster Critical Review Form for quantitative studies.[25] Accordingly, the qualitative studies included in the review were appraised using the McMaster Critical Review Form for qualitative studies (v2.0).[26] The critical appraisal process was undertaken independently by the two authors (PM and LL). Discrepancies in scoring were then resolved through discussions until consensus was achieved.

Data extraction

A standardised, bespoke data-extraction template was developed for the review to ensure consistency between studies and between reviewers. The data-extraction template was piloted for comprehensiveness and utility, and modifications were made accordingly. The data extracted for each study included study aim, design, setting, sample size, parameters of telesupervision sessions (type of

supervision, type of technology used, frequency and duration of sessions), comparator, outcome measures, data collection methods, findings, including enablers and barriers of telesupervision, limitations and any other parameters suggested for effective and high quality telesupervision. Data were extracted by the first author (PM) and independently double checked by a second reviewer (LL). Any disagreements were resolved through discussion between the two reviewers.

Data analysis and synthesis

Qualitative data were synthesised thematically in order to understand the factors that contributed to effective and high-quality telesupervision. Thematic analysis involves discovering, interpreting and reporting patterns and clusters of meaning within the data.[27] Using this framework and by reading the included articles several times, themes were identified. Subsequently, these themes were further examined for their similarities, differences and contradictions.[27,28]

The subject matter of the findings from the quantitative studies was examined, and the resulting information was placed under the qualitative themes. This integration of quantitative findings to the qualitative themes was completed by the first author.[29,30] The second author reviewed the matched themes and quantitative studies. Any disagreement was resolved through mutual discussion. This integration of quantitative results with the qualitative findings was undertaken to present a complete view of the factors related to effective and high-quality telesupervision.

Results

Search results

The initial search identified 1099 potentially relevant studies across all the databases searched. Subsequently, duplicates were removed before articles were reviewed by the first author. Titles and abstracts of these studies were screened to identify relevant studies. Of the articles reviewed, 36 papers were subject to full-text examination independently by two reviewers (PM and LL) to determine if they met the inclusion criteria. Subsequent to the full-text retrieval and examination process, 11 studies (nine qualitative[23,31-34,35–38] and two quantitative[39,40]) met the inclusion criteria. The search results, screening results and the final numbers of studies included are presented in Figure 1.

Characteristics of included studies

There was a great deal of diversity in terms of participants representing a range of disciplines, including nurses, psychiatry residents, psychiatric nurse practitioners, registrars, psychologists, counsellors and social workers. The different types of technology used in the studies for supervision included either a telephone or a videoconference.

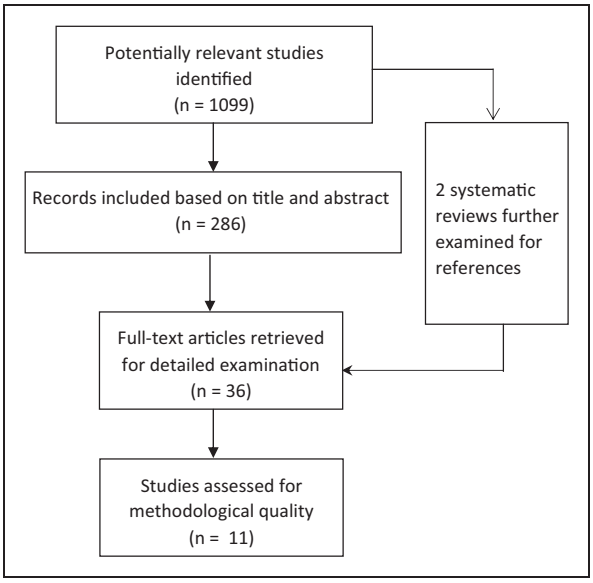

Figure 1. Flow chart detailing stages of systematic review.

Supervision sessions included one-to-one or group supervision arrangements, ranging from weekly to monthly sessions that lasted between 45 minutes and two hours. The main comparator used in the identified studies was face-to-face supervision. Rather than measuring objective outcomes, most studies captured participant experiences and perspectives through interviews or self-reported questionnaires whilst using technology in supervision.

Critical appraisal

The results of the critical appraisal of the qualitative and quantitative studies are presented in Tables 1 and 2, respectively. The context of each study, the aims, methods, samples and setting are summarised in Table 3. The data that contributed to the generation of these themes are presented narratively in the following results subsection, with the appropriate source references identified.

Critical appraisal of qualitative research studies

As outlined in Table 1, all qualitative studies had a clear purpose, relevant review of the literature, purposeful sample selection and overall trustworthiness. However, it was apparent that data-collection methods were weak, and sampling issues were evident. Findings from some of the studies are non-transferable. All studies contained appropriate conclusions, given their purpose.

Critical appraisal of quantitative research studies

As outlined in Table 2, both the quantitative studies had a clear purpose and relevant literature reviews. However, absence of sample-size justification, lack of outcome measures and lack of controls contributed to their weaknesses. Both studies reported appropriate conclusions, given their study purpose.

Table 1. Qualitative studies: McMaster Critical Review Form – Qualitative studies (v2.0).

	Driscoll et al., 2006	Gammon et al., 2009	Gibson et al. 2007	Ingham and Fry, 2016	Miller and Gibson, 2004	Nickson et al., 2016	Robson and Whelan, 2006	Wearne et al., 2014	Wright and Griffiths, 2010
Study purpose									
Was the purpose and/or research question stated clearly?	✓	✓	✓	✓	✓	✓	✓	✓	✓
Literature									
Was relevant background literature reviewed?	×	✓	✓	✓	✓	✓	✓	✓	✓
Study design									
Was a theoretical perspective identified?	✓	✓	×	×	✓	✓	✓	✓	✓
Sampling									
Was the process of purposeful selection described?	✓	×	×	×	✓	×	NA	✓	NA
Was sampling done until redundancy in data was reached?	NR	NR	NR	NR	NR	NR	NA	✓	NA
Was informed consent obtained?	NR	✓	NR	NR	NR	NR	✓	✓	✓
Data collection									
Clear and complete description of data?	✓	✓	×	×	✓	×	✓	✓	✓
Clear and complete description of participants?	✓	✓	✓	✓	✓	✓	×	✓	✓
Role of researcher and relationship with participants?	X	✓	×	×	✓	✓	✓	✓	✓
Identification of assumptions and biases of researcher?	X	✓	×	×	×	×	✓	✓	NR
Procedural rigour was used in data collection strategies?	NR	✓	NR	NR	✓	NR	✓	✓	✓
Data analysis									
Data analyses were inductive?	✓	✓	NR	NR	✓	✓	✓	✓	✓
Findings were consistent with and reflective of data?	✓	✓	NR	NR	✓	✓	✓	✓	✓
Decision trail developed?	×	✓	NR	NR	✓	NR	✓	✓	✓
Process of analysing the data was described adequately?	×	✓	×	×	✓	✓	✓	✓	×
Did a meaningful picture of the phenomenon under study emerge?	✓	✓	✓	×	✓	✓	✓	✓	✓
Overall rigour									
Was there evidence of the four components of trustworthiness?									
• Credibility	×	✓	NR	×	✓	NR	✓	✓	✓
• Transferability	✓	✓	✓	✓	✓	✓	×	✓	×
• Dependability	×	✓	×	×	✓	×	✓	✓	✓
• Confirmability	×	✓	NR	×	✓	×	✓	✓	✓
Study conclusions and implications									
Conclusions were appropriate given the study findings?	✓	✓	✓	NR	✓	✓	✓	✓	✓
The findings contributed to theory development and future practice/research?	✓	✓	✓	✓	✓	✓	✓	✓	✓

Only the key questions on the left-hand side have been reported. The question on study design and methods is covered in data extraction.
✓: criteria were met within the study; × : criteria were not met; NR: not reported; NA: not applicable.

Table 2. Quantitative studies: McMaster Critical Review Form – Quantitative Studies.

	Heckner and Giard, 2005	Xavier et al., 2007
Study purpose		
Was the purpose clearly stated?	✓	✓
Literature		
Was relevant background literature reviewed?	✓	✓
Sample		
Was the sample described in detail?	✓	✓
Was the sample size justified?	×	×
Outcomes		
Were the outcome measures reliable?	NR	NR
Were the outcome measures valid?	NR	NR
Intervention		
Intervention was described in detail?	✓	✓
Contamination was avoided?	NA	NA
Co-intervention was avoided?	NA	NA
Results		
Results were reported in terms of statistical significance?	×	✓
Were the analytical methods appropriate?	✓	✓
Clinical importance was reported?	NA	NA
Drop-outs were reported?	NA	✓
Conclusions and implications		
Conclusions were appropriate given the study methods and results?	✓	✓

Only the key questions on the left-hand side have been reported. The question on study design is covered in data extraction.

Factors that influence the quality and effectiveness of telesupervision

From the analysis of data, eight major themes that influence the quality and effectiveness of telesupervision were identified: supervisee characteristics, supervisor characteristics, supervision characteristics, supervisory relationship, communication strategies, prior face-to-face contact, environmental factors and technological considerations. Additionally, a theme was identified on the benefits and pitfalls of telesupervision.

Supervisee characteristics

There is evidence from three studies to support that personal attributes of supervisees are an important consideration for effective and high-quality telesupervision.[31–33] Supervisees who have clinical practice experience,[31,32] have insight into own learning and supervision needs,[31] and make a choice to learn through distance supervision[31] were found to experience rich learning through telesupervision. In addition, traits such as being flexible, pragmatic, reflective, committed, relaxed and willing to rely on others when visual cues are absent were found to be essential for successful telesupervision.[32,33]

Supervisor characteristics

Four studies reviewed found that it was important for remote supervisors to have experience of the context of isolated rural practice in order to provide advice and support that is credible and relevant.[23,31,34,39] In group telesupervision studies, it was found that having a site coordinator or identified facilitator for the videoconference session enhanced the telesupervision experience of all participants. The facilitator's role included sending the meeting agenda to the group members and facilitating the discussions.[34,39]

Supervision characteristics

Heckner and Giard[40] undertook a study involving psychiatric nurse practitioners and recommended that telesupervision sessions have the following characteristics to be effective and of high quality: structured sessions, use of supervision minutes and agenda and designation of topics/cases prior to supervision session.[40] In addition, a study by Xavier et al.[32] recommended that the level of supervision provided be matched to the supervisee's competence.[32] Multiple studies reviewed ($n = 3$) found that clear contractual expectations with a level of flexibility to accommodate distance practices played a crucial role in telesupervision.[23,34,35] Another recommendation involved thorough preparation before telesupervision sessions to make the most of the supervision time.[34,36] Preparation included constructing the meeting agenda, booking a room for the session and testing the equipment and connectivity prior to the meeting. Finally, length and time of meeting was found to be crucial to the success of telesupervision, and these were dependent on the context of the supervisor and supervisee.[34]

Supervisory relationship

The supervisory relationship has been well-acknowledged to play an important part in supervision, regardless of the mode of supervision.[3,16] In line with this, the quality of the supervisory relationship or the working alliance between the supervisor and supervisee was found to be crucial in telesupervision in four studies reviewed.[31,35–37] In particular, the immediacy of the relationship[35] and the continuity of supervisor availability[31] were found to be of paramount importance in telesupervision. This refers to the supervisor being available and contactable between supervision sessions. Miller and Gibson[37] note that detachment may arise in the supervisory relationship due to the videoconference nature of the telesupervision relationship, as participants receiving videoconference supervision reported feeling impersonal and that there was a lack of warmth because social cues were reduced.[37]

Table 3. Key metrics and findings from included studies.

Study	Aim	Design/methods	Participants	Study characteristics	Supervision characteristics	Key findings	Limitations
Driscoll et al., 2006	To explore the efficacy of telephone group supervision as an alternative to F2F encounter	Qualitative; summative evaluation of reflective reports and supervision documentation	Nurses from England, Wales and Northern Ireland from the Developing Practice Network	Sample size –10 Mode – telephone Comparator – none	Monthly group supervision sessions for 90 minutes, over six months	Correct equipment and environment, and effective communication are crucial Being committed and relaxed are important Group telesupervision is a viable alternative to F2F supervision but needs thorough preparation	Relevant literature was not reviewed in detail Sample size has not been justified
Gammon et al., 2009	To evaluate the quality of the supervisory process of VC supervision	Qualitative; interviews	Psychiatry residents in Norway	Sample size – 6 supervision pairs (six candidates and two supervisors) Mode – VC Comparator – F2F	Weekly sessions, 45 min, over six months; 10 supervised sessions with 5 VC-based and 5 F2F, alternating every other session	VC is an acceptable supplement in psychotherapy supervision provided there was an existing working relationship established prior to telesupervision There is a tendency to reserve difficult emotional issues for F2F sessions	No justification of sample size Limited generalisability of findings to other health professions
Gibson et al., 2007	To determine if VC supervision matches up to the gold standard of F2F supervision, given its lack of physical presence and more formal, less dynamic style of communication	Qualitative, longitudinal study; behavioural measures of session dialogue and self-report measures of task orientation and working alliance	Provisional psychologists employed in a mental-health agency in rural Australia	Sample size – 13 provisional psychologists and three supervisors Mode – VC Comparator – F2F	Alternating blocks of weekly VC and F2F supervision over a two-year period; unclear if individual or group supervision	Telesupervision requires adoption of a specific communication style, including speaking in longer blocks of dialogues and more disciplined turn-taking Telesupervision requires attention while setting up Overall VC supervision is comparable to F2F supervision	Supervision characteristics not described in detail Research methodology and data-collection tools not described in detail Only limited data presented
Heckner and Giard, 2005	To capture telesupervision experiences	Cross-sectional descriptive survey	Psychiatric nurse practitioners at an ambulatory clinic in the USA	Sample size – 6 Mode – group 1 – two-way interactive VC ($n=4$) Comparator – Group 2 – F2F ($n=2$)	Group supervision, weekly, supervision in place for a year	Onsite supervision was rated as having more advantage Technological issues were cited as hampering supervision experience	Only minimal quantitative data reported Small sample size Confounding variables
Ingham and Fry, 2016	To describe a model of supervision called 'blended supervision' and its initial implementation and evaluation	Qualitative; internal evaluation (written feedback and interviews)	Registrars in rural settings and their supervisors in Australia	Sample size - three practices that used the model Mode – TC and VC Comparator – none	Blended model of supervision (local and remote supervision components)	Positive feedback about the blended model of supervision Selecting the right registrar (experience level and competence) for remote supervision is important	Pilot, internal evaluation Limited information about participants and supervision characteristics Limited data reported

(continued)

Table 3. Continued

Study	Aim	Design/methods	Participants	Study characteristics	Supervision characteristics	Key findings	Limitations
Miller and Gibson, 2004	To explore the experience of VC supervision with a supervision model together with power and involvement	Qualitative; semi-structured interviews	Psychologists in rural Australia	Sample size – 26 (four supervisees with F2F supervision experience; 18 with VC supervision experience; four supervisors) Mode – VC Comparator – F2F	Previous experience with 100 hours of supervision over two years required for registration	Technical and practical problems are encountered by most people Most F2F supervisees always felt equal in power to their supervisors, unlike VC supervisees Tendency for supervisees not to discuss emotional issues via VC	Methodology is unclear Lack of information on supervision characteristics Lack of information on participants
Nickson, Gair and Miles, 2016	To examine the nature and impact of peer supervision models for rural social workers	Qualitative; action research	Social workers in rural Australia	Sample size – 20 Mode – TC Comparator – none	Peer group session, monthly	Peer group supervision provided relevant, useful supervision that addresses professional isolation for rural social workers	Small sample size Gaps in several participant evaluations
Robson and Whelan, 2006	To reflect on the experience of telesupervision for two participants	Qualitative	Counsellors in the United Kingdom	Sample size – 2 Mode – telephone Comparator – none	Individual supervision; further supervision characteristics not available	A clear supervision contract is essential Having met each other and worked F2F previously contributed to the success of telesupervision	Limited information on the context of the supervisory relationship Limited generalisability
Wearne et al., 2014	To explore one approach to remote supervision of registrars in isolated rural practice	Qualitative descriptive; in-depth interviews	Registrars in rural and remote settings in Australia and Canada	Sample size – 11 Mode – not reported Comparator – none	Remote supervision with virtual support	Overall positive experience with remote supervision Remote supervision provided rich learning experience for experienced doctors	Minimal information on supervision sessions Only registrars perceptions measured Participant bias
Wright and Griffiths, 2010	To explore the experience of using technology for counselling supervision at a distance	Qualitative; dialogical	Experienced counsellors in the North Island of New Zealand	Sample size – 2 Mode – telephone Comparator – none	Individual telephone supervision commenced after a year of F2F supervision	Clear, contractual expectations are essential Immediacy of relationship is valuable Telesupervision works best after establishing a trusted F2F relationship	Limited generalisability Data from only one supervision partnership
Xavier et al., 2007	To identify if remote provision of clinical supervision is both feasible and acceptable	Quantitative, pre–post survey and self-reported evaluation questionnaires	Psychologists and social workers in 13 cancer treatment centres in Australia	Sample size – 18 Mode –VC and TC Comparator – none	Monthly group VC for two hours plus individual TC for 30 minutes	Supervision resulted in increased self-reported confidence Comfort with the VC format increased with time It is feasible and acceptable to provide supervision via VC	Small sample size Use of old VC units in the study Literature not reviewed in detail

VC: videoconference; F2F: face-to-face; TC: teleconference.

Communication strategies

Effective communication strategies were found to be important in three telesupervision studies reviewed.[33,34,36] Gibson et al.[36] recommend that supervisees in telesupervision adopt a communication style that involves using a more formal, slower speaking style; speaking in longer blocks of dialogues; jotting down spontaneous comments and queries during longer speech blocks to avoid interrupting the flow of speech; disciplined turn-taking; and emailing written material to the supervisor prior to the telesupervision session. Effective use of silence is essential in telesupervision, and this was found to take up to three or four sessions to develop in a study of 10 nurses.[34] Adding to this evidence, in a study of psychiatry residents in Norway, Gammon et al.[33] found that it took five sessions for participants to feel comfortable and competent using the videoconference for supervision. It is likely that this length of time allowed for the supervisor and supervisee to become familiar with each other's communication styles and strategies.

Prior face-to-face contact

There is evidence from four studies to support that prior face-to-face contact enhances the telesupervision partnership.[23,33–35] Several studies reviewed reported that technology for supervision can be successful when a trusting relationship has already been established face-to-face.[23,33–35] It is believed that it is easier to establish mutual trust and respect where there is access to all verbal and non-verbal cues of the involved parties.[33] When prior face-to-face contact is not present, Driscoll et al.[34] recommend that more frequent sessions be scheduled in the early stages of telesupervision to promote development of the supervisory relationship.[34]

Environmental factors

Conducive environmental factors were found to be necessary for successful telesupervsion in two studies.[34,37] This included a quiet space; access to a phone and computer; and rooms that were soundproofed and where distractions were minimal.[34,37] Poorly soundproofed rooms were said to affect privacy of information in supervision adversely.[37]

Technological considerations

Seven studies reviewed reported a variety of technological issues that were experienced by participants.[33–36,38–40] Some issues reported were background noise, auditory distractions,[34] audio lags[36,38] and use of old or incorrect equipment.[34,39] Such technological issues were found to hamper supervision experience by taking away supervision time,[40] affecting spontaneity[33,39,40] and hampering ethical practice in supervision.[35] Telesupervision participants also reported a lack of confidence in operating the videoconference unit.[39]

While a number of barriers were found related to the use of technology in supervision, comfort with using technology for supervision was found to increase over time.[37–39] One study recommended that firewalls and virus protection on computers remain up-to-date.[35] Furthermore, some studies recommended that open acknowledgement of prejudices about technology was essential while commencing telesupervision.[33]

Benefits and pitfalls

A number of pitfalls related to telesupervision were identified in five studies,[31,33,34,36,37] including power imbalance in videoconference relationships between the supervisor and supervisee,[37] a tendency to reserve emotional issues for face-to-face sessions[33,37] and increased costs and time factors associated with telesupervision, including the initial set-up costs.[34] Despite these barriers, telesupervision was found to enhance communication between the supervisor and supervisee. This was because using technology forced supervisees to verbalise and communicate things to the off-site supervisor.[31,33] Also, use of videoconference in supervision was said to lead to detailed instruction and explanations from supervisors while supervisees asked more questions.[36]

Discussion

There is now a considerable body of evidence on the positive impact of technology on health-care processes and outcomes. As an extension of this, telesupervision is a mechanism where health-care professionals' continuing professional needs can be met through the use of technology. A number of factors appear to play a critical role in influencing the quality and effectiveness of telesupervision. This systematic review was undertaken to identify those factors.

Findings from the literature highlight that supervisees who are experienced and have insight into their own learning and supervision needs made the most of their telesupervision arrangements.[31,32] Similarly, supervisors who have experience in the context of isolated rural practice were linked to positive telesupervision experiences of supervisees.[23,31] Therefore, supervisees and supervisors need to be carefully selected in telesupervision. Supervisees and supervisors who have different characteristics from those described above may be more suited to face-to-face supervision. Furthermore, supervision sessions that are well-planned, structured, documented and tailored to the supervisee's needs and which use a clear contract are expected to have more positive outcomes.

The importance of a positive supervisory relationship in effective supervision is well reported in the clinical supervision literature.[3,16,24] A good supervisory relationship is described in the literature as one that is positive, supportive, trustworthy, non-judgemental and encouraging.[3] This is more crucial in telesupervision than it is in face-to-face supervision, as found in some studies

reviewed.[31,35–37] Similarly, it is clear from the studies reviewed that telesupervision was perceived to be more effective when the supervisee and supervisor had already met face-to-face and established a good working alliance.[23,33–35] This is consistent with the findings from a qualitative study of occupational therapists from Australia, where previous face-to-face contact was linked to positive reports of supervision experience.[16] Face-to-face contact is said to enhance rapport building and the formation of a positive working alliance, as both the supervisee and supervisor have access to each other's verbal and non-verbal cues. Telesupervision perhaps is more suitable when the supervisor and supervisee have already met face-to-face or if there are opportunities for initial supervision sessions to be face-to-face. Where this is not possible, using videoconference or increased frequency of sessions during initial sessions is recommended.[34]

Technology is not without its limitations. Issues with technology are not unique to telesupervision and have been reported in the broader telemedicine literature. For example, Camron et al.[41] in a teleoncology study of remote supervision of junior medical officers in rural Australia reported that having a high-quality system to undertake videoconference supervision was extremely important for providing appropriate supervision. Most studies included in this review reported technological issues and found them to hamper the supervision experience.[33,34,36,38–40] It is essential that technological issues are proactively managed. It is also useful for the supervisee and supervisor to undertake training in the use of technology relevant to supervision.

The limitations of this review reflect the limitations of the primary literature in this area. Most studies identified in this review are limited by a number of methodological flaws. Studies were small scale, of pilot nature, used unreliable measures with no established psychometric properties and only measured participant perspectives and experiences. Some studies were not reported in detail,[31,32,36,37] which will make replication of the study challenging. This review has highlighted a huge gap in primary research in telesupervision. Given the importance role clinical supervision plays in the quality and safety of health-care delivery and the rise in the use of technology in supervision, there is a need for high-quality and robust studies to further the much-needed evidence in this area.

Conclusion

It is imperative to understand what makes telesupervision effective, as it may be the only available option for professional support and education in countries with a dispersed population.[42] This review was undertaken to examine what factors influence the effectiveness and quality of telesupervision. Characteristics of telesupervision studies identified were found to be similar to those of broader clinical supervision studies. Most studies report perspectives of participants rather than actual outcomes which is difficult to measure in clinical supervision. Overall, available evidence demonstrates that telesupervision can provide a positive experience if it is set up properly and that it is a feasible, acceptable and viable alternative to face-to-face supervision. Studies included in this review were mostly small-scale studies with a number of methodological limitations. Research on telesupervision is in its infancy and further studies with robust designs are required to strengthen the existing evidence on what makes telesupervision effective, as well as to examine its cost-effectiveness.

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Declarations of Conflicting Interests

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Appendix A: Search Strategy Psych Info

Search ID#	Search terms	Search options	Last run via	Results
S3	S1 and S2	Expanders – apply related words Search modes – find all my search terms	Interface – EBSCOhost research databases Search screen – advanced search Database – PsychINFO	139
S2	Remote OR distance OR teleconference OR video-conference OR rural*	Expanders – apply related words Search modes – find all my search terms	Interface – EBSCOhost research databases Search screen – advanced search Database – PsychINFO	88,393
S1	DE 'professional supervision'	Expanders – apply related words Search modes – find all my search terms	Interface – EBSCOhost research databases Search screen – advanced search Database – PsychINFO	6767

Complementary Publication: Effective use of technology in clinical supervision

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Publication Overview

This publication arises from the systematic review presented above. It outlines ten practical tips for health professionals to enhance the quality and effectiveness of telesupervision.

As this article was published in an Open Access journal, permission to reproduce this article in this thesis was not required. Information about the journal's policy can be found in Appendix 5.

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Effective use of technology in clinical supervision

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ABSTRACT

Clinical supervision is integral to continuing professional development of health professionals. With advances in technology, clinical supervision too can be undertaken using mediums such as videoconference, email and teleconference. This mode of clinical supervision is termed as telesupervision. While telesupervision could be useful in any context, its value is amplified for health professionals working in rural and remote areas where access to supervisors within the local work environment is often diminished. While telesupervision offers innovative means to undertake clinical supervision, there remain gaps in the literature in terms of its parameters of use in clinical practice. This article outlines ten evidence-informed, practical tips stemming from a review of the literature that will enable health care stakeholders to use technology effectively and efficiently while undertaking clinical supervision. By highlighting the "how to" aspect, telesupervision can be delivered in the right way, to the right health professional, at the right time.

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Introduction

Continuing professional development requires robust support mechanisms to maximise opportunities for achieving best practice in clinical settings (Parkinson et al., 2010). Clinical or professional supervision is one mechanism to do this (Moran et al., 2014). Clinical supervision has been shown to benefit the patient, the health professional and the organisation (Bambling et al., 2006; Farnan et al., 2012; Fitzpatrick et al., 2012). While the benefits of supervision is widely accepted, the terminology about and the definition of clinical supervision is marred by confusion (Dawson et al., 2012; Martin et al., 2014; Ducat and Kumar, 2015). In this article, clinical supervision is defined as a formal process of professional support and learning which enables individual practitioners to develop knowledge and competence (Edwards et al., 2005; Simpson and Sparkes, 2008).

The need for clinical supervision in non-metropolitan settings where health professionals face a number of challenges in accessing professional support is well-documented (Ducat and Kumar, 2015; Edwards et al., 2005; Simpson and Sparkes, 2008; Martin and Kumar, 2013). While supervision has historically been provided face-to-face, the use of distance supervision using technology is on the rise (Brandoff and Lombardi, 2012). Distance supervision or telesupervision refers to clinical supervision conducted by using technology such as telephone, email or videoconferencing (Brandoff and Lombardi, 2012). Videoconferencing is the use of video in real time to connect and this includes use of platforms such as Skype. This usually occurs when the supervisor and supervisee are not co-located. With the rise of social media, tools such as blog, micro-blog, wiki, video chat, virtual world, podcast and social networks can also play a role in telesupervision (Kind et al., 2014). Moving from traditional face-to-face supervision to telesupervision calls for clear guidelines and recommendations for using technology to undertake clinical supervision. It is important to recognise that telesupervision is not the same as tele/distance education (which also uses technology). While tele/distance education has a particular focus on teaching and learning and as such been researched extensively (Chi and Demiris, 2015; Bain et al., 2015), the use of technology to support health professionals is the focus of telesupervision.

To date, there is only limited information in the literature on the quality and effectiveness of telesupervision (Ducat and Kumar, 2015; Manosevitz, 2006; Wood et al., 2005; Robson and Whelan, 2007). Manosevitz (2006) noted that supervision using technology, such as telephone, while frequently used is rarely evaluated. He argued that there was a dearth of information on how supervision using technology is best undertaken and highlighted the need to address persistent knowledge gaps. More recently, Ducat and Kumar (2015) completed a systematic review of professional supervision experiences of allied health practitioners working in non-metropolitan health care settings. They echoed Manosevitz's (2006) observations and noted that the concept of, and the impact from, telesupervision requires more attention. Telesupervision has the potential to achieve the same benefits as face-

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to-face supervision and offers a very promising approach to supervision, particularly for geographically isolated practitioners (Miller et al., 2010; McColgan and Rice, 2012; Rousmaniere et al., 2014). This article, based on a review of the literature, outlines ten evidence-informed, practical tips that will enable health care stakeholders to use technology effectively and efficiently while undertaking clinical supervision. This can assist health care stakeholders to become better informed and confident while engaging in telesupervision.

1. Set clear expectations and goals for telesupervision

Clinical supervision has been shown to have consistent positive outcomes when the purpose and goals of supervision are explicitly stated and roles of the supervisor and supervisee are clarified at the outset (Martin et al., 2014; Kenny and Allenby, 2013). This is true for all types of clinical supervision, regardless of the mode or medium used and therefore is a critical first step. Supervision goals are set at the start of the supervision partnership. During this stage, a supervision agreement is developed between the supervisor and the supervisee (Martin et al., 2014). This may take one or more sessions and is dependent on various factors such as the experience level of the supervisor and supervisee, supervision needs of the supervisee, organisational policies around professional support activities etc.

Where possible, it is recommended that the initial sessions where goals and expectations are discussed and supervision contract developed, be undertaken face-to-face before transitioning into telesupervision. If initial face-to-face supervision sessions are not feasible, telesupervision using videoconference is recommended (as opposed to using a telephone). This is because the ability to read non-verbal cues is preserved while using videoconference. Furthermore, cohesion between participants has been shown to improve when non-verbal cues are able to be seen (Hambley et al., 2007).

2. There is no one size fits all with the medium and mode of telesupervision

Wood et al. (2005) recommend that a range of telecommunication options be incorporated into the supervisory process to maximise the benefits of telesupervision. Different health professionals engage with telesupervision differently, have different learning styles and this flexibility recognises there is no one size fits all. It is essential that the medium of technology used in telesupervision is carefully considered. This will largely be dictated by the clinical supervision needs of the supervisee. For example, a supervisee with a learning need related to a hands-on skill or clinical task, such as bandaging a limb, would find videoconference more beneficial than teleconference. To a lesser extent factors such as equipment, network capacity and technical support available may also influence the choice of medium used. Optimal and effective use of technology has been shown to lead to positive supervision outcomes (Ducat et al., 2015). Hence it is imperative that the supervisee and supervisor are proficient and competent in the technologies being used (Rousmaniere et al., 2014). Some supervisees or supervisors may benefit from targeted initial training in the use of equipment related to the medium chosen (e.g., videoconference). Such training should aim to educate participants about the mechanics and the use of the equipment and provide an opportunity for hands-on practice operating the equipment as means of familiarisation (Wood et al., 2005; Cameron et al., 2015).

Furthermore, it is recommended that face-to-face meetings should complement telesupervision in an ad hoc or opportunistic manner. This recommendation is generally supported in the telesupervision literature (Manosevitz, 2006; Wood et al., 2005; Martin et al., 2015; Reese et al., 2009; Sorlie et al., 1999). Some studies found that augmenting telesupervision with face-to-face supervision resulted in the supervisee rating their supervision as more effective (Martin et al., 2015; Reese et al., 2009). Furthermore, Martin et al. (2015) found that the reverse was also true in that some supervisees that had no prior face-to-face contact with their supervisors reported concerns about their telesupervision partnership.

3. Embed telesupervision into a sound framework based on educational principles

Professional support activities achieve best outcomes when they are underpinned by established frameworks and educational principles (Schichtel, 2009; Nancarrow et al., 2014). Doing so will ensure that clinical supervision theory and practice are linked. As health professionals are confused about the pragmatics of the clinical supervision process (Dawson et al., 2012; Martin et al., 2014), it is essential for the supervisee and supervisor to clarify what clinical supervision means and how it will be undertaken. The Proctor's model of clinical supervision is informed by rigorous research and commonly used in practice (Martin et al., 2014; Winstanley and White, 2003). As per this model, clinical supervision is divided into formative, normative and restorative domains (Winstanley and White, 2003). These domains can be used to structure supervision sessions. More recently, Nancarrow et al. (2014) proposed a supervision and support framework, developed by thematic analysis of existing supervision frameworks, called 'connecting practice'. This is a practitioner-centred framework that recognises the tacit and explicit knowledge that the supervisor and supervisee bring to the supervision partnership (Nancarrow et al., 2014). Embedding telesupervision onto a framework, which is paired with educational principles, is likely to maximise supervision outcomes (Sorlie et al., 1999).

4. Focus on the supervisory relationship

Supervisor-supervisee fit, which results in a positive supervisory relationship, has been shown to be a critical factor for effective and high quality supervision (Martin et al., 2014, 2015; Ducat et al., 2015; Wetchler et al., 2007), especially in telesupervision. A positive supervisory relationship is achieved by mutual trust and respect for each other (Sorlie et al., 1999). Some reports of telesupervision in the literature note that participants felt telesupervision was on par with face-to-face supervision when the supervisor and supervisee had a positive supervisory relationship and had met face-to-face previous to entering the telesupervision arrangement (Manosevitz, 2006; Cameron et al., 2015; Sorlie et al., 1999; Mason and Hayes, 2007). Therefore it is recommended that the supervisee is matched with the right supervisor for an optimal supervisor-supervisee fit and where possible is provided with a choice of supervisor (Martin et al., 2015, 2016).

5. Formulate a plan to manage technical problems

Technology is not without its limitations with poor reliability and connectivity being the commonly reported technological problems. It is therefore essential to anticipate and manage technical problems proactively (Chou et al., 2012) in telesupervision. Benefits of supervision undertaken via technology is maximised when there is an action plan for managing technological glitches. Chou et al. (2012) argue that a plan outlining anticipatory solutions to common technical issues need to be in place before a telesupervision session. Proposed strategies include having a back-up plan for contacting other participants involved in the teleconference (e.g., via email or another phone number), and identifying a technical support point person to help with resolving issues (Chou et al., 2012). It is recommended that a plan to manage technical problems be developed and included in the clinical supervision contract. This plan is likely to vary depending on the medium of technology used, with dedicated teleconferencing systems more likely to require technical support than mobile technologies. It is recommended that aspects such as other means of contact, back-up phone numbers and training in the use of equipment be considered.

6. Pay attention to communication

Developments in technology provide new opportunities for understanding the role of communication in the process of building relationships (Cameron et al., 2015; Sorlie et al., 1999). However, the absence of physical cues in virtual meeting environments, such as those created while engaging in telesupervision, may lead to unwanted hazards such as distraction and the temptation to multi-task (Manosevitz, 2006; Wasson, 2004). It is useful for the supervisor and supervisee to discuss upfront the use of silence, minimising distractions and avoiding unrelated multi-tasking during supervision sessions. The supervisee and supervisor need to consider the use of silence during sessions and define a period that will be allowed and accepted by both parties. When reflection occurs within supervision (Martin et al., 2014), it is expected to be accompanied by some silence. While using the telephone for supervision, the supervisor and supervisee will need to be comfortable with silence when it occurs. Having an explicit discussion about this and defining a time period after which the supervisee or supervisor may interject is crucial in this process.

The supervisee and supervisor need to be mindful of avoiding multitasking during the supervision session. Whilst some multi-tasking activities such as conducting a concurrent literature search on the topic discussed may be helpful, some other tasks such as having a cross-conversation with a third party (e.g. via email or text message which is not obvious to the other supervision partner) may act as a deterrent to the supervision session (Chou et al., 2012). A dedicated space to undertake supervision situated away from the regular work space may help eliminate some distractions (Martin et al., 2014). Another important consideration is the use of a good speaking etiquette. This includes appropriate turn-taking, being clear while speaking, using the mute button while listening, paraphrasing and use of questions (Martin et al., 2014). Therefore, it is recommended that more attention is paid to communication while using media such as the telephone or web conferencing where there is no access to physical cues.

7. Rethink continuity

Telesupervision is likely to be more successful when the involved parties prioritise continuity over co-location. This means that the disadvantage created by the increased distance between the supervisor and the supervisee in a telesupervision partnership is overcome by increased supervisor availability between supervision sessions. Wearne et al. (2014) explored one approach of remote supervision of registrars in isolated rural practice through thematic analysis of data from eleven in-depth interviews. They concluded that responsibility and continuity may be as important as supervisor proximity for experienced registrars. Similarly, Martin et al.'s (2015) research of occupational therapy supervisees identified that the availability of supervisor between clinical supervision sessions enhanced the perceived effectiveness of supervision. The issue of continued, or increased, availability should be discussed at the outset of the telesupervision partnership. Ad hoc contact between the supervision sessions may take the form of an email and/or limited to critical times. This is best discussed upfront and revisited during regular telesupervision reviews.

8. Protect online security, safety, confidentiality

It is essential that the supervisor and supervisee undertaking telesupervision adhere to responsible and ethical use of technology (Quinn and Phillips, 2010). Roby et al. (Roby and Panos, 2004) outline the various ethical and legal issues surrounding telesupervision such as liability, protecting confidentiality and adhering to professional practice standards. Users should be aware of their legal and professional practice guidelines and liability related to the use of technology in supervision (Wood et al., 2005; Roby and Panos, 2004; Rousmaniere and Kuhn, 2016). While face-to-face supervision must also uphold confidentiality, telesupervision can be particularly risky as it involves transferring confidential information using technology. For example, an email with client information can be accidentally sent to a third party or information about a client could be faxed to an incorrect number thereby breaching confidentiality. Furthermore, supervisors need to ensure that supervision is timely, adequate and within the supervisor's scope of practice (Quinn and Phillips, 2010; Roby and Panos, 2004). Rousmaniere and Kuhn (2016) outline various practical strategies to ensure internet security for clinical supervisors such as setting strong passwords, performing regular computer backups and tips for avoiding phishing attacks.

9. Factor in additional time

It is important for supervisees and supervisors to set aside and protect clinical supervision time. This becomes particularly crucial in telesupervision, as additional time may be needed for trouble shooting issues with technology and to prepare for telesupervision sessions (Wood et al., 2005; Rousmaniere et al., 2014; Cameron et al., 2015). Setting and forwarding the agenda prior to the session will ensure that maximum benefits are reaped from the telesupervision session (Mason and Hayes, 2007). Therefore, it is recommended that supervisees and supervisors set aside and protect additional supervision time through all the phases of telesupervision.

10. Review telesupervision arrangement regularly

Regular monitoring and evaluation of telesupervision processes and outcomes are critical to ensuring agreed goals and objectives are being met (Brandoff and Lombardi, 2012). Martin et al. (2014) summarise a range of formal and informal methods to evaluate clinical supervision on a regular basis. They recommend that factors such as the style of supervision, whether the needs of the supervisee are being met, the effectiveness of feedback provided, the nature of the supervisory relationship and the support provided be evaluated. The evaluation and review should be followed by changes to the clinical supervision contract or arrangement if required (Martin et al., 2014). With regards to telesupervision, additional consideration should be provided to the medium used to determine if the supervisee's learning goals are being met using this medium. A decision should then be made about continuing with the same medium, changing the medium or augmenting the existing medium with other options.

Conclusions

Telesupervision offers an opportunity to overcome the tyrannies of distance, access and time. However, improved access to technology and connectivity does not necessarily equate to quality telesupervision. Based on contemporary research evidence and real-world experience from the coal face, this article provides ten practical tips (also shown in Fig. 1) that will enable health care stakeholders to use technology effectively and efficiently through all the stages of telesupervision namely pre-session, in-session and post-session.

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

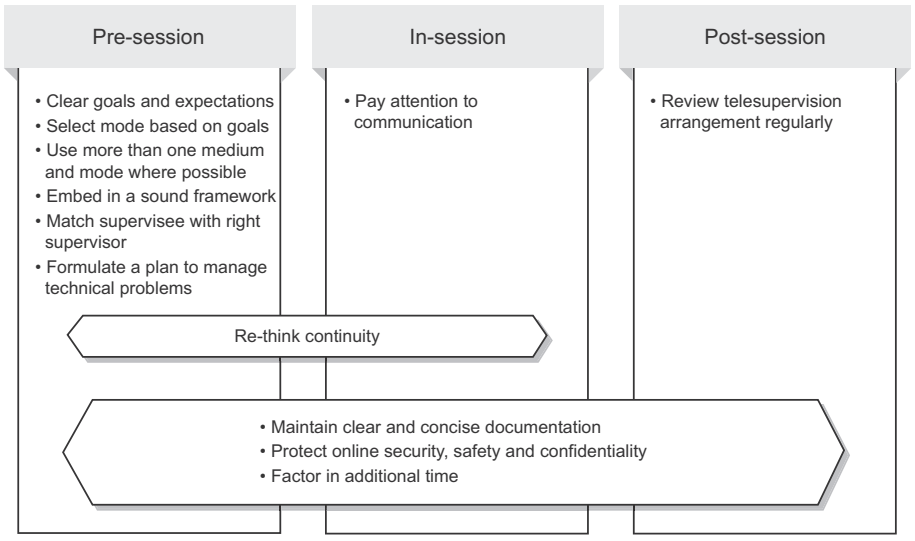

Fig. 1. Tips aligned with telesupervision phases.

Competing interests

The authors declare that they have no competing interests.

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Nil.

Authors' contributions

PM developed the idea for the paper and completed the literature search. PM, SK and LL contributed to the synthesis of information from the literature search. All authors contributed to writing the paper.

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Chapter Summary

This chapter included a published systematic review on factors that lead to effective and high quality telesupervision. Additionally, it included a complementary publication on ten practical tips for health professionals to enhance the quality and effectiveness of telesupervision. Although telesupervision is common practice, it remains under-researched. Subsequently, there is a lack of evidence-informed guidelines on what makes it high quality. This systematic review was undertaken to address that gap. As noted in the publication, a search of the grey literature was undertaken. This primarily involved searching Google Scholar and Google using the key search terms. Any link that was identified to be of interest was further searched on the internet including the relevant websites of government departments and organizations. As highlighted in the published systematic review, research on telesupervision is in its infancy. This was reflected in the fact most studies in this area report supervisee or supervisor perspectives, rather than using more objective measures that have sound psychometric properties. Recommendations were also made in this paper for high-quality, robust studies to address the gaps in this area.

6 Factors that contribute to high quality clinical supervision of the allied health workforce in rural areas: lessons from the coalface

Chapter Overview

This chapter presents the findings of the quantitative study in the main phase. This study investigated the factors that contributed to high quality clinical supervision in allied health supervisees. (Main phase, study 3).

This study was informed by the quantitative study in the pilot phase (Pilot phase, study 1). Essentially, this involved testing of the data collection instruments namely the MCSS-26 and customized survey, the study design as well as application of regression analysis. It was evident from the pilot study that the MCSS-26 was a suitable measurement tool to use with allied health professionals. The customized survey from the pilot study was updated prior to use in the main study to enable data collection with eight professions. A decision was made to distribute the surveys electronically given this was multi-jurisdictional and multi-site study. Findings of this study have been submitted as a peer-review paper as per information below.

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Factors that contribute to high quality clinical supervision of the allied health workforce: lessons from the coalface

Abstract

Objective

The aim of the study was to identify the factors that contribute to high quality clinical supervision of the allied health workforce in rural and remote settings.

Methods

This quantitative study was part of a broader project that employed a mixed methods sequential explanatory design. Participants were159 allied health professionals from two Australian states. Quantitative data were collected using an online customised survey and the Manchester Clinical Supervision Scale (MCSS-26). Data were analysed using regression analyses.

Results

Supervisee's work setting and choice of supervisor were found to have a positive and significant influence on clinical supervision quality. Supervisee profession and time in work role were found to have a negative and significant influence on the quality of clinical supervision.

Conclusions

High quality clinical supervision is essential to achieve quality and safety of healthcare, as well as to support the health workforce. Information on high quality clinical supervision identified in this study can be applied to CS practices in rural and remote settings and professional support policies and training to enhance supervision quality.

Key question summary

1. What is known about the topic?

   There is mounting evidence on the benefits of clinical supervision to health professionals, organisations and patients. Clinical supervision enhances recruitment and retention of the health workforce. However, there are still existing gaps about the factors that contribute to high quality clinical supervision especially for rural and remote health professionals.

2. What does this paper add?

   This study, the first of its kind, recruited rural and remote health professionals from seven disciplines across two Australian states. It investigated the factors that influence high quality clinical supervision in this under-resourced group.

This paper outlines specific factors that contribute to clinical supervision quality for rural and remote allied health professionals.

3. What are the implications for practitioners?
   Effective and high quality clinical supervision of the rural and remote allied health workforce can enhance recruitment and retention in those areas. Healthcare organisations can facilitate effective clinical supervision delivery by utilising the evidence gathered in this study in clinical supervision policy, training and practice.

Key words – clinical supervision; professional support; rural and remote workforce.

Background

Clinical supervision (CS) has been defined by Milne [1] as 'the formal provision, by approved supervisors, of relationship-based education and training that is work-focussed and which manages, supports, develops and evaluates the work of colleague/s'. CS has been shown to benefit patients; [2-4] organisations [5-7] and health professionals. [8-10] CS fulfils a clinical governance function and is said to enhance safety and quality in healthcare. [6, 11] Numerous studies have documented the beneficial effects of clinical supervision for health professionals including increased job satisfaction, professional support and prevention of burnout. [8, 12-15] CS when conducted effectively using best practice principles has been shown to support health workers even during times of organisational change. [6] However, recent studies have demonstrated the lack of understanding and agreement of what CS is and how best to engage with it. [16-18]

Whilst the benefits of CS to the health workforce remain undisputed, it is widely acknowledged in the literature that current supervisory practice in the health professions has very little empirical or theoretical basis. [18, 19] CS is said to be the least investigated, discussed and developed aspect of clinical education. [19] This is especially true in professions other than nursing and psychology. [20] Two recent systematic reviews of the CS literature [18, 20] have shed light on the gaps in CS research in the non-mental health allied health professions. Pearce and colleagues [20] called for further high quality CS research in allied health to further the evidence in this area.

Unique context of rural and remote healthcare in Australia

As of 2009, 31.4% of the Australian population resided outside metropolitan areas. [21] The number of health professionals is substantially lower per capita in non-metropolitan Australia compared to metropolitan areas. [22] This disparity has led to a high demand for healthcare, while those living in these areas continue to have poor health outcomes. The mismatch between the healthcare services and resources available, and the increased demand for healthcare due to poor health outcomes have meant that rural health practitioners need to be innovative, responsive and multi-skilled. However, there is a large body of evidence that highlights numerous barriers (including distance, travel time, cost) faced by health professionals in accessing continuing professional development opportunities, including CS. [23, 24]

Results of an integrative review of the literature by Moran and colleagues [25] reinforced the role of supervision in supporting rural and remote health professionals. Adding to this, results of a systematic review by Ducat and Kumar [8] on the effects of supervision on non-metropolitan health professionals identified that supervision enhanced satisfaction and support of this under-resourced workforce. A recent study of CS practices among occupational therapists across a large state in Australia documented under-representation of rural and remote health professionals. [26] The authors of this study called for dedicated CS research in rural and remote areas to address a gap in the literature. [26] This gap has also been highlighted by other studies. [8, 25, 27] Therefore, there is a need to study the unique CS context and practices to address the challenges faced by this group of health professionals. To address these gaps, this study aimed to investigate the factors that contribute to high quality CS in allied health in rural and remote areas.

Methods

Ethics

Ethics approval for this study was obtained from the Darling Downs Hospital and Health Service Human Research Ethics Committee for multi-sites (Ref: HREC/16/QTDD/22) and the University of South Australia Human Research Ethics Committee (Ref: 0000035268). Following this all required site specific approvals were obtained.

Design

The overall study employed a mixed methods sequential explanatory design [28] where a quantitative phase is first completed followed by a qualitative phase. The qualitative phase is built on findings from the quantitative phase and data obtained from the quantitative phase is used to strengthen the qualitative phase. [28] This paper reports on the quantitative phase. Findings from the qualitative phase of the study will be reported elsewhere.

Setting and participants

The study was carried out in two states in Australia, namely Queensland and South Australia. These states were chosen as they have both implemented comparable supervision frameworks for allied health; [29, 30] and due to their geographical spread, both states have a dispersed non-metropolitan population serviced by dispersed allied health professionals. Given the rural and remote focus of this study, participants from five Queensland Health rural and remote Hospital and Health Services and Country Health South Australia Local Health Network were invited to participate in this study. The participants were from the major allied health professions including physiotherapy, occupational therapy, speech pathology, psychology, podiatry, exercise physiology, dietetics and social work. These professions were chosen due to similarities in CS practices between them, as well as in line with other similar studies in this field. [16, 17]

Procedure

The Manchester Clinical Supervision Scale (MCSS-26) and the customised survey were distributed to the participants electronically using SurveyMonkey©. The allied health leaders in Queensland Health Rural Hospital and Health Services and the Country Health South Australia Local Health Network Clinical Leads were used to disseminate these tools to staff from the targeted allied health professions. The principal investigator sent the allied health leaders information on the study and the link to the survey. Subsequently, these leaders emailed all the eligible allied health staff in their work units' information about the study and an invitation to participate in it. Participants therefore received a participant information sheet that outlined that completion of survey will be taken as implied consent. Participants that did not wish to complete the survey were requested to provide minimal demographic information by completing the first section. Participants were advised that this information would enable the researchers to understand the characteristics of non-respondents. Data collection period

was three weeks. Three reminder emails were sent to all potential participants through the allied health leaders to improve the response rate.

Outcome measures

a) The Manchester Clinical Supervision Scale (MCSS-26)

The MCSS-26 measures the perceived quality and effectiveness of CS received. This measurement tool has been based on a conceptual model of supervision, the Proctor's model. Following many revisions of the original scale, the most recent 26-item version of the MCSS (MCSS-26) includes six factors namely trust/rapport, supervisor advice/support, improved care/skills, importance/value of CS, finding time, and reflection. [31] These factors, in turn, correspond to the three components of Proctor's model of CS. The scale has robust psychometric properties which have been reported previously. [26, 31] A high score for any subscale (factor) reflects a high degree of effectiveness of CS received. A high total evaluation score reflects a high level of overall quality/effectiveness in relation to the CS process. [32-34]

b) Customised Survey

This bespoke survey included questions regarding the demographics of the participant, characteristics of their supervisor and features of the CS sessions such as location, length, frequency and mode. Information from this survey was used to determine the factors that are associated with effective CS. The survey was piloted with ten allied health professionals with experience in developing and/or completing surveys to obtain feedback on the structure, content and ease of use. Feedback from this process was incorporated prior to the survey being finalised.

Data analysis including a power calculation

Data were analysed using the Statistical Package for Social Sciences (SPSS) version 21. Descriptive and inferential statistical tests were applied to the data. Descriptive statistics summarised information about supervisee and supervisor characteristics and the parameters of the CS sessions. Generalized linear models Poisson regression was used to determine the relationships between the predictors and the overall MCSS-26 score, as the assumptions of linear regression were not met and Poisson models provided the best fit for the data. Poisson regression estimates were expressed as relative risks (RRs), with corresponding 95% CIs. Factors that were significant at $p<0.25$ in univariate models

were included in a multivariable model; [35] non-significant predictors in multivariable models were removed and model fit assessed using Akaike information criterion and Bayesian information criterion. The factors in the final model were considered to be significant at α=0.05. Model estimates are reported as relative risks with their 95% confidence interval and p-values. The minimum number of responses required for the proposed analyses was estimated to be 139. This was calculated using a medium effect size for multiple regression (squared to at least 0.15), 80% power and an alpha of 0.05. Up to fifteen predictors/independent variables were accounted for in this estimate.

Results

Supervisee characteristics

Participants were 159 allied health professionals from Country Health South Australia Local Health Network (n=133) and rural/remote Queensland hospital and health services (n=26). A response rate of 33.5% was achieved. The majority of the respondents were female (91%, n=145). The majority (17%, n = 27) of participants were aged between 26 - 30 years. Seventy seven (n=122) participants reported working in a rural area, 16% (n=26) in a remote area and a further 2.5% (n=4) in very remote areas. Fifty six participants (35%) reported that there was no other suitable clinician available on-site to provide face-to-face professional support. The majority of participants had 6 - 10 years of clinical experience (22%, n=35) and 47% (n=74) of the participants provided supervision for other staff members. Participants were from the following allied health professions: social work (28%, n=45); occupational therapy (20%, n=32): physiotherapy (18%, n=29); speech pathology (14%, n=23); dietetics and nutrition (8%, n=14); podiatry (8%, n=14) and psychology (1%, n=2). Further information about the demographic characteristics of the respondents is reported in Table 1.

Supervisor characteristics

The majority of the participants (80%, n=123) reported their supervisors as female aged between 41 - 45 years. Most supervisors were from allied health (93%, n=143). Other supervisors were from nursing (2%), medicine (2%) and other health professions (3%). The majority of the participants reported that their supervisor was allocated to them (66%) as opposed to being chosen by them (25%).

Clinical supervision characteristics

Supervision sessions occurred monthly for the majority of the participants (67%) and fortnightly for 14% of the participants. The duration of CS sessions ranged from 46-60 minutes for the majority of the participants (76%). Four participants (3%) reported CS sessions lasting 15-30 minutes. The majority of the participants (78%) received supervision sessions within their workplace. Ninety one percent of participants engaged in one-to-one supervision, whereas 2% received peer supervision and 3% reported not receiving any supervision at the time of the study. When asked about the mode of supervision used, participants reported the following: face-to-face (30%), teleconference (41%), videoconference (9%) and a combination of modes (19%). Furthermore, only 30% of participants reported to have undertaken prior supervision training and 78% had an existing supervision contract in place. Further information about supervision characteristics have been reported in Table 2.

MCSS-26 subscale scores

The subscale with the highest mean subscale score was 'importance/value of CS' (mean = 16.32) followed by trust/rapport, supervisor advice/support, improved care/skills, reflection and finding time. Mean subscale scores are reported in Table 3.

Factors that influence high quality clinical supervision

The final sample for regression analyses included 142 participants that provided complete data on all measures. Predictors that were included in the final model were work setting, choice of supervisor, supervisee profession and time in role (Table 4). Predictor variables with a positive and significant influence on the overall MCSS-26 scores included work setting and choice of supervisor. Participants that worked in both hospital and community settings and those that worked only in community settings reported higher quality CS compared to those that worked only in a hospital setting. Those that chose their supervisor reported higher quality CS than those that had supervisors allocated to them.

Predictor variables with a negative and significant influence on the overall MCSS-26 scores included supervisee profession and time in role. All participants except for psychologists and social workers obtained lower MCSS-26 scores compared to those in nutrition and dietetics. Participants that have been in their roles between one and five

years, and sixteen years or longer reported lower CS quality compared to those that have been in their roles for under a year.

Discussion

This study has provided new evidence on the factors that contribute to high quality CS practices for rural and remote allied health professionals. This is the first known study that investigated the CS practices of this under-resourced group. The study has identified factors that had either a positive or negative influence on CS quality. Firstly, participants that worked in community settings or in community and hospital settings reported receiving higher quality CS compared to those that worked in hospital settings. It appears that this finding reflects time constraints experienced in some work settings given that *finding time* MCSS-26 subscale received the lowest score. It can be argued that those working in community settings tend to have more time to engage in CS, compared to those in busier acute settings where CS may not be seen as a priority. [26] Time has been consistently cited as a barrier to high quality CS in several previous studies. [10, 16, 17, 26, 36] Martin and colleagues [26] have outlined several practical strategies to assist clinicians with competing priorities to prioritise CS time. This is an important consideration as previous research has indicated that when time is prioritised for CS, it can act as an enabler to achieve positive outcomes. [36]

Secondly, those that had chosen their supervisors reported higher quality CS than those whose supervisors were allocated to them. Several previous studies have reported the influence of choice of supervisor on high quality. CS. [6, 16, 26, 37] There is emerging evidence to support that choice of clinical supervisor can contribute to higher quality CS. More recently, Martin and Milne [38] have outlined the advantages and risks of providing clinical supervisor choice to supervisees. They have argued that providing a choice of supervisor where feasible and appropriate can enhance the supervisory alliance and promote positive CS outcomes. [38]

This study found that participants from all professions surveyed except for psychology and social work reported lower CS quality. This is similar to the finding of another Australian study of 196 allied health professionals where social workers, psychologists and occupational therapists reported more effective CS than supervisees from other

allied health professions. [10] It is well acknowledged that supervisees from professions that work in mental health settings (such as psychologists, social workers and nurses) embrace CS more and therefore prioritise CS more than colleagues that work in non-mental health settings. [34] This finding highlights the importance of educating supervisees in non-mental health professions about the value of CS and empowering them to quarantine CS time.

Supervisees that have been in their work roles for one to five years, and 16 years or longer have reported lower quality CS in this study compared to those that have been in their roles for under a year. It is likely that those in their roles in for less than a year require more advice and support, therefore perceive CS to be more beneficial. Those in their roles between one to five years and for 16 years or longer may not prioritise CS time due to competing clinical priorities, which in turn may affect CS quality. The influence of time in work role on CS quality has not been investigated in previous studies and needs further investigation.

Limitations of study

This study achieved a response rate of 33.5%. Whilst there is no gold standard response rate for surveys, this is not unusual for surveys of health professionals. [39] However, given limited CS research for rural and remote allied health professionals, further studies are needed to build the evidence in this area. As the data collected in this study were non-identifiable, non-respondents were unable to be followed up. Although the online survey encouraged those that didn't wish to participate to provide basic demographic information to enable the authors to understand the characteristics of non-respondents, such data was not provided. Another limitation of this study is that only the supervisee experiences were investigated. Further studies in rural and remote areas are required to capture the CS experiences of supervisors. Finally, further research is needed to strengthen evidence on the impact of CS on patient care.

Conclusion

CS is considered beneficial to the health professionals, patients and organisations. It is particularly beneficial in supporting the rural and remote workforce that already experiences geographical isolation and related barriers. Whilst the benefits of CS to rural and remote allied health professionals is well established, evidence on the factors

that influence the quality of CS in this group is in its infancy. This study was conducted to address this gap. Findings from this study have identified several factors that have a positive and a negative influence on CS, first of its kind in this field. Findings from this research will provide practical guidance for supervisees in rural and remote settings to establish CS partnerships that will result in positive outcomes. Furthermore, findings from this study can be used to inform professional support policies, guidelines and training of the rural and remote health workforce. This research has also identified gaps in knowledge which warrant further investigation.

List of abbreviations

CS – Clinical Supervision

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Table 1 Demographic characteristics of supervisees (n=159)

Demographic characteristics	n (%)
Gender	
1. Male	14 (8.8)
2. Female	145 (91.2)
Age range	
c) 21-25 years	23 (14.5)
d) 26-30 years	27 (17)
e) 31-35 years	23 (14.5)
f) 36-40 years	9 (5.7)
g) 41-45 years	15 (9.4)
h) 46-50 years	18 (11.3)
i) 51-55 years	15 (9.4)
j) 56-60 years	12 (7.6)
k) 61-65 years	17 (10.7)
Work base	
• Hospital	23 (14.5)
• Community	45 (28.3)
• Both	91 (57.2)
Practice area	
• Adult physical	51 (32.1)
• Paediatrics	19 (12)
• Mental health	26 (16.4)
• Other (education/research/generalist)	63 (39.6)
Geographical location	
• Rural	122 (76.7)
• Remote	26 (16.4)
• Very remote	4 (2.5)
• Other	7 (4.4.)
Gender of supervisor	
• Male	31 (20.1)
• Female	123 (79.9)
Approximate age range of supervisor	
l) 21-25 years	1 (0.7)
m) 26-30 years	9 (5.9)
n) 31-35 years	28 (18.3)
o) 36-40 years	16 (10.5)
p) 41-45 years	34 (22.2)
q) 46-50 years	27 (17.7)
r) 51-55 years	18 (11.8)
s) 56-60 years	18 (11.8)
t) 61-65 years	2 (1.3)

Table 2 Characteristics of supervision sessions (n=159)

Characteristics of supervision	n (%)
Choice of supervisor • Allocated • Chosen • Other	 101 (65.6) 38 (24.7) 15 (9.8)
Frequency of supervision • Weekly • Every 2 weeks • Monthly • 2-3 months • > 3 months • Other	 6 (4) 21 (13.9) 103 (67.8) 12 (7.9) 1 (0.7) 9 (6)
Location of supervision • Within my workplace • Within my supervisor's workplace • Away from the workplace • Both	 119 (78.3) 8 (5.3) 5 (3.3) 20 (13.2)

Table 3 MCSS-26 subscale scores (n=142)

Subscale	**MCSS-26 minimum to maximum score range**	**Score range of study participants**	**Mean (SD)**
Importance/value of clinical supervision	0-20	6-20	16.32 (2.86)
Finding time	0-16	1-16	8.91 (3.38)
Trust/Rapport	0-20	5-20	15.5 (3.18)
Supervisor advice/support	0-20	2-20	15.17 (3.37)
Improved care/skills	0-16	2-16	12.32 (2.52)
Reflection	0-12	0-12	9.68 (1.98)

Table 4 Significant predictors in the final multi-variable regression model (n=142)

Predictor	RR	95% CI	p-value
(Intercept)	78.35	72.163 - 85.065	.000
Work setting			
Hospital and community	1.16	1.088 - 1.230	.000
Community	1.07	1.002 - 1.151	.045
Hospital	1.00	.	.
Choice of supervisor			
Neither allocated nor chosen	1.04	.972 - 1.110	.263
Chosen	1.07	1.021 - 1.119	.004
Allocated	1.00	.	.
Profession			
Speech pathology	.90	.836 - .978	.012
Psychology/ Social work	.93	.866 - 1.002	.056
Podiatry	.85	.775 - .928	.000
Physiotherapy	.89	.823 - .955	.002
Occupational therapy	.93	.861 - .997	.042
Dietetics and Nutrition	1	.	.
Time in role			
Above 16 years	.79	.716 - .867	.000
11 – 15 years	.99	.919 - 1.072	.845
6 – 10 years	.99	.939 - 1.049	.788
3 – 5 years	.94	.887 - .991	.023
1 – 2 years	.90	.841 - .964	.003
Under 1 year	1	.	.
(Scale)			

RR: Relative risk; 95% CI: 95% confidence interval.

Complementary Publication: Choice of clinical supervisor: cunning or collusion?

Publication Overview

Choice of clinical supervisor was found to be a factor that had a positive and significant influence in the quantitative studies in both the pilot and main phase of this thesis. There was a lack of information in the literature on what choice of supervisor meant for supervisees and supervisors and how best to approach this. This manuscript, informed by a review of literature, clarifies what choice of supervisor is and recommends practical strategies that can be used by health professionals engaging in CS.

Journal permission to include this paper in the thesis has been attached in Appendix 5.

Citation Details

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EDITORIAL

WILEY JAN
Informing Practice and Policy Worldwide through Research and Scholarship

Choice of clinical supervisor: Cunning or collusion?

Health professionals are increasingly expected to do more with less. A resource-constrained healthcare environment, expanding scope of clinical roles and increased demand for health care all contribute to this seeming conundrum. Consequently, health professionals are relying more on professional support mechanisms in the workplace (Saxby, Wilson, & Newcombe, 2015). A well-accepted form of professional support is clinical supervision (CS) which can help professionals to better manage resources, and which has been shown to be essential to an effective healthcare workforce (Edwards et al., 2005; Martin, Kumar, Lizarondo, & Tyack, 2016; Saxby et al., 2015). Whilst its value is now widely accepted, CS has not been implemented fully across all professions, and there remains scope to develop CS internationally (Watkins & Milne, 2014). Confusion in CS terminology and lack of understanding of what makes CS effective are partly to blame (Martin, Kumar, & Lizarondo, 2017), and there is also a need to improve the way that CS is organized. For example, research indicates that a productive supervisory relationship is important for effective CS (Martin, Copley, & Tyack, 2014; Milne, 2018), and that organizing CS based on choice of supervisor can aid that relationship, by promoting comfort, trust, confidence and positive challenge within the CS alliance (Cerinus, 2005). On the other hand, supervision is often practiced in ways that compromise its effectiveness, such as peer supervision (Martin, Milne & Reiser, 2017). Although such methods are attractive in some ways (e.g. readily organized, non-threatening and inexpensive), they can foster bad practices, drifting into collusion and other avoidant and unproductive supervision relationships (Milne, Leck, & Choudhri, 2009). We next review the evidence for supervisee choice of supervisor, and consider the main implications. The essential dilemma that we address is whether encouraging choice of supervisor is a cunning plan to optimize supervision, or represents a drift away from best practice into relationships that become collusive and in other ways ineffective.

CHOICE OF SUPERVISOR

First, supervisee choice of supervisor has been shown consistently to positively influence perceptions that CS has been enhanced. For example, a study of 260 community mental health nurses in the UK found choice of supervisor to positively contribute to reports of high-quality CS (Edwards et al., 2005). More recently, two Australian studies have corroborated this finding. A survey study of 207 occupational therapists in Australia found that frequency of CS sessions, choice of supervisor and the type of CS contributed positively to high-quality CS (Martin et al., 2016). A further Australian survey of 82 community allied health workers by Saxby et al. (2015) identified that choice of supervisor, together with other factors (length of CS sessions, number of sessions, session duration and CS contract) was associated with significantly higher quality CS (e.g. enhanced trust and supervisor support; improved competence and reflection skills), as measured by a self-report questionnaire. These findings are consistent with previous studies and help explain supervisees' desire to have choice over their supervisors (Sines & McNally, 2007).

The mechanism linking choice with CS quality was suggested in a study on the influence of supervisor and supervisee matching, role conflict and supervisory relationship on supervisee satisfaction (Cheon et al., 2009). These authors found that the supervisory relationship, above other variables, influenced supervisee satisfaction with CS. Cheon et al. (2009) concluded that the supervisory relationship itself, through a strong working alliance, can act as a mediator for variables of context, method and environment on the outcome of satisfaction.

Second, choice represents a cunning plan because supervisees not having a choice in supervisor allocation were often found to receive CS from their line managers. Teasdale, Brocklehurst, and Thom (2001) conducted a multi-methods study of 211 nurses across 11 NHS trusts in England. The results indicated that 56% of study participants had chosen their supervisors, who either came from the same organization (69%), were their line managers (22%), or were from external organizations (9%). The remaining 44% of participants reported that they were not permitted to choose their supervisors. For this latter group, the supervisors were predominantly their line managers (65%). Similarly, a national online survey study of 675 social workers in Australia found that two-thirds of the participants had not had a choice in supervisor allocation and were supervised by their line managers (Egan, 2012). This is concerning, as the literature contains information on risks associated with dual roles where supervisees receive CS from their manager (Martin et al., 2014). The primary risk with dual roles is the tendency for operational matters to take priority over the supervisee's learning or support needs.

PRACTICAL AND THEORETICAL IMPLICATIONS

Thus, the available research indicates that allowing supervisees' choice over their supervisors contributes to perceived CS quality and self-reported effectiveness. Therefore, it is a good example of how research can profitably guide the way that CS is organized. But there are some associated concerns that merit consideration, in addition to the risk of collusion. In many professions (such as clinical psychology) and in some contexts (such as rural and remote locations), exercising choice of supervisor is impractical, due to the scarcity of supervisors. The last thing that the stretched supervision system needs is to

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offend or distance un-chosen supervisors, or to destabilize the traditional allocation approach (e.g. asking supervisors to also choose their supervisees). Furthermore, some research suggests that it may be the less 'choice' supervisors who are the most effective, because they routinely challenge their supervisees (James, Allen, & Collerton, 2004), or are more directive and generally 'disagreeable' (Rieck, Callahan, & Watkins, 2015). Appropriate challenge, direction and corrective feedback are part of high-quality supervision, but are also unattractive features for most supervisees (Milne, 2018). In any case, supervision is a responsive, developing interaction, one in which both parties need to contribute to success. Indeed, a core competence for both supervisees' and supervisors' is to jointly manage and repair alliance ruptures, to foster their professional effectiveness (e.g. in developing cultural competence). There is reason to believe that it is the supervisees who apply their learning expertise with (un-chosen) supervisors who become the best therapists (Green, Barkham, Kellett, & Saxon, 2014). In direct contrast to a collusive relationship, these star supervisees actively seek opportunities for experiential learning with their supervisors. This illustrates how choice can be cunning without being collusive, the ideal combination.

CONCLUSION

Where feasible, it seems desirable to organize supervision based on the supervisees' choice of supervisor provided that concerns such as collusion are addressed. Choice stands to enhance CS, moving it from a negative concern about repairing ruptures to a positive onus on optimizing CS. However, given that most studies in this area are based on participants' perceptions within uncontrolled evaluations, there is a need for more objective and rigorous research in this area (e.g. using direct observation).

RECOMMENDATIONS

Based on the available evidence, it seems desirable for managers to arrange for other clinicians to provide CS, rather than providing it themselves. Where feasible, it can be a 'cunning plan' to allow supervisees' choice of supervisor, provided that this choice is driven by their learning needs (e.g. role requirements, career goals). However, it is imperative that choice of supervisor does not undermine the challenging developmental tasks within CS (i.e. beware of collusive or 'nice' supervision).

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Chapter Summary

This chapter presented the findings of the quantitative study in the main phase. This study investigated the factors that contributed to high quality CS in allied health supervisees. (Main phase, study 3). This study was informed by the quantitative study in the pilot phase (Pilot phase, study 1). Essentially, this involved testing of the data collection instruments namely the MCSS-26 and customized survey, the study design as well as application of regression analysis. It was evident from the pilot study that the MCSS-26 was a suitable measurement tool to use with allied health professionals. The customized survey from the pilot study was updated prior to use in the main study to enable data collection with eight professions. The quantitative pilot study used postal surveys made possible through the Queensland occupational therapy registration bulk mail-out. However, a decision was made to distribute the surveys electronically in the quantitative main study given this was multi-jurisdictional, multi-site and multi-professional study. In this study, supervisee's work setting and choice of supervisor were found to have a positive and significant influence on clinical supervision quality. Supervisee profession and time in work role were found to have a negative and significant influence on the quality of CS. To highlight the importance of choice of supervisor in achieving high quality CS, a paper on choice of supervisor was developed and included in this chapter.

7 Perspectives of health professionals on factors that lead to high quality clinical supervision: a qualitative study

Chapter Overview

This chapter presents the findings of the qualitative study in the main phase. This study investigated the experiences and perspectives of allied health supervisees on high quality clinical supervision (Main phase, study 4).

This study was informed by the qualitative study in the pilot phase (Pilot phase, study 2) which enabled testing of the study design, methods and procedure. The pilot study was also useful in testing the semi-structured interview guide (see Appendix G). Given the expanded focus of this study to eight allied health professions and the specific attention paid to rural and remote CS, the interview guide was updated to include questions on telesupervision (a common mode of clinical supervision used in rural and remote health settings). Further information about the interview guide has been attached in Appendix G. This study provided a platform to explore further and understand better some findings from the previous study (Main phase, study 3). For example, a key finding in the previous study was that the MCSS-26 sub-scale on the *importance/value of CS* received the highest score. The interviews conducted in this study helped to unpack that and understand the value of CS in rural and remote areas, which has been reported as a prominent theme in this paper (see pages 93 and 94).Similarly, it was evident in the previous study that telesupervision was used prevalently in rural and remote settings. Therefore, this was further explored in this study which resulted in the development of a theme on telesupervision (see page 97-98).

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Perspectives of health professionals on factors that lead to high quality clinical supervision: a qualitative study

Abstract

Background

The benefits of clinical supervision are more pronounced for health professionals in rural and remote areas. Most clinical supervision studies to date have occurred in metropolitan centres and have used the survey methodology to capture participant experiences. There is a lack of qualitative research that captures participants' lived experiences with clinical supervision at the coal face.

Methods

Participants were recruited from rural and remote sites of two Australian states using a purposive maximum variation sampling strategy. Data were collected through individual, semi-structured interviews with participants. Data were analysed using content analysis and themes were developed.

Results

Sixteen participants from six professions completed the interviews. Eight themes were developed including the content of supervision, context of supervision, value of supervision, increased need for professional support and unique characteristics of rural and remote clinical supervision.

Conclusions

This study has highlighted the value of clinical supervision for the rural and remote health professional workforce. Furthermore, it has shed light on the unique characteristics of clinical supervision in this population. This information can be used by organisations and health professionals to ensure clinical supervision partnerships are effective thereby enhancing rural and remote workforce recruitment and retention.

Background

Clinical supervision [CS] is a form of work-related support for health professionals which ensures that healthcare delivery is safe and of high quality [1,2]. CS has been defined by Milne [3] as 'the formal provision, by approved supervisors, of relationship-based education and training that is work-focussed and which manages, supports,

develops and evaluates the work of colleague/s'. Information on the benefits of CS to patients, health professionals and organisations is well-documented in the literature. The benefits include enhanced safety and quality of patient care, improved workforce retention and a more supported and satisfied workforce. Although the benefits of CS are well-accepted, research in this area is lacking [1, 4-9].

Proctor's model of CS is the most widely used and reported model [10]. This model consists of three domains: normative or managerial [e.g., promoting and complying with policies and procedures]; formative or educational [e.g., knowledge and skill development]; and restorative or pastoral support [e.g., understanding and managing emotional wellbeing]. It can be suggested that these three domains also explore quality elements of CS including technical aspects [such as effectiveness as measured through formative functions] and functional aspects [such as expectations and support as measured through normative and restorative functions].

The importance of CS is more pronounced in countries with a geographically dispersed population such as Australia [11-14]. Health professionals working in rural and remote locations in particular often experience professional isolation [14]. Health organisations use CS as one means of improving professional support of these staff. Whilst this is common practice [15], there is a lack of research on what happens at the coal face [12, 14]. This is especially true for allied health professionals as most CS literature to date has focused on nurses and mental health professions [16, 17]. As rural and remote practice comes with unique challenges [14], such as generalist roles with a broad scope of practice, it warrants further investigation.

Most existing studies have used surveys to investigate CS practices [11, 12, 16, 18, 19], creating a lack of research on individual clinician perspectives. Studies are required that capture lived experiences of clinicians to understand what happens at the coal face. Martin and colleagues [12] conducted a survey study with 159 rural and remote allied health professionals in Australia. This study identified various factors that contributed to high quality supervision such as supervisee's work setting, nature of job, supervisor and supervisee age, practice area, time in work role and CS frequency. Whilst the survey study identified the factors that contribute high quality CS, it did not explore in-depth the CS experiences of these professionals.

Some CS studies reported in the literature have used qualitative methodologies including individual interviews. For example, Martin and colleagues [13] explored occupational therapist perspectives of CS in a qualitative study using individual interviews. The findings of this study provided rich information on the importance of the supervisory relationship as well as the value placed on CS by occupational therapy supervisees. This study called for further research to explore telesupervision practices of rural and remote health professionals. A further study by Kumar and colleagues [20] of allied health professionals used focus groups and individual semi-structured interviews to explore participant experiences in their own words and descriptions. This study called for further CS research with allied health professionals to address existing knowledge gaps especially in rural and remote contexts. To address these gaps, this study was undertaken to explore the CS practices and experiences of rural and remote allied health professionals using qualitative methodology. This study was part of a larger project that investigated the factors that contribute to high quality CS in allied health.

Methods

Ethics

Ethics approval for this study was obtained from the Darling Downs Hospital and Health Service Human Research Ethics Committee for multi-sites [Ref: HREC/16/QTDD/22] and the University of South Australia Human Research Ethics Committee [Ref: 0000035268]. Following this all required site specific approvals were obtained.

Design

This study employed a qualitative research design that used individual, semi-structured interviews. Semi-structured interviews utilise a loose structure consisting of open-ended questions that allow the interviewer and interviewee to pursue an idea or response in more detail [21].

Setting and participants

The study was undertaken in two states in Australia, namely Queensland and South Australia. These states were chosen as they have both implemented comparable supervision frameworks for allied health [22, 23]; and due to their geographical spread, both states have a dispersed non-metropolitan population serviced by dispersed allied

health professionals. Given the rural and remote focus of this study, participants from five Queensland Health rural and remote Hospital and Health Services and Country Health South Australia Local Health Network were invited to participate in this study. The participants invited were from the major allied health disciplines including physiotherapy, occupational therapy, speech pathology, psychology, podiatry, dietetics, exercise physiology and social work. These disciplines were chosen due to similarities in CS practices between them, as well as in line with other similar studies in this field [16, 18].

Procedure

Participants were recruited to this study using a purposive maximum variation sampling strategy [24 -26]. This strategy was chosen as it captures diverse variations and helps identify common patterns that cut across variations [24-26]. The allied health rural leaders in Queensland Health and the Local Health Network Clinical Leads in Country South Australia were contacted to obtain a list of eligible participants. The first author then sent out email invitations to allied health professionals from a broad range of experience, nature of their role and years of experience to capture diverse variations. Interested participants provided consent and participated in individual in-depth, semi-structured interviews.

An interview guide was developed based on the literature and previous studies conducted by the authors [11-13]. The purpose of guided interviews was to elicit the participant's worldview. Semi-structured interviews contain pre-determined questions, the order of which can be modified based upon the interviewer's perceptions of what seems most appropriate. They allow the flexibility to change the question wording and explanations given. Also, particular questions that seem inappropriate with a particular participant can be omitted, and/or additional questions added [27, 28]. Some broad topics (framed as questions) were identified by the authors to help uncover the participant's meaning or perspective. However, the first author that conducted the interviews allowed the participants to frame and structure their responses. The questions posed were open-ended questions followed by requests for elaboration [27, 29]. All the interviews were conducted via telephone and were recorded with permission. Interviews were conducted until no new information was obtained.

Data analysis

Data analysis was undertaken iteratively as the interviews were being conducted. The interviews were transcribed verbatim by an independent typist. The data were managed using the NVivo software ^{TM} [version 10], and were subsequently subjected to inductive content analysis. Content analysis is a research method for the subjective interpretation of the content of the text data through the systematic classification process of coding and identifying themes or patterns [30, 31]. Although both content and thematic analyses cut across data and search for patterns and themes, content analysis provides the opportunity for quantification of data [32]. Content analysis allows the researcher to measure the frequency of different categories and themes [32, 33, 34] and hence was chosen as the preferred method of analysis. Three phases were observed during the inductive content analysis – preparation, organizing, and reporting. In the preparation phase, the researchers became familiar with the data by reading it several times. The researchers strived to make sense of the data and to learn what was going on. The organization phase included open coding [notes and headings were written in the text while reading it], creating categories [by grouping the data] and abstraction [formulating a general description of the research topic from the categories generated] [35]. The reporting phase involved reporting themes and categories.

Numerous strategies were employed to ensure the research rigour of the qualitative data analysis and interpretation processes. Strategies used to promote credibility, transferability, dependability and confirmability of the analyses and interpretation processes included adherence to semi-structured interview guide, audiotaping interviews, transcribing verbatim by an independent typist, coding by more than one researcher, cross checking between coders and member checking of a proportion of data [15, 29, 36, 37].

Results

Participants were from rural and remote sites representing a broad range of clinical and rural experience. Participants were from the following professions: dietetics, social work, speech pathology, occupational therapy, physiotherapy and podiatry. Four of the sixteen participants were transitioning from existing clinical supervision arrangements and entering or seeking new supervisory relationships. The interviews lasted from 28 to 55 minutes. Further information about the participants and CS characteristics has been

presented in Table 1. Content analysis of the interview data resulted in the following eight themes:

Value of CS in rural and remote areas

All participants described the value and benefit of CS in their roles. Participants stated that rural and remote roles can be isolating and resilience building through CS is integral to working in such roles. In this context, they reported CS as a valuable opportunity to network with colleagues, find answers to questions, validate clinical practice and feel supported in their roles. Most participants emphasised that this is different for supervisees in metropolitan areas where there is easy access to other professionals to draw support from. One participant, a social worker with over 20 years of rural work experience said:

> "…I find CS very nourishing, and the lady I work with (supervisor) has such grace and humour that it's a truly enjoyable experience. Even if you're working through some particularly difficult issues it's a really enjoyable experience…the feedback you get is really affirming and it's like you're on the right track…. I think that's very very helpful" (Interviewee 1, female)

Some participants in leadership roles viewed CS as a strategy for recruitment and retention. They highlighted the issues faced in rural and remote areas relating to persistent vacancies and dealing with a transient workforce. They emphasised that CS helps to address some of these issues. One participant that had clinical governance responsibility for around 100 physiotherapists said:

> "I think in terms of it (CS) being a strong part of a recruitment and retention strategy it's really important. We have a lot of staff who are either sole practitioners or work within small teams of maybe just two or three. So CS is a really valuable tool so that they continue to feel supported…." (Interviewee 4, female)

Another participant who was a new graduate said thus:

> "….if I was just here on my own without that (CS) relationship, I would feel quite isolated I guess because we are so far away and the sole practitioner in town. So I find it very useful" ((Interviewee 8, female)

A participant that had recently re-located and commenced new employment, while describing the value of clinical supervision had this to say:

> "I think it (CS) is vital, as much for the feeling of support for staff as well as the clinical support" (Interviewee 9, female)

More than one form of professional support

A predominant theme arising from the interviews was that most participants were linked into a number of professional support arrangements on top of one-to-one CS. These include mentoring, peer group supervision, peer networks and informal/ad hoc arrangements. It appears that just one form of professional support (e.g., one-to-one CS) may not be adequate to meet the broad range of learning needs inherent to rural generalist roles. This appears to be a reflection of the broad scope of rural and remote allied health roles. As these roles tend to be generalist roles, participants felt more supported with access to multiple people with a range of skill set that can be contacted to navigate through particular clinical scenarios. One participant remarked:

> "I actually think it is really beneficial. I actually did more intensive supervision with a mentor as well as a clinical supervisor, as well as another supervisor – like I had three supervisors when I first came out to this area – but I found it really good and it's really good to make contacts…..quite helpful with linking you with resources and people and processes and also really good for learning…." (Interviewee 7, female)

Another participant, a speech pathologist who reported receiving both formal and informal professional support in addition to CS said thus:

> "I call it phone a friend – do you know what I mean? Like I've got a lot of people with different experience I tap into… I have a strong network of people that I can go to. Just because of the breadth of the caseload and the variety that you see in a remote area, like kids and adults and you get the weird and wacky ones..…so it's really helpful to have a variety of people to call on…. This might sound a bit funny but it's also nice not to have to go to your clinical supervisor for everything because sometimes I think I don't want her to think that I don't know anything….so if you are spreading your questions around a little bit you don't have to worry about it" (Interviewee 6, female)

One participant when offering advice about obtaining sufficient professional support commented thus:

> "…and then you have some good support in place other than just clinical supervision, like peer support, mentoring, good multi-disciplinary team, professional development opportunities – so not just relying only on CS" (Interviewee 15, female)

Context is everything

It was clear from the interviews that supervisees considered it essential for supervisors to have a good understanding and/or experience of working in a rural/ remote context. This appeared to be as important and desirable as supervisors' knowledge and clinical

experience. Without the supervisor's understanding of the supervisee's context, the advice provided in CS appeared to be less relevant and useful. Often times, rural and remote allied health professionals tend to be sole practitioners, have a broad range of caseload and spend considerable time travelling to smaller sites. This appeared to create a need for clinical and professional advice that is unique and relevant to this context. Some participants made suggestions to overcome this hurdle. One suggestion was for the supervisor to travel to the supervisee's site at the time of establishing the supervision agreement.

A participant that was receiving CS from a supervisor that worked in a nearby bigger centre had this to say:

> "I think the fact that their (supervisor's) department is so so different to this health service. So I think their expectations are very mismatched with what services are actually like on the ground in such a remote area. I know that they are only a couple of hours by plane, but they may well be a million miles away….the recommendations or suggestions that she provides me don't necessarily solve the problem because of the context" (Interviewee 12, female)

One participant recalled this while thinking about previous supervisors:

> "…some of them are very good supervisors – academically and clinically – but some of them have never worked in a rural setting and they don't understand what rural practice looks like" (Interviewee 14, male)

One participant that was receiving CS from a supervisor from another health service described the difference in the work contexts:

> "I might spend twelve hours one day at work and four-five hours of that is travelling to get to do treatments to then go home again. So whilst you are in a bigger center and you are based in one site, you're not having as much moving around, you're not having to plan, spend as much time planning your travel and lists and everything like that " (Interviewee 13, female)

Another participant that was allocated a supervisor from the nearest bigger centre discussed the lack of understanding of the supervisor about her work environment. Whilst describing this, she said:

> "… I don't think it's that she doesn't get it at all. I think sometimes there is just so much complexity, on account of remoteness, on account of cultural factors, on account of social factors, because we all know all know the determinants of health, and we have a lot of risk factors for people with speech and language development, poor health etc. etc. You know there's a lot to do sometimes before you can get at speech and I don't know if she gets how much time that stuff takes" (Interviewee 6, female)

Whilst discussing the importance of the supervisor having a good understanding about the supervisee's work context, one participant made this recommendation:

> "I think it is really important that clinical supervisors have the opportunity to visit the remote sites where their supervisee is based" (Interviewee 15, female)

Yet another supervisee who received CS from a supervisor from another health service, while commenting on this issue said thus:

> "So when I ask questions to my supervisors, their answers may not be necessarily too relevant for my position because I don't have access to the same services, or for me to access the services of the flying people into a whole different centre and things like that. So that makes it different and difficult" (Interviewee 13, female)

One participant who was in a leadership role acclaimed that some CS issues in their region arose from supervisors not being in the same region as the supervisees. She said thus:

> "We have found that some of the issues that have cropped up with our dietitians were from when someone supervised a dietitian outside their region…… They haven't seen what happens on the ground. They don't have an understanding of how that other region works – they only have that form that person……What we try and do is say to people that when you are setting up that supervision arrangement, to visit the site and get an orientation around that, but the practicality of that is always a bit challenging. It's more likely to happen if you say at the start that it needs to happen" (Interviewee 2, female)

Content of CS

Key content areas covered in CS included normative, restorative and formative aspects as per the Proctor's model. However, given most participants used technology for CS, there appeared to be an increased emphasis on normative and restorative aspects, limiting engagement in formative or technical aspects of CS. In other words, most participants receiving telesupervision reported that the focus is on discussion of challenges on the ground, going through information, brainstorming solutions etc. On the ground, this appears to result in lack of emphasis on observing patient care events, practicing a skill or reviewing patient chart notes. Furthermore, given the broad clinical nature of rural generalist roles, CS appeared to include a wide variety of discussions.

One participant said:

> "So we spend most of our time discussing service development and what processes and procedures happening in her (supervisor's) unit that I may be able to implement here. Really, I spend a lot of time debriefing about the challenges of

> working in such a remote area, and yes, they are the main sorts of things" (Interviewee 12, female)

A participant thus described the limitation of formative aspects in telesupervision:

> "It's one thing to describe scenarios and that over the phone or videoconference, but it's quite different if the person is sitting with you and you can show them or be part of that physically…." (Interviewee 4, female)

Another participant employed in a senior leadership role, whilst commenting on this issue said:

> "Yes absolutely that the ability to not be able to follow or respond to – like to go and have a look at a client on the ward or to watch or observe an education session. I think that hinders the depth that can be achieved with CS, and the usefulness too, because essentially we want to be supporting people with their clinical case management, but if you can't actually get on the ground to help someone in an area that they're really wanting to change, I think that can be a challenge…. So there seems to be a lot more time spend on the relationship with the telephone to be able to negotiate to do things with the dietetic service rather than on clinical cases" (Interviewee 2, female)

Yet another supervisee, who received telesupervision from a senior at another health service said thus:

> "Well it probably ends up being less more direct CS and more of a chance for me to have someone to talk through – yes, and like unwind a little bit with any issues – have a chance to talk with them, but it's not so much the hands on 'oh this is what I do here'. It's going to be just by the nature of it a lot more talking through management issues and things like that. Yes, it's not really a skills development. It's more of an unwind type of thing" (Interviewee 13, female)

Telesupervision can be set up to work well

It appears that telesupervision can work well if some conditions are met including supervisee and supervisor preparedness for the CS session, augmentation with occasional face-to-face sessions and working with a supervisor that the supervisee knew prior to entering the CS relationship. Participants reported that videoconference and telesupervision, despite the technological barriers, can be beneficial to engage in CS. Multiple participants reiterated the importance of planning the telesupervision in advance in order to avail videoconference and room facilities. Some quotes by different participants about these pre-requisites are presented below:

> "The fact that I met my supervisor in person when I commenced really helped us establish a relationship so when we transitioned to using the telephone it wasn't such a problem" (Interviewee 12, female)

> "…your preparation (in telesupervision) is kind of vital…when it is on the phone and it's very allocated time, so to try and get the most out of your time that you have. So I find telephone supervision to be at times even better than face-to-face because of that prior preparation that you can get your thoughts organised…" (Interviewee 5, female)

Some participants emphasised the importance of occasional face-to-face contact where possible to augment the telesupervision relationship. A senior speech pathologist in a leadership role said had some practical suggestions to enhance the telesupervision experience:

> "…non-verbal communication is incredibly important. You don't get that over the phone, so there are some downsides to the telesupervision models, but in some ways you do need to work hard to I guess work through an agenda. So you need to be really clear what it is that you are going to be talking about, because you are not going to be picking up people's cues that they are ready to move on….I do try to have face to face CS once a year or so ..I think it is really important for people to see each other and to understand people's body language….that you can't read from over the phone" (Interviewee 3, female)

Organisational factors can be an enabler and a barrier

Some participants reported having CS frameworks and procedures in place which promoted engagement in CS. Many comments were made about the usefulness of having a CS framework organization-wide, associated resources and training to up-skill allied health professionals in CS. However, some participants commented on the need for reviewing the framework in place and provision of another round of CS training, given the high staff turnover rates in rural and remote settings. One participant, an experienced occupational therapist in a leadership role said thus:

> "We have our clinical supervision framework, which also has supervision tools available to staff such as activity logs, records, learning style questionnaires…I feel that they are very beneficial for new clinicians coming through to help them develop their skills and build on their experience with uni. So those things I think really support new grads…" (Interviewee 5, female)

In line with it, another participant said:

> "In our State, we have a CS Support policy, so all people that come under the government health service have the same guiding principles to CS" (Interviewee 1, female)

One participant noted the importance of keeping the framework, policies and training up-to-date:

> "I think we went through a process in our State of doing lots of fantastic training a few years ago, and we have got lots on our intranet around these resources and

> things, but I do wonder – we've had a reasonable turnover of staff in that time and I do think ongoing discussions/training around quality CS and different supervision models and learning about your own learning styles are really useful" (Interviewee 3, female)

On the other hand, some participants reported to having organisational barriers that reduced CS engagement and efficiency. Specifically, being operationally managed by someone different from their own profession appeared to hinder CS engagement and outcomes. Furthermore, participants expressed the desire for closer alignment of CS and operational management.

One participant said:

> "..the problem is that maybe management is not understanding or even if you are in allied health sitting under a nurse not understanding the recommendations from the organisation around supervision, it would be quite easy for you to never have supervision because it is not managed and there is no governance around it…" (Interviewee 15, female)

A participant said when describing the complexities in organising a student placement:

> "…anyhow I just kind of felt a bit confused because I have got an operational reporting manager who is an admin person, and then the professional reporting line is to the allied health professional lead and then my clinical supervision Is to someone in a different health service who doesn't have anything to do with students…so anyhow that was tricky…" (Interviewee 6, female)

One participant commented on the mis-alignment of policy makers in larger metropolitan centres and those engaging in CS in rural and remote locations:

> "When the State level policies and everything made by the practice what is currently governed and all the policy officers and everyone are sitting in the metropolitan centre, but it is the real underground clinicians have the challenges" (Interviewee 14, male)

Need for assessment/measurement in CS

Many participants reported the need for CS audits and for examining the currency of CS frameworks and models used by the organisation. Some participants highlighted the need to roll out training regularly given the transient workforce in rural and remote areas. One participant said:

> "…we've got a model in place that's probably been a fairly stagnant model for a while. So it would be nice to have it reviewed. The agreements haven't changed in the past six or seven years. So I think a potential recommendation might be just reviewing that and making sure that it is still meeting the needs of the organisation" (Interviewee 4, female)

Another participant, an experienced occupational therapist in a team leader role, when discussing how CS experience can be made better for her team members, said:

> "….if there is some way of assessing the quality of the supervision, and I think giving our clinicians an opportunity to feedback to us around supervision…I don't think that is necessarily set up formally" (Interviewee 11, female)

One participant working in a remote location expressed concerns about the possible lack of good CS practices at her site. She said thus:

> "I would just hope they would check up that your supervisor that you have nominated is true and legit. I guess – I mean really I am quite happy to not be mollycoddled or like I do my supervision every month, but perhaps if people are less likely to do that then perhaps they need a bit of reminder or something"(Interviewee 7, female)

Unique characteristics of rural and remote CS

Various unique characteristics of CS became apparent through the interviews. Some participants considered friendship and social aspects of CS crucial in the supervisory relationship.

One participant who reported a positive supervisory relationship with her supervisor said:

> "I guess when we have supervision we usually go for coffee. We usually catch up with what's happening in each other's lives and then we talk about business…" (Interviewee 1, female)

Many participants reported on drawing professional support from the multi-disciplinary team and engaging in informal, interprofessional CS. One participant, who had recently moved from a metropolitan centre to a remote town said:

> " I have had a few decent conversations with some of the other professionals about how they manage their time, how they manage to see clients from rural and remote areas - what strategies they use – when they use face-to-face or tele-health. So, not in a formal setting but definitely I've had a number of conversations with other members of the team informally" (Interviewee 9, female)

Participants reported that the eligible pool of supervisors in rural and remote areas was limited. Participants also highlighted the difficulty in finding time for CS. However, those participants that planned CS sessions ahead of time and saw CS as a priority were more successful in engaging with CS. The majority of participants reported about the flexible nature of CS they received and saw it as an essential characteristic of rural and remote CS. One participant while commenting on flexibility said:

> "I think rurally you need that flexibility and I think sometimes it's even good to have two supervisors because it's very difficult to get a supervisor who can meet all of your needs. If you have a supervisor and a mentor maybe that cover two different areas I think that would be really nice, especially if you don't have a lot of people on site…." (Interviewee 9, female)

Discussion

This study was undertaken to further the evidence for CS of rural and remote allied health professionals. As this study recruited participants from two Australian states and from six allied health professions, it provides rich, transferable information on the factors that improve the quality of CS for rural and remote health professionals. As rural and remote CS has not been adequately researched to date, the findings from this study are expected to contribute to the emerging evidence base in this area. Furthermore, as this study explored individual participant perspectives, evidence is now available on what happens at the coalface.

The predominant finding of this study is the value placed on CS by rural and remote health professionals. Whilst CS has been shown to benefit health professionals in all geographical and practice contexts [4, 11, 2], its value is more pronounced in rural and remote healthcare settings. These areas often face workforce challenges such as recruitment, retention and dealing with a transient workforce [38, 39].Most rural roles are also generalist roles where the scope of clinical practice is broad and varied. Health professionals practicing rurally are also known to face professional isolation, challenging cultural contexts and lack of resources [14]. These issues enhance the value of CS for this under-resourced group. This is further highlighted by the finding that more than one form of professional support is utilised by most study participants. This finding is expected to reinforce to employing organisations, the unique professional support needs of rural and remote health professionals. This build on findings from previous studies that a 'one size fits all' approach does not work for CS [20,40].

A key finding from this study was the role context played in CS. Participants that were supervised by those that had previously worked in a rural context found their CS arrangements more useful and relevant. This reiterates the importance of achieving a good supervisor-supervisee fit that has been highlighted in previous studies [13, 15]. It is important to take into consideration prior experience of the supervisor in the initial phases. A systematic review of telesupervision studies found that supervisors with rural experience achieved positive CS outcomes for rural supervisees [40]. Where this is not

possible, supervisors can be encouraged to complete site visits of the supervisee's work place to understand the context better. Furthermore, the findings of this study have highlighted the challenges supervisees face when reporting to someone from another profession or stream. As this is common in rural and remote regions given smaller number of health professionals, guidelines need to be established on managing such partnerships.

This study revealed that supervisees embraced the restorative and normative functions of CS more than the formative functions when they used technology for CS. Proctor's model emphasises that all the three functions are essential in CS [10]. Whilst the challenges of engaging in 'hands on' demonstration or practice sessions in telesupervision are real, it is imperative that this is acknowledged as a barrier and working solutions are found. Failure to address this proactively may pose a risk for clinical governance. This is especially essential for new graduates, professionals that are new in their roles and those that have changed practice areas.

It is already well-acknowledged that organisational factors can be a barrier to high quality CS [15, 20]. This study has added evidence to this and highlighted the need for organisations to ensure currency of their CS frameworks, tools and trainings. Additionally, this study has highlighted the need for evaluation of CS practices in rural and remote CS which is consistent with previous recommendation [9]. Interestingly time for CS was again cited as a barrier to CS consistent with previous studies [15, 20]. However, multiple participants in this study made it clear that when CS is treated as priority and when it is planned in advance, this barrier can be overcome. Given the value of CS to rural and remote health professionals, it is imperative to prioritise and quarantine CS time.

Limitations

This study explored the perspectives of supervisees about the factors that contribute to high quality CS. Similar studies with supervisors are required to further the evidence in this area. Studies are also required that would demonstrate the impact of CS on patient outcomes. All interviews were conducted via telephone as participants were recruited from a number of rural and remote sites in two Australian states. As non-verbal communication is unavailable to the interviewer whilst using the telephone, there is a risk that not all information conveyed by participants were captured. However, the first

author is experienced with conducting telephone interviews and employed a number of strategies [such as pausing adequately, using clarifying questions and disciplined turn taking] to ensure that information was efficiently captured.

Conclusions

This is the first known study to explore rural and remote allied health supervisee perspectives on CS quality. Rural and remote areas are known to be underserved and health professionals in those regions often experience professional isolation. As this group is also known to experience unique challenges in healthcare delivery, specifically targeted studies were required. This study addressed this gap and highlighted a number of themes related to CS quality in allied health supervisees. Results reinforced that the benefits of CS are more-pronounced rurally and shed light on the crucial role CS played in recruitment and retention of the rural health workforce. These findings are expected to add further evidence to the growing evidence of the impact of CS on healthcare. The findings from this study also provide important lessons for employing organisations about the unique context of CS in rural and remote regions.

List of abbreviations

CS – Clinical Supervision

Declarations

Ethics approval and consent to participate – Ethics approval has been reported in the methods section. Consent to participate was obtained from all participants.

Consent for publication – Not applicable

Availability of data and material - The datasets generated and/or analysed during the current study are not publicly available as they are part of Ms Martin's PhD thesis.

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Authors' contributions – PM designed the study, collected data and took the lead on the manuscript development. SK, LL and KB assisted with study design, data analyses, interpretation of results and publication development. SK, LL and KB provided advice

and guidance to PM through all phases of the study and publication development. All authors read and approved the final manuscript.

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Appendix - Interview Guide Categories:

Supervision characteristics
Supervisory relationship
Rural and remote supervision (enablers, barriers, recommendations)
Telesupervision

Table 1 Participant demographics and information about CS received

Demographic Characteristics	**Number (total n=16)**
Gender	
Male	0
Female	16
Workplace location	
Queensland	11
South Australia	5
Nature of role	
Predominantly clinical	10
Predominantly leadership	6
Profession	
Dietetics	4
Social Work	3
Speech Pathology	3
Occupational Therapy	3
Physiotherapy	2
Podiatry	1
Position level	
Junior	1
Intermediate	9
Senior	6
Mode of CS	
Face-to-face	2
Telesupervision	14

Chapter Summary

This chapter presented the findings of the qualitative study in the main phase. This study investigated the experiences and perspectives of allied health supervisees on high quality clinical supervision (Main phase, study 4).

This study was informed by the qualitative study in the pilot phase (Pilot phase, study 2) which enabled testing of the study design and the use of the semi-structured interview guide. Given the expanded focus of this study to eight allied health professions and the specific attention paid to rural and remote CS, the interview guide was updated to include questions on telesupervision (a common mode of clinical supervision used in rural and remote health settings) Further information about the interview guide has been attached in Appendix G. Sixteen participants from six professions completed the interviews. Eight themes were developed including the content of supervision, context of supervision, value of supervision, increased need for professional support and unique

characteristics of rural and remote CS. This study has highlighted the value of CS for the rural and remote health professional workforce. Furthermore, it has shed light on the unique characteristics of CS in this population.

8 Discussion: key findings, implications and recommendations for future research and practice

Introduction

The primary aim of this thesis was to investigate the factors that contribute to high quality clinical supervision (CS) in allied health. This was achieved by studies in the pilot and main phase that used a mixed methods sequential explanatory study design. The pilot phase was conducted with occupational therapists across Queensland Health to test the outcome measures and processes that were to be used in the main phase. This phase laid the foundation for this thesis providing key insights about the factors that influence high quality CS. Information about this was lacking in the literature during the conduct of the pilot phase. The pilot phase highlighted the challenges of rural and remote CS practice. To address this and the dearth of CS research in rural and remote health settings, particular attention was paid to CS of rural and remote allied health professionals in the main phase. The main phase therefore recruited rural and remote allied health professionals from Queensland Health and South Australia. Furthermore, given the lack of research on telesupervision which is used predominantly by rural health professionals, a systematic review was conducted on the factors that influence the quality and effectiveness of telesupervision.

Through a series of studies, this thesis identified factors that positively or negatively contributed to the quality of CS in allied health supervisees. Whilst the pilot phase identified that the type of supervision and frequency of CS sessions were associated with higher quality CS, the main phase identified that the supervisee's work setting had a positive influence on CS quality. The quantitative studies in both the pilot and main phase identified that choice of clinical supervisor was a key factor that contributed to supervisee perceptions of high quality CS. Some factors were also identified as having a negative and significant influence on CS quality. The pilot phase identified these to be

the supervisee age, length of CS sessions and practice area of the supervisee. In the main phase, the factors with negative association identified were profession of the supervisee and time in work role. The qualitative studies in both the pilot and main phase identified several critical factors that acted as enablers of or barriers to high quality CS. These include the importance of the supervisory relationship, impact of supervision, complexity of rural and remote CS and the value of CS to workforce recruitment and retention. The systematic review on factors that influence the quality and effectiveness of CS concluded that telesupervision is a feasible and acceptable form of CS if set up well.

This thesis supported the use of Proctor's model and the MCSS-26 in allied health CS. It is noteworthy that the MCSS-26 is based on the three functions of the Proctor's tripartite model namely normative, formative and restorative. Through the series of studies undertaken in this thesis, further evidence has been made available to support the application of the Proctor's model of CS in allied health. Therefore, based on the studies in this thesis, it appears that there is no necessity for the development of a new model of CS for allied health.

High quality CS can be difficult to achieve given the involvement of a range of factors including the supervisee, supervisor, CS content, context and organizational factors. This can be best demonstrated through the use of systems theory given this thesis drew upon the concept of quality in healthcare using the systems theory (Chuang & Inder, 2009; Petula, 2005). As per this framework, it was expected that the factors that were found to influence CS quality in this thesis would fit into intrapersonal, interpersonal, organizational and environmental levels. The factors that were found to influence CS quality were able to be categorized into these levels accordingly. Throughout this thesis, it has been highlighted that factors that influence high quality CS are multiple and at different levels of the system. Papers included in Chapters 3, 4, 6 and 7 have showcased in a variety of ways that multiple factors are involved in high quality CS. For example, the factors found to influence high quality CS with occupational therapists reported in Chapter 3 (Study 1, Pilot quantitative) can be categorized into intrapersonal (age), interpersonal (choice of supervisor,), organizational (area of practice) and environmental (frequency of CS, type of CS, length of CS) levels. The study reported in Chapter 4 (Study 2, pilot qualitative) outlined themes that can be categorized into these levels – intrapersonal (validation, sense of confusion about CS), interpersonal

(Supervisor-supervisee fit, supervisory relationship, dual roles), organizational (enablers and barriers in organization) and environmental (face-to-face contact).

The study reported in Chapter 6 (Study 3, main quantitative) outlined various factors that can be classified into these levels - intrapersonal (supervisee profession), interpersonal (choice of supervisor), organizational (work setting) and environmental (time in role). Finally, the interview themes reported in Chapter 7 (Study 4, main qualitative) can also be categorized in these levels - intrapersonal (value of CS), interpersonal (content of CS), organizational (organizational factors can be enablers or barriers, need for assessment in CS) and environmental (more than one form of professional support, context is everything, telesupervision can be set up to work well, unique characteristics of rural and remote CS). The findings of this thesis therefore support the use of systems theory in research investigating CS quality.

These studies were the first series of multi-state, multi-jurisdictional studies designed specifically to investigate CS practices of rural and remote allied health professionals, as well as telesupervision. The majority of previous CS research has focused on nurses and mental health professionals or recruited from single sites/health services (see chapter Two for a review). Therefore, this thesis has added crucial information to the evidence base around CS practices of allied health professionals, especially for those working in underserved rural and remote settings.

Summary of key findings

Chapter Two of this thesis examined the available literature on factors that contribute to high quality CS in allied health. It highlighted the issues around CS terminology and included a paper that defines and clarifies CS terminology. It is essential to use CS terminology correctly and consistently to promote understanding and to build the much-needed evidence base around CS. Secondly, CS in health professions was examined exposing the gap in CS research for allied health professionals. Finally, information on the unique context of healthcare in rural and remote Australia was presented and need for CS studies of health professionals serving in these areas was identified.

Chapter Three reported on the quantitative study in the pilot phase. This study recruited 207 occupational therapists from 17 hospital and health services in Queensland. Data were collected using an online customised survey and the Manchester Clinical

Supervision Scale (MCSS-26). Regression analysis was applied to the data. This study identified various factors that positively or negatively influenced CS quality as reported by supervisees. Frequency of supervision sessions, choice of supervisor and the type of supervision were found to be the predictor variables with a positive and significant influence on the quality of CS. Factors such as age, length of supervision and the area of practice were found to be the predictor variables with a negative and significant influence on the quality of CS. This was the first state-wide study, conducted with occupational therapists across all practice settings, which investigated the factors that contributed to high quality CS.

Following on from the quantitative study in the pilot phase, Chapter Four reported on the qualitative study. This study consisted of semi-structured, individual, in-depth interviews with nine occupational therapy supervisees from Queensland using a purposive maximum variation sampling strategy. Study findings from the quantitative component of the pilot study were used to guide the interviews. Content analysis of interview data resulted in eight themes that were broadly around the importance of the supervisory relationship, the impact of CS and enablers of barriers to high quality CS. This study identified a number of factors that were perceived to be associated with high quality CS. Supervisor-supervisee matching and fit, supervisory relationship and availability of supervisor for support in between CS sessions appeared to be associated with perceptions of higher quality of CS received. Some face-to-face contact augmented with telesupervision was found to improve perceptions of the quality of CS received via telephone. Lastly, dual roles where CS and line management were provided by the same person were not considered desirable by supervisees.

Both the quantitative and qualitative studies in the pilot phase tested the outcome measures and processes that were to be used in the main phase. The pilot phase highlighted the difficulty in recruiting rural and remote health professionals using state-wide sampling techniques, as well as the complexities around CS in rural and remote settings. Furthermore, it highlighted the dearth of available studies in that population and the dire need for further CS research to build the evidence for allied health professionals serving in underserved rural and remote settings. Therefore, the main phase was undertaken specifically with rural and remote allied health professionals.

Chapter Five reports on a systematic review on the factors that influence the quality and effectiveness of telesupervision for health professionals. Telesupervision is CS undertaken using technology such as telephone or videoconference. This mode of CS is commonly used by health professionals in rural and remote settings. The review included 11 studies that met inclusion criteria and highlighted the dearth of studies in this area. Eight themes were developed including supervisee characteristics, supervisor characteristics, supervision characteristics, supervisory relationship, communication strategies, prior face-to-face contact, environmental factors and technological considerations. From the available evidence, it was concluded that telesupervision can be a feasible and acceptable form of CS if set up well. Chapter Five also included a complementary publication on effective use of technology in CS which outlines practical tips that can be used by health professionals at the coal face to improve telesupervision quality.

In Chapter Six, results from the quantitative study in the main phase were presented. The aim of this study was to identify the factors that contribute to high quality clinical supervision of the allied health workforce in rural and remote settings. 159 allied health supervisees from seven professions were recruited from five Queensland Health rural and remote Hospital and Health Services and Country Health South Australia Local Health Network. Data were collected using an online customised survey and the Manchester Clinical Supervision Scale (MCSS-26). Regression analysis was applied to the data. Supervisee's work setting and choice of supervisor were found to have a positive and significant influence on CS quality. Supervisee profession and time in work role were found to have a negative and significant influence on the quality of CS. Choice of clinical supervisor was found to have a positive and significant influence on CS quality in this study as well as the quantitative study in the pilot phase (see Chapter Three). To highlight the important role choice of clinical supervisor plays in high quality CS, a manuscript titled *Choice of clinical supervisor: cunning or collusion?* was included in this chapter.

Finally, Chapter Seven reported on the qualitative study in the main phase. This study explored the CS experiences and perspectives of rural and remote allied health supervisees at the coal face. Using a purposive maximum variation sampling strategy, 16 allied health supervisees were recruited from five Queensland Health rural and remote Hospital and Health Services and Country Health South Australia Local Health

Network. Data were collected through individual, semi-structured interviews with participants from six allied health professions. Data were analysed using content analysis and themes were developed. Eight themes were developed including the content of supervision, context of supervision, value of supervision, increased need for professional support and unique characteristics of rural and remote CS. This study highlighted the value of CS for the rural and remote health professional workforce. Furthermore, it shed light on the unique characteristics of CS in this population.

Limitations of research

CS research is in its infancy (Kilminster and Jolly, 2000). The studies in this thesis investigated supervisee perceptions of what makes CS high quality. This was essential to address the knowledge gaps and to build the much-needed evidence in this area. To date, studies have mainly focused on individual stakeholder perspectives on CS processes and not on the impact of CS on patient outcomes. However, it is necessary to move towards measuring the organisational and patient outcomes related to CS. Given healthcare is multi-faceted and complex, causally attributing improved patient outcomes to CS will remain a challenge.

Another limitation relates to the low response rates achieved in the quantitative studies in both the pilot and the main phase. Whilst the pilot quantitative study achieved a response rate of 24%, the main quantitative study had a slightly improved response rate of 33.5%. A number of strategies were put in place (e.g., use of online surveys, getting buy-in from allied health leaders) for the main quantitative phase to improve the response rate following the pilot phase. Whilst there is no gold standard response rate for surveys, this is not unusual for surveys of health professionals (Cook, Dickinson and Eccles, 2009). Rural and remote allied health professionals are particular stretched given the increased constraints and challenges they face (Martin et al., 2013). Further discussions are needed to enhance the research engagement of this group.

A final limitation of the quantitative studies in this thesis was the inability to follow-up non-respondents. As the data collected in this study were non-identifiable, non-respondents were unable to be followed up. Following the pilot phase, alterations were made to the survey in the main phase to encourage those that didn't wish to participate to provide basic demographic information to enable the authors to understand the

characteristics of non-respondents. However, despite the efforts, such data was not made available. Therefore, the conclusions in these studies were made based on the data that were available.

Implications for practice

The findings from this thesis have the potential to influence CS policy and practice in Australia and internationally. Although the studies were conducted with allied health professionals, the transferability of these findings to other healthcare disciplines should be considered given the similarities of healthcare and CS practices across disciplines. Findings from this thesis have already been translated to practice and have impacted Queensland Health in a number of ways. Firstly, findings from the studies have informed the development of Cunningham Centre supervision training (comprising of supervisee, supervisor and advanced supervision workshops) that is offered state-wide to health professionals from allied health, nursing, medicine and dentistry (Cunningham Centre, 2017). Secondly, this thesis has informed the development of a state-wide Queensland Health libguide on CS that is used by clinicians at the coal face (Queensland Health, 2 017). Thirdly, information on factors that contribute to high quality CS has been integrated in CS procedures within Queensland Health. There is potential for these studies to further inform CS policies, guidelines, training and practice world-wide.

Given the focus on rural and remote CS in this thesis, valuable information has now become available on this under-researched aspect of CS. This information, along with findings from the systematic review on telesupervision, can influence CS practices of rural and remote allied health professionals. Furthermore, this information can be used by employing organisations and management in rural and remote areas to support the workforce and promote recruitment and retention that continue to be a challenge.

Recommendations for future research

Various areas for further research pertaining to CS have been identified in this thesis. These include

1 Research to demonstrate the impact of CS on patient care.

2 Research to measure and demonstrate influence of CS on organisational outcomes such as workforce recruitment and retention.
3 Studies on the influence of age on CS (see Chapter Three).
4 Further research of rural and remote CS to build the evidence in this area.
5 Further studies with robust designs are required to strengthen the existing evidence on what makes telesupervision effective, as well as to examine its cost-effectiveness (see Chapter Five).

CS remains a black box creating a need for further research to unpack this. Further studies on the impact of CS on patient outcomes and the return-on-investment for organisations are needed. Despite this thesis addressing some knowledge gaps in CS, the black box of CS remains elusive.

Conclusions

This is the first known multi-state, multi-jurisdictional series of studies to investigate the factors that influence the quality CS for allied health professionals, with a particular focus on rural and remote settings. Factors that influence CS quality in a positive or negative way have been identified. Various enablers of and barriers to high quality CS have also been identified. Finally, factors that influence the quality and effectiveness of telesupervision have been identified.

Specifically, this thesis has determined that:

1 Type of CS, frequency of CS sessions, choice of supervisor and supervisee work setting have a positive and significant influence on CS quality.
2 Supervisee age, length of CS sessions, practice area of the supervisee, profession and time in work role have a negative and significant influence on CS quality.
3 Supervisory relationship is crucial to high quality CS.
4 Rural and remote allied health CS is complex and more than one form of professional support is needed given the broad scope and generalist nature of roles.
5 Supervisor's awareness of supervisee's context is a key success factor for high quality CS in rural and remote settings.
6 There is a risk for reduced engagement with formative aspects of CS (including skills and knowledge development) in telesupervision arrangements.

7 Telesupervision can be a feasible and acceptable form of CS if it is set up well. It is most suited to supervisees that are motivated and driven and for supervisors that understand the context of rural and remote healthcare practice. Furthermore, it is crucial to take additional time at the outset to establish a good supervisory relationship in telesupervision.
8 CS is valuable in workforce recruitment and retention of allied health professionals in rural and remote settings.

Collectively, these findings address important knowledge gaps on the factors that contribute to high quality CS in allied health. The evidence provided by this thesis directly informs health professionals engaging in CS, managers and leaders, healthcare organisations, policy makers and CS researchers about the various factors that contribute to high quality CS, as well as the enablers of and barriers to high quality CS.

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Appendices

Appendix A Complementary publication

Citation Details

Martin, P. 2017. Clinical supervision in the bush: is it any different? *International Journal of integrated care*. Conference abstract accepted for publication.

Introduction

The complexities of rural and remote health professional practice in countries with a highly dispersed population are well-acknowledged. These professionals often feel isolated in their roles whilst dealing with resource constraints, geographical barriers and complex, generalist caseloads. Professional support mechanisms, such as clinical supervision (CS), are often paramount to recruitment and retention of the rural and remote health workforce. Although the value of CS in these contexts is realised, research into this is lacking. This presentation will draw upon a recent mixed methods study in this area, and other available literature, to outline the best practice in rural and remote CS.

Methods

Two recent systematic reviews and a recent Australian mixed methods study were examined. The systematic reviews investigated rural supervision experiences and telesupervision (CS undertaken using technology) respectively (Ducat & Kumar, 2015; Martin et al. 2017). The primary research study investigated the factors that contributed to high quality rural/remote CS using a standardised survey as well as explored supervisee experiences at the coal face through individual interviews (Martin, 2017). Information obtained was then organised into themes.

Results

Numerous factors were identified that contributed either positively or negatively to the quality of CS received in rural and remote areas including work setting, choice of supervisor, supervisee discipline and time in work role. Supervisees also shared their

perspectives on the importance of context in CS, the unique characteristics of rural and remote CS, role of supervision on workforce retention, challenges with hands-on skills development activities and the need for accessing multiple forms of professional support. Ideal CS in rural and remote settings appears to be a regular, evolving and flexible arrangement, with face-to-face interaction and utilising more than one mode. Various enablers of and barriers to high quality CS in rural and remote settings were also identified.

Discussions

Research investigating the CS practices and experiences of rural and remote health professionals in Australia is lacking. Recent studies have shed light on the value and uniqueness of rural and remote CS. Information is now emerging on the factors that contribute to high quality CS as well as the associated enablers and barriers.

Conclusions

High quality CS is essential for clinical governance in health organisations. CS, when conducted efficiently, can lead to safer and higher quality healthcare. CS in rural and remote areas is unique given the geographical barriers and resource constraints. Information is now emerging on what works and what doesn't in rural and remote CS. These findings are expected to be useful to health professionals, employing organisations and policy makers to enhance the rural and remote workforce recruitment and retention.

Lessons learned

Rural and remote CS has unique characteristics reflecting the complex nature of generalist roles. Some conditions need to be met to facilitate high quality CS.

Limitations/Future Research

Further studies with health professionals and bigger sample sizes are necessary to progress the evidence in this area.

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3 Ducat WH & Kumar S. 2015. A systematic review of professional supervision experiences and effects for allied health practitioners working in non-metropolitan healthcare settings. Journal of Multidisciplinary Healthcare, 8: 397-407.

Appendix B Approvals from Human Research Ethics Committees

HREC Approval (Pilot Phase) – Metro South HREC for multi-sites

Metro South
Human Research Ethics Committee

06 September 2011

Enquiries to: Metro South Health Service District
Human Research Ethics Committee
Phone: 07 3176 7672
Fax: 07 3176 7667
HREC Ref: HREC/11/QPAH/322
E-mail: PAH_Ethics_Research@health.qld.gov.au

Miss Priya Martin
Allied Health Department
Canning Street
Rockhampton Hospital
QLD 4700

Dear Miss Martin

HREC Reference number: HREC/11/QPAH/322
Project title: Exploring Occupational Therapists' Perspectives of the Quality and Effectiveness of Clinical Supervision

Thank you for submitting the above research protocol to the Metro South Health Human Research Ethics Committee for ethical and scientific review, on behalf of the following Principal Investigators (see appendix). This protocol was first considered by the Human Research Ethics Committee (HREC) at the meeting held on 28 June 2011.

I am pleased to advise that the HREC has granted approval of this research protocol.

You are reminded that this letter constitutes ethical approval only. You must not commence this research protocol at a site until separate authorisation from the District CEO or Delegate of that site has been obtained.

A copy of this approval must be submitted to the District Research Governance Office(r)/Delegate of the relevant institution with a completed Site Specific Assessment (SSA) Form for authorisation from the CEO or Delegate to conduct this research at the Metro North Health Service District, Metro South Health Service District, Cairns and Hinterland Health Service District, Cape York Health Service District, Central Queensland Health Service District, Central West Health Service District, Children's Health Services, Darling Downs – West Moreton Health Service District, Gold Coast Health Service District, Mackay Health Service District, Mount Isa Health Service District, South West Health Service District, Sunshine Coast Health Service District, Torres Straits – Northern Peninsula Health Service District, Townsville Health Service District & Wide Bay Health Service District

The documents reviewed and approved include:

Document	*Version*	*Date*
Feedback letters from other review bodies		
Sample copy of research instrument – Manchester Clinical Supervision Scale		
Application		15 June 2011
Checklist		
Lay Summary		
Protocol: Exploring Occupational Therapists' Perspectives of the quality and Effectiveness of Clinical Supervision		
Patient Information Sheet/Consent Form for Part 1 and 2	1	15 June 2011

Please note the following conditions of approval:

1. The Coordinating Principal Investigator will immediately report anything which might warrant review of ethical approval of the protocol in the specified format, including unforeseen events that might affect continued ethical acceptability of the protocol. Serious Adverse Events must be notified to the HREC as soon as possible. In addition the Investigator must provide a summary of the adverse events, in the specified format, including a comment as to suspected causality and whether changes are required to the Patient Information and Consent Form. In the case of Serious Adverse Events occurring at the local site, a full report is required from the Coordinating Principal Investigator, including duration of treatment and outcome of the event.
2. Amendments to the research protocol which may affect the ongoing ethical acceptability of a protocol must be submitted to the HREC for review. Major amendments should be reflected in a revised online NEAF (accompanied by all relevant updated documentation and a cover letter from the principal investigator, providing a brief description of the changes, the rationale for the changes, and their implications for the ongoing conduct of the study). Hard copies of the revised NEAF, the cover letter and all relevant updated documents, with *tracked changes*, must also be submitted to the HREC office as per standard HREC SOP. (Further advice on submitting amendments is available at http://www.health.qld.gov.au/ohmr/documents/researcher_userguide.pdf http://www.health.qld.gov.au/pahospital/research/amendments.asp
3. Amendments to the research protocol which only affect the ongoing site acceptability of the protocol are not required to be submitted to the HREC for review. These amendment requests should be submitted directly to the Research Governance Office/r.
4. Proposed amendments to the research protocol which may affect both the ethical acceptability and site suitability of the protocol must be submitted firstly to the HREC for review and, once HREC approval has been granted, then submitted to the Research Governance Office/r.
5. Amendments which do not affect either the ethical acceptability or site acceptability of the protocol (e.g. typographical errors) should be submitted electronically (track changes) and in hard copy (final clean copy) to the Research Ethics Manager. These should include a cover letter from the Coordinating Principal Investigator or Study Co-ordinator providing a brief description of the changes and the rationale for the changes, and accompanied by all relevant updated documents with tracked changes.
6. The HREC will be notified, giving reasons, if the protocol is discontinued at a site before the expected date of completion.
7. The Coordinating Principal Investigator will provide an annual report to the HREC and at completion of the study in the specified format.

This HREC approval is valid for 3 years from the date of this letter.

8. If you require an extension for your study, please submit a request for an extension in writing outlining the reasons. Note: One of the criteria for granting an extension is the compliance with the approval's conditions including submission of progress reports.

Should you have any queries about the HREC's consideration of your protocol please contact the Ethics Secretariat on 07 3176 7672.

Please note that the Metro South HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007)* and the *CPMP/ICH Note for Guidance on Good Clinical Practice*. Attached is the HREC Composition with specialty and affiliation with the Hospital (Attachment I).

The HREC Terms of Reference, Standard Operating Procedures, membership and standard forms are available from the following websites:

http://www.health.qld.gov.au/pahospital/research/ethics.asp

http://www.health.qld.gov.au/ohmr/html/regu/regu_home.asp

Once authorisation to conduct the research has been granted, please complete the Commencement Form (Attached) and return to the Metro South Human Research Ethics Committee.

The Metro South HREC wishes you every success in your research.

Yours sincerely,

[redacted]

A/Prof Maher Gandhi
Chair
Metro South Health Service District
Human Research Ethics Committee (EC00167)
Centres for Health Research
Princess Alexandra Hospital

Appendix:

List of Principal Investigators and Sites

No.	Name of Principal Investigators	Sites
1.	Priya Martin	Metro North Health Service District
2.	Priya Martin	Metro South Health Service District
3.	Priya Martin	Cairns and Hinterland Health Service District
4.	Priya Martin	Cape York Health Service District
5.	Priya Martin	Central Queensland Health Service District
6.	Priya Martin	Central West Health Service District
7.	Priya Martin	Children's Health Services
8.	Priya Martin	Darling Downs – West Moreton Health Service District
9.	Priya Martin	Gold Coast Health Service District
10.	Priya Martin	Mackay Health Service District
11.	Priya Martin	Mount Isa Health Service District
12.	Priya Martin	South West Health Service District
13.	Priya Martin	Sunshine Coast Health Service District
14.	Priya Martin	Torres Straits – Northern Peninsula Health Service District
15.	Priya Martin	Townsville Health Service District
16.	Priya Martin	Wide Bay Health Service District

HREC Approval (Pilot Phase) – the University of Queensland

During the conduct of the pilot phase the candidate was enrolled at the University of Queensland as a higher degree research candidate. Therefore, as is required, ethical approval for the conduct of this phase was obtained from the University of Queensland's (educational institution) HREC for this phase. Subsequently, the candidate transferred her candidature to the University of South Australia. Therefore, ethical approval for all subsequent phases of research was obtained from the University of South Australia's (educational institution) HREC.

School of Medicine

The University of Queensland
Mayne Medical School
Herston Road
Herston Qld 4006 Australia

School of Medicine Approval Form for Research Involving Humans Including Behavioural Research

for Honours, MPhil & PhD Students in the School of Medicine

Chief Investigator (student)	Priya Martin
Project Title	Exploring Occupational Therapists perceptions of the quality and effectiveness of clinical supervision
Supervisor(s)	Dr Stephani Tyack & Dr Jodie Copely
Co-Investigator(s)	
Research Centre/Institute/School	School of Medicine
SOM Clearance Number	2011-SOMILRE-0015
Date of Issue	15 Sep 2011
Date of Expiry	Dec 2013

Comments: Holds prior approval from the QH Low Risk Review

UQ School of Medicine Low Risk Ethical Review Committee

This project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research (complies with the regulations governing research involving humans) and UQ ethical paragraphs concerning low risk research.

UQ School of Medicine Low Risk Ethical Review Committee Representative

Associate Professor Diann Eley

[redacted]

Signed Date 21/11/2011

HREC Approval (Main Phase) - Darling Downs Hospital and Health Service HREC for multi-sites

Queensland
Government

Medical Services

Darling Downs Hospital and Health Service

Enquiries to: Wendy Friend
Telephone: (61 7) 4616 6696
Facsimile: (61 7) 4616 5099
Our Ref: HREC/16/QTDD/22

Ms Priya Martin
Cunningham Centre
Penrose
Baillie Henderson Hospital
PO Box 405
TOOWOOMBA QLD 4350

Dear Ms Martin

HREC Reference number: HREC/16/QTDD/22
Project title: Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study.

Thank you for submitting the above project for ethical and scientific review. This project was considered by the Darling Downs Hospital and Health Services Human Research Ethics Committee (HREC).

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007) and the CPMP/ICH Note for Guidance on Good Clinical Practice. Attached is the HREC Composition with specialty and affiliation with the Hospital.

This research proposal meets the requirements of the National Statement on Ethical Conduct in Human Research. I am pleased to advise that the Human Research Ethics Committee has granted approval of this research project at the following sites:

- All facilities as listed in Attachment 1 for the Department of Health in the state of Queensland
- All facilities as listed in Attachment 2 for Country Health for the state of South Australia

Medical Services
Pechey Street Toowoomba
PMB 2 Toowoomba
Queensland 4350 Australia
Telephone +61 7 4616 6151
Facsimile +61 7 4616 5099
www.health.qld.gov.au/darlingdowns

ABN 64 109 516 141

The documents reviewed and approved include:

Document	Version	Date
Application	NEAF AU/1/DC15210	31/03/2016
Participant Information Sheet for survey participants	V2	26/04/2016
Participant Information Sheet for interview participants	V2	26/04/2016
Consent Form	V2	26/04/2016
Protocol		10/04/2016
Interview Guide	V1	31/03/2016
Questionnaire: Manchester Clinical Supervision Scale (MCSS – 26)		31/03/2016
CV Priya Martin		April 2016
CV V S Saravana Kumar		March 2016
CV Lucylynn Lizarondo		April 2016
Further Information Response		26/04/2016

Please note the following conditions of approval:

1. The Principal Investigator will immediately report anything which might warrant review of ethical approval of the project in the specified format, including: Unforeseen events that might affect continued ethical acceptability of the project.

2. Serious Adverse Events must be notified to the Committee as soon as possible. In addition the Investigator must provide a summary of the adverse events, in the specified format, including a comment as to suspected causality and whether changes are required to the Patient Information and Consent Form. In the case of Serious Adverse Events occurring at the local site, a full report is required from the Principal Investigator, including duration of treatment and outcome of event.

3. Amendments to the research project which may affect the ongoing ethical acceptability of a project must be submitted to the HREC for review. Major amendments should be reflected in a revised online NEAF (accompanied by all relevant updated documentation and a cover letter from the principal investigator, providing a brief description of the changes, the rationale for the changes, and their implications for the ongoing conduct of the study). Hard copies of the revised NEAF, the cover letter and all relevant updated documents with tracked changes must also be submitted to the HREC coordinator as per standard HREC SOP. Further advice on submitting amendments is available from http://www.health.qld.gov.au/ohmr/html/regu/regu_home.asp

4. Amendments to the research project which only affect the ongoing site acceptability of the project are not required to be submitted to the HREC for review. These amendment requests should be submitted directly to the Research Governance Office/r (by-passing the HREC).

5. Proposed amendments to the research project which may affect both the ethical acceptability and site suitability of the project must be submitted firstly to the HREC for review and, once HREC approval has been granted, then submitted to the RGO.

6. Amendments which do not affect either the ethical acceptability or site acceptability of the project (e.g. typographical errors) should be submitted in hard copy to the HREC coordinator. These should include a cover letter from the principal investigator providing a brief description of the changes and the rationale for the changes, and accompanied by all relevant updated documents with tracked changes.

7. The HREC will be notified, giving reasons, if the project is discontinued at a site before the expected date of completion.

8. The Principal Investigator will provide an annual report to the HREC and at completion of the study in the specified format.

9. The Health Service administration and the Human Research Ethics Committee may inquire into the conduct of any research or purported research, whether approved or not and regardless of the source of funding, being conducted on hospital premises or claiming any association with the Hospital; or which the Committee has approved if conducted outside the Hospital and Health Service.

HREC approval is valid for 3years from the date of this letter.

Should you have any queries about the HREC's consideration of your project please contact Dr Ans Van Erp, Acting Chair, Darling Downs Hospital and Health Service Human Research Ethics Committee. The HREC terms of Reference, Standard Operating Procedures, membership and standard forms are available from http://www.health.qld.gov.au/ohmr/html/regu/regu_home.asp

You are reminded that this letter constitutes ethical approval only. You must not commence this research project at a site until separate authorisation from the Health Service Chief Executive or Delegate of that site has been obtained.

A copy of this approval must be submitted to the Health Service Research Governance Officer/Delegated Personnel with a completed Site Specific Assessment (SSA) Form for authorisation from the CE or Delegate to conduct this research at the Health Service.

Once authorisation to conduct the research has been granted, please complete the Commencement Form attached and return it to the office of the Human Research Ethics Committee.

The HREC wishes you every success in your research.

Yours faithfully

[redacted]

Dr Ans Van Erp
Acting Chair
Darling Downs Hospital and Health Service
Human Research Ethics Committee

27 / 4 / 16

Ethics Amendment (Main Phase)

Queensland Government

Medical Services

Darling Downs Hospital and Health Service

Enquiries to: Wendy Friend
Telephone: (61 7) 4616 6696
Facsimile: (61 7) 4616 5099
Our Ref: HREC/16/QTDD/22

Ms Priya Martin
Cunningham Centre
Penrose
Baillie Henderson Hospital

Dear Ms Martin

HREC Reference number: HREC/16/QTDD/22
Project title: Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study.
Amendment number: HREC/16/QTDD/22/AM01
Amendment Date: 23 August 2016

The above amendment was reviewed at the meeting of the Darling Downs Hospital and Health Service Human Research Ethics Committee held on 08 September, 2016.

I am pleased to advise that the amended documents reviewed and approved at the meeting were:

Document	Version	Date
Notification of amendment Change of sites to: Longreach Hospital Mt Isa Hospital Roma Hospital St George Hospital Charleville Hospital Weipa Integrated Health Service Cooktown Multipurpose Health Service Thursday Island Hospital Thursday Island Community Wellness Centre Thursday Island Primary Health Care Centre		23 August 2016
Inclusion of 'implied consent' on Information Sheet (for survey participants)	V3	23 August 2016

Medical Services
Pechey Street Toowoomba
PMB 2 Toowoomba
Queensland 4350 Australia
Telephone +61 7 4616 6151
Facsimile +61 7 4616 5099
www.health.qld.gov.au/darlingdowns

ABN 64 109 516 141

The Darling Downs Hospital and Health Services HREC is constituted and operates in accordance with the National Health and Medical Research Council's *"National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007)* and the "*CPMP/ICH Note for Guidance on Good Clinical Practice".*

A copy of this letter must be forwarded to the Governance Officer.

It should be noted that all requirements of the original approval still apply.

Should you require any additional information, please contact the HREC Co-ordinator on 07 4616 6696 or DDHHS-RESEARCH@health.qld.gov.au.

Yours sincerely

[redacted]

Angela O'Shea
A/Chair
Darling Downs Hospital & Health Service
Human Research Ethics Committee

16/09/16

HREC Approval (Main Phase) – The University of South Australia

From: Priya Martin
To: Priya Martin
Subject: Fwd: Human Ethics: Application approved
Date: Thursday, 26 May 2016 12:14:10 PM

---------- Forwarded message ----------
From: <no_reply@unisa.edu.au>
Date: 26/05/2016 11:06 AM
Subject: Human Ethics: Application approved
[redacted]
Cc:

Dear Applicant

Re: Ethics protocol "Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study" (Application ID: 0000035268)

Thank you for submitting your ethics protocol for consideration. Your protocol has been considered by the E1 Committee Review Group.

I am pleased to advise that your protocol has been granted ethics approval and meets the requirements of the National Statement on Ethical Conduct in Human Research. Please note that the E1 Committee Review Group's decision will be reported to the next meeting of the Human Research Ethics Committee for endorsement.

Please regard this email as formal notification of approval.

Ethics approval is always made on the basis of a number of conditions detailed at http://www.unisa.edu.au/res/forms/docs/humanresearchethics_conditions.doc; it is important that you are familiar with, and abide by, these conditions. It is also essential that you conduct all research according to UniSA guidelines, which can be found at http://www.unisa.edu.au/res/ethics/default.asp

Please note, if your project is a clinical trial you are required to register it in a publicly accessible trials registry prior to enrolment of the first participant (e.g. Australian New Zealand Clinical Trials Registry http://www.anzctr.org.au/) as a condition of ethics approval.

Best wishes for your research.

Executive Officer
UniSA's Human Research Ethics Committee
CRICOS provider number 00121B

This is an automated email and cannot be replied to. Please direct your query to humanethics@unisa.edu.au.

Appendix C Participant information sheets

Participant Information – Pilot quantitative study (Study One)

Project Title - Exploring Occupational Therapists' Perspectives of the Quality and Effectiveness of Clinical Supervision

The aim of this research is to investigate the effectiveness of clinical supervision for Occupational Therapists in Queensland; as well as factors that influence clinical supervision and the barriers to effective clinical supervision. Limited evidence currently exists in these areas for any of the allied health disciplines.

Clinical Supervision plays a big part in the Occupational Therapy profession and has recently gained wide recognition as being fundamental to clinical competence, and the maintenance and improvement of clinical practice. This study will examine whether the Manchester Clinical Supervision Scale (originally developed for the Nursing population) is valid for use with Occupational Therapists. Although the Manchester will address the effectiveness of supervision, it does not examine how the other influences such as workplace culture, structured sessions, supervisor's empathy, power imbalance between the supervisor and supervisee, lack of local knowledge by supervisors, training of supervisors, lack of time etc. which have been described in the literature influence effective supervision. Therefore, information about the barriers and facilitators of effective clinical supervision will be explored using individual interviews with a small number of OTs to advance knowledge in this area.

The rationale for addressing the barriers and facilitators of supervision is that this of great interest to our profession as it would provide greater depth of information regarding effective clinical supervision.

This study consists of two parts.

Part 1 Based on review of literature, a survey questionnaire has been developed. You are invited to complete this survey questionnaire and the Manchester Clinical Supervision Scale (MCSS) as an OT working in Queensland. This will help in determining if the MCSS is valid for the OT population. **You are being invited to participate in part 1 of the study.**

Part 2 of this research will consist of individual interviews. This will help in exploring the barriers and facilitators of effective clinical supervision. If you would like to participate in part 2 of the study please send an email to the principal investigator (Email – Priya_Martin@health.qld.gov.au) for further information to be sent to you.

The research group has used the OT Board of Queensland to mail out the survey confidentially. You are being sent a survey questionnaire, the MCSS and 2 reply-paid envelopes addressed to Ms. Priya Martin, Allied Health Department, Rockhampton Hospital, Queensland 4700. The OT Board of Queensland has assisted the investigators by producing a mailing label, affixing it to this correspondence as supplied by the research team, in a sealed envelope and lodging it with Australia Post. The Board has not disclosed your name, address or any other information to the research team in providing this service.

The survey questionnaire and the MCSS will take approximately 20 minutes to complete. All responses will be confidential and no organisation or individual can be identified unless you specifically insert these details. In order to maintain your anonymity please do not insert organisational or individual identifying details such as your name or position. The data will be stored securely and will be accessible only to the investigators. Please return the completed MCSS and the survey questionnaire in one envelope and the signed consent form in the second envelope.

The results of the survey will be published in the Occupational Therapy literature and presented at Occupational Therapy conferences. The findings will consist of group results and no individual information will be identifiable. The more responses we receive, the more insight we will obtain from this research.

Participation is entirely **voluntary.** If you choose not to participate in the study or decide to withdraw, this will not affect your relationship with the OT Board of Queensland or the investigators. You are free to contact the researchers any time if you have any concerns or questions or would like more information about the project on 0419677006 or email Priya_Martin@health.qld.gov.au.

Ethics approval has been obtained from the Metro South Queensland Health multi-site Human Resources Ethics Committee.

Thank you for taking the time to read this information. We hope you will assist us in advancing knowledge of Clinical Supervision of OT's by completing the questionnaires. We appreciate your input in advance.

Ms. Priya Martin - (Principal Investigator),
Clinical Education Support Officer,
Occupational Therapy,
Allied Health, Rockhampton Hospital,
Rockhampton – 4700.
Email – Priya_Martin@health.qld.gov.au
Phone – 0419677006/ (07) 4920 7396

Dr. Zephanie Tyack - (Co-Investigator),
Principal Research Fellow,
Allied health, Rockhampton Hospital,
Rockhampton – 4700.
Email - Zephanie_Tyack@health.qld.gov.au
Phone – (07) 4920 7396

Dr Jodie Copley - (Co-Investigator),
Lecturer,
School of Health and Rehabilitation Sciences,
The University of Queensland,
St Lucia – 4072
Email – j.copley@uq.edu.au
Phone – (07) 3365 3011

Participant Information – Pilot qualitative study (Study Two)

Information sheet for interview participants

Project Title - Exploring Occupational Therapists' Perspectives of the Quality and Effectiveness of Clinical Supervision

The aim of this research is to investigate the effectiveness of clinical supervision for Occupational Therapists in Queensland; as well as factors that influence clinical supervision and the barriers to effective clinical supervision. Limited evidence currently exists in these areas for any of the allied health disciplines.

Clinical Supervision plays a big part in the Occupational Therapy profession and has recently gained wide recognition as being fundamental to clinical competence, and the maintenance and improvement of clinical practice. This study will examine whether the Manchester Clinical Supervision Scale (originally developed for the Nursing population) is valid for use with Occupational Therapists. Although the Manchester will address the effectiveness of supervision, it does not examine outside influences such as workplace culture, structured sessions, supervisor's empathy, power imbalance between the supervisor and supervisee, lack of local knowledge by supervisors, training of supervisors, lack of time etc. which have been described in the literature. Therefore, information about the barriers and facilitators of effective clinical supervision will be explored using survey questions and individual interviews with a small number of OTs to advance knowledge in this area.

The rationale for addressing the barriers and facilitators of supervision is that this of great interest to our profession as it would provide greater depth of information regarding effective clinical supervision.

This study constitutes two parts.

Part 1 consisted of administration of the Manchester Clinical Supervision Scale (MCSS) and additional survey questions to registered OTs working in Queensland. The Questionnaire and the MCSS will help in determining the validity of the MCSS among the OT population.

Part 2 consists of individual interviews. You are being invited to participate in this part of the study. Not all of those who respond as willing to participate will be asked to participate as it is necessary to select the participants that represent a cross section of

locations (i.e., rural, remote, and metropolitan) and a mix of males and females. Any identifying information will be removed at the time the data is transcribed and it will be stored in non-identifiable form on completion of the study in a locked filing cabinet in the Allied Health Department, Rockhampton Hospital. We would like to contact you once the data is transcribed to check the summaries, to ensure that we have interpreted correctly. The principal research investigator will check with you that you are happy for this to occur after the interview has been completed.

The results of the survey will be published in the Occupational Therapy literature and presented at Occupational Therapy conferences. The findings will consist of group results and no individual information will be identifiable. The more responses we receive, the more insight we will obtain from this research.

Participation is entirely **voluntary.** If you choose not to participate in the study or decide to withdraw, this will not affect your relationship with the OT Board of Queensland or the investigators. You are free to contact the researchers any time if you have any concerns or questions or would like more information about the project on 0419677006 or email priya_martin@health.qld.gov.au.

Ethics approval has been obtained from the Metro South Queensland Health multi-site Human Resources Ethics Committee.

Thank you for taking the time to read this information. We hope you will assist us in advancing knowledge of Clinical Supervision of OT's by participating in the focus group discussions. We appreciate your input in advance.

Ms. Priya Martin – (Principal Investigator),
Clinical Education Support Officer,
Occupational Therapy,
Allied Health, Rockhampton Hospital,
Rockhampton – 4700.
Email – Priya_Martin@health.qld.gov.au
Phone – 0419677006/ (07) 4920 7396

Dr. Zephanie Tyack - (Co-Investigator),
Principal Research Fellow,
Allied health, Rockhampton Hospital,
Rockhampton – 4700.
Email - Zephanie_Tyack@health.qld.gov.au

Phone – (07) 4920 7396

Dr Jodie Copley - (Co-Investigator),
Lecturer,
School of Health and Rehabilitation Sciences,
The University of Queensland,
St Lucia – 4072
Email – j.copley@uq.edu.au
Phone – (07) 3365 3011

Participant Information – Main quantitative study (Study Three)

Project Title - Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study

The aim of this research is to investigate the factors that influence the perceived quality of clinical supervision among allied health professionals from a supervisee perspective in non-metropolitan Queensland and Country South Australia Health. Limited evidence currently exists in these areas for the allied health disciplines. The professions included in this research study are physiotherapy, occupational therapy, speech pathology, psychology, podiatry, exercise physiology, dietetics and social work.

Clinical supervision has also been shown to have a wide range of benefits for professionals, patients and health organisations. It plays a big part in the the allied health professions and has recently gained wide recognition as being fundamental to clinical competence, and the maintenance and improvement of clinical practice. Given the important nature of clinical supervision, it is necessary to identify and better understand the factors that improve it's quality.

This study consists of two phases.

Phase One - Based on a review of literature, a demographic questionnaire has been developed. This contains questions about your current supervision arrangements and your perceptions of how it works for you. You are invited to complete this questionnaire and the Manchester Clinical Supervision Scale (MCSS -26) which contains questions about the supervision you receive. **You are being invited to participate in Phase One of the study.**

Phase Two of this research will consist of individual interviews. This will help in understanding the results from Phase One and finding out some more about the factors that influence high quality clinical supervision.

The demographic questionnaire and the MCSS-26 will take approximately 20 minutes to complete. All responses will be confidential and no organisation or individual can be identified unless you specifically insert these details. In order to maintain your anonymity please do not insert organisational or individual identifying details such as

your name or position. The data will be stored securely and will be accessible only to the investigators for seven years after which it will be destroyed.

The results of this study will be published in the allied health literature and presented at health conferences. The findings will consist of group results and no individual information will be identifiable. The more responses we receive, the more insight we will obtain from this research.

Participation is entirely voluntary. Your decision to complete the survey will be taken as your implied consent to participate. If you choose not to participate in the study or decide to withdraw, this will not affect your relationship with the investigators. You are free to contact the researchers any time if you have any concerns or questions or would like more information about the project on 07 4699 8130 or email Priya.Martin@health.qld.gov.au.

Ethics approval for multi-sites has been obtained from the following Human Research Ethics Committees – Darling Downs Hospital and Health Service and the University of South Australia.

Thank you for taking the time to read this information. We hope you will assist us in advancing knowledge of clinical supervision of allied health professionals by completing the questionnaires. We appreciate your input in advance. If you would like to participate, please click this Survey Monkey link – https://www.surveymonkey.com/r/CSUP_QH.

Please be aware that SurveyMonkey is based in the United States of America. Information you provide on this survey will be transferred to SurveyMonkey's servers in the United States of America and Luxembourg. SurveyMonkey's Security Statement can be found at https://www.surveymonkey.net/mp/policy/security/. By completing this survey, you agree to this transfer.

Ms. Priya Martin (Principal Investigator),
Advanced Clinical Educator – Allied Health,
Cunningham Centre
Penrose, Baillie Henderson Hospital
Toowoomba
Queensland – 4350
Email – Priya.Martin@health.qld.gov.au
Phone – (07) 4699 8130

Dr. Saravana Kumar (Co-Investigator)
Senior Lecturer
School of Health Sciences
University of South Australia
Adelaide
South Australia – 5005
Email – Saravana.Kumar@unisa.edu.au
Phone – (08) 8302 2085

Dr Lucylynn Lizarondo (Co-Investigator)
Research Fellow – Implementation Science,
Faculty of Health Sciences,
The University of Adelaide
Adelaide
South Australia - 5005
Email – Lucylynn.Lizarondo@adelaide.edu.au
Phone – (08) 8313 2283

Please contact the Human Research Ethics Committee coordinator on 07 4616 6696 or via email DDHHS-RESEARCH@health.qld.gov.au for any complaints about the conduct of the study.

Participant Information – Main qualitative study (Study Four)

Information sheet for interview participants

Project Title - Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study

The aim of this research is to investigate the factors that influence the perceived quality of clinical supervision among allied health professionals from a supervisee perspective in non-metropolitan Queensland and Country South Australia Health. Limited evidence currently exists in these areas for the allied health disciplines. The professions included in this research study are physiotherapy, occupational therapy, speech pathology, psychology, podiatry, exercise physiology, dietetics and social work.

Clinical supervision has also been shown to have a wide range of benefits for professionals, patients and health organisations. It plays a big part in the the allied health professions and has recently gained wide recognition as being fundamental to clinical competence, and the maintenance and improvement of clinical practice. Given the important nature of clinical supervision, it is necessary to identify and better understand the factors that improve it's quality.

This study consists of two phases.

Phase One – This phase has already been completed. It consisted of administration of a demographic questionnaire and the Manchester Clinical Supervision Scale (MCSS-26).

Phase Two - Phase Two of this research will consist of individual, semi-structured interviews. These interviews will help with understanding the results from Phase One and finding out some more about the factors that influence high quality clinical supervision. **You are being invited to participate in Phase Two of the study.**

Each interview is expected to last around 45 minutes. Interviews will be transcribed verbatim by an independent typist before the data from all interviews are analysed. All responses will be confidential and no organisation or individual can be identified unless you specifically insert these details. In order to maintain your anonymity please do not insert organisational or individual identifying details such as your name or position. The data will be stored securely and will be accessible only to the investigators for seven years after which it will be destroyed.

The results of this study will be published in the allied health literature and presented at health conferences. The findings will consist of group results and no individual information will be identifiable. The more responses we receive, the more insight we will obtain from this research.

Participation is entirely **voluntary.** If you choose not to participate in the study or decide to withdraw, this will not affect your relationship with the investigators. You are free to contact the researchers any time if you have any concerns or questions or would like more information about the project on 07 4699 8130 or email Priya.Martin@health.qld.gov.au.

Ethics approval for multi-sites has been obtained from the following Human Research Ethics Committees – Darling Downs Hospital and Health Service HREC for multi-sites and the University of South Australia HREC.

Thank you for taking the time to read this information. We hope you will assist us in advancing knowledge of clinical supervision of allied health professionals by taking part in the interviews. We appreciate your input in advance.

Ms. Priya Martin (Principal Investigator),
Advanced Clinical Educator – Allied Health,
Cunningham Centre
Penrose, Baillie Henderson Hospital
Toowoomba
Queensland – 4350
Email – Priya.Martin@health.qld.gov.au
Phone – (07) 4699 8130

Dr. Saravana Kumar (Co-Investigator)
Senior Lecturer
School of Health Sciences
University of South Australia
Adelaide
South Australia – 5005
Email – Saravana.Kumar@unisa.edu.au
Phone – (08) 8302 2085

Dr Lucylynn Lizarondo (Co-Investigator)
Research Fellow – Implementation Science,
Faculty of Health Sciences,
The University of Adelaide
Adelaide
South Australia - 5005
Email – Lucylynn.Lizarondo@adelaide.edu.au

Phone – (08) 8313 2283

Please contact the Human Research Ethics Committee coordinator on 07 4616 6696 or via email DDHHS-RESEARCH@health.qld.gov.au for any complaints about the conduct of the study.

Appendix D Participant informed consent forms

Consent Form - Pilot quantitative study (Study One)

Project Title - Exploring Occupational Therapists' Perspectives of Quality and Effectiveness of Clinical Supervision

Principal Investigator:

Priya Martin
Clinical Education Support Officer
Occupational Therapy
Allied Health, Rockhampton Hospital
Queensland – 4700.

Co-investigators:

Dr. Zephanie Tyack
Principal Research Fellow
Allied health, Rockhampton Hospital
Queensland – 4700.

Dr. Jodie Copley
Lecturer
School of Health and -
Rehabilitation Sciences
The University of Queensland.

I am aware that the aim of this research is to investigate the effectiveness of clinical supervision for Occupational Therapists in Queensland; as well as investigate the factors that influence clinical supervision and the barriers to effective clinical supervision.

I, ……

1. Understand that I do not have to participate in this research study if I do not want to.
2. Realise that whether or not I decide to participate is my decision and will not impact on my relationship with the OT Board of Queensland or the researchers.
3. Realise that I can withdraw from the research at any time. I do not have to give any reasons for withdrawing.
4. Understand that if I do choose to withdraw from the research, any information received from me or pertaining to me that was obtained during the research will not be used unless I provide written approval.

5. Understand that all information obtained from me or pertaining to me will be kept strictly confidential by the research team. I will not be able to be identified as a participant as long as no identifying information is added by me. There will be no means of identifying me as a research participant in any publication, presentation or other means arising from the research.
6. Am aware that data obtained from or about me for this study may be used for future related research projects. I consent to its use for that purpose.
7. Have been given an opportunity to ask questions about the research project. All my questions have been answered to my satisfaction.
8. Have decided to participate in this research project of my own free will. I have not been coerced in any way to participate.
9. Understand that I am under no obligation to separately email my contact details to the primary investigator so that an information and consent form can be sent to me for consideration in second part of the study – an interview.
10. Understand that the study will be carried out as described on the 'Participation Information Sheet'.
11. Have a copy of the 'Participation Information Sheet' and the 'Consent to Participate' form.
12. Understand the contents of the 'Participation Information Sheet' and this 'Consent to Participate' form. I agree to participate and give my consent freely.

Print Name:

Signature of the Participant: …… Date: …/.../…

Consent Form - Pilot qualitative study (Study Two)

Project Title - Exploring Occupational Therapists' Perspectives of Quality and Effectiveness of Clinical Supervision

Principal Investigator:

Priya Martin
Clinical Education Support Officer
Occupational Therapy
Allied Health, Rockhampton Hospital
Queensland – 4700.

Co-investigators:

Dr. Zephanie Tyack
Principal Research Fellow
Allied health, Rockhampton Hospital
Queensland – 4700.

Dr. Jodie Copley
Lecturer
School of Health and -
Rehabilitation Sciences
The University of Queensland.

I am aware that the aim of this research is to investigate the effectiveness of clinical supervision for Occupational Therapists in Queensland; as well as investigate the factors that influence clinical supervision and the barriers to effective clinical supervision.

I, ……

1. Understand that I do not have to participate in this research study if I do not want to.
2. Realise that whether or not I decide to participate is my decision and will not impact on my relationship with the OT Board of Queensland or the researchers.
3. Realise that I can withdraw from the research at any time. I do not have to give any reasons for withdrawing.
4. Understand that if I do choose to withdraw from the research, any information received from me or pertaining to me that was obtained during the research will not be used unless I provide written approval.
5. Understand that all information obtained from me or pertaining to me will be kept strictly confidential to the research team. There will be no means of identifying me as a research participant in any publication, presentation or other means arising from the research.
6. Am aware that data obtained from or about me for this study may be used for future related research projects. I consent to its use for that purpose.
7. I am happy to provide the information listed below including my gender and location to assist the researchers in selecting the right mix of people for the interview.
8. I am aware that I may not be selected for an interview.

9. Am aware that I will be contacted after the interview to check accuracy of the data that was transcribed word to word. I consent to this.
10. Have been given an opportunity to ask questions about the research project. All my questions have been answered to my satisfaction.
11. Have decided to participate in this research project of my own free will. I have not been coerced in any way to participate.
12. Understand that the study will be carried out as described on the 'Participation Information Sheet'.
13. Have a copy of the 'Participation Information Sheet' and the 'Consent to Participate' form.
14. Understand the contents of the 'Participation Information Sheet' and this 'Consent to Participate' form. I agree to participate and give my consent freely.

Print Name:

Contact Details:
(for forwarding the interview transcript for data checking)

Signature of the Participant: …… Date: …/.../…

Gender (please circle) Male Female

Location (please state the town(s) or suburb(s) that you predominately practice in)

Consent Form - Main qualitative study (Study Four)

Project title - Factors that contribute to high quality clinical supervision in allied health: a mixed methods sequential explanatory study

- I have read the participant information sheet and the nature and purpose of the research project has been explained to me. I understand and agree to take part.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may withdraw from the research project at any stage and that this will not affect my status now or in the future.
- I understand that while information gained during the study may be published, I will not be identified and my personal results will remain confidential.
- I understand that if I choose to participate, participation will involve completing a semi-structured interview and completion of a questionnaire and the Manchester Clinical Supervision Scale (MCSS-26).
- I understand that any paper-based data will be stored in a locked cabinet at the Cunningham Centre (Darling Downs Hospital and Health Service, Queensland) and the University of South Australia for seven years. The files will be shredded after this time.
- I understand that the interviews will be audio-taped.
- I understand that the audiotape will be transcribed into an electronic word document. I understand that the electronic file will be held by the investigators for seven years in safe password-protected computers. The file will be electronically destroyed after this time.

Name of participant
…….....

Signed……
Date……

I have provided information about the research to the research participant and believe that he/she understands what is involved.

Researcher's signature and date
…….....

Appendix E Chapter permissions and authorship statements

Chapter 2 permissions and authorship statement

Permission

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Sep 27, 2017

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Licensed Content Title	When I say … clinical supervision
Licensed Content Author	Priya Martin,Saravana Kumar,Lucylynn Lizarondo
Licensed Content Date	Feb 17, 2017
Licensed Content Pages	2
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Format	Print and electronic
Portion	Full article
Will you be translating?	No
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Factors influencing the quality of clinical supervision of occupational therapists in one Australian State

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Statement of authorship

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I hereby certify that this statement of contribution to the above-named paper is correct, and I give permission for the inclusion of the paper in the thesis.

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Publication Two: Effective use of technology in clinical supervision

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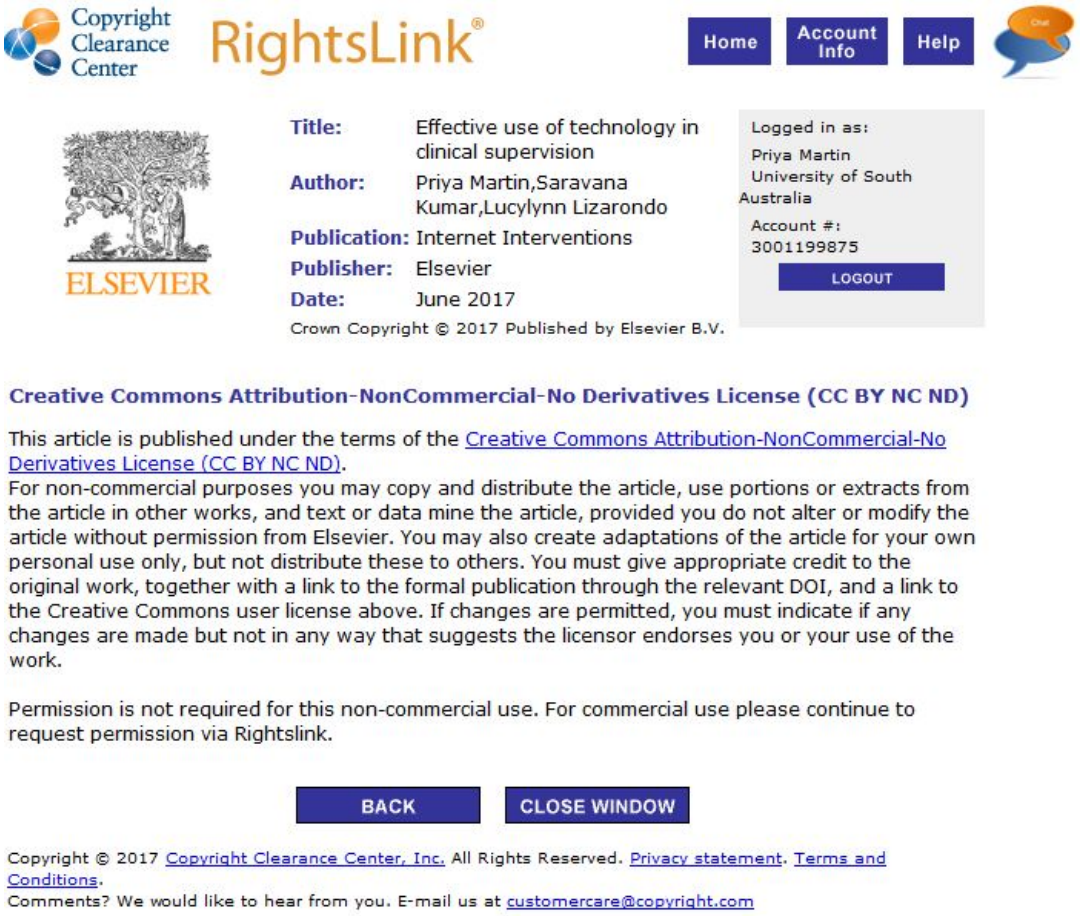

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Author 2: Dr Saravana Kumar

Dr Saravana Kumar contributed to the conception of the manuscript, editing and revising the manuscript, and approving the final version of the manuscript.

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Author 3: Dr Lucylynn Lizarondo

Dr Lucylynn Lizarondo contributed to conception of the manuscript, editing and revising the manuscript, and approving the final version of the manuscript.

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Chapter 6 Statement of authorship

Publication One: Factors that contribute to high quality clinical supervision of the allied health workforce: lessons from the coalface

Statement of authorship

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Name of candidate: Ms Priya Martin

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Author 2: Dr Katherine Baldock

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Author 3: Dr Saravana Kumar

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Dr Lucylynn Lizarondo contributed to performing review, interpreting of results of review, editing and revising the manuscript, and approving the final version of the manuscript.

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Publication Two: Choice of clinical supervisor: cunning or collusion?

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1. Martin P, Kumar S & Lizarondo L. 2017. When I say clinical supervision. *Medical Education*. Early online. DOI:10.1111/medu.13258
2. Martin P, Kumar S, Lizarondo L & Tyack Z. 2016. Factors influencing the quality of clinical supervision of occupational therapists in one Australian State. *Australian Occupational Therapy Journal*, 63(5): 338-346.

3. Martin P & Milne D. 2017. Choice of clinical supervisor: cunning or collusion? *Journal of Advanced Nursing – this is an editorial that has just been accepted.*

Please can you let me know what the best way is to get written persmission to use these papaers in my PhD thesis? Thank you for your assistance.

Kind Regards,

Priya

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Statement of authorship

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Author 2: Dr Derek Milne

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Chapter 7 authorship statement

Perspectives of health professionals on factors that lead to high quality clinical supervision: a qualitative study

Statement of authorship

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Name of candidate: Ms Priya Martin

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Author 2: Dr Saravana Kumar

Dr Saravana Kumar contributed to performing review, interpreting of results of review, editing and revising the manuscript, and approving the final version of the manuscript.

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Signed: [redacted] Date: 27/11/2017

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Dr Katherine Baldock contributed to performing review, interpreting of results of review, editing and revising the manuscript, and approving the final version of the manuscript.

I hereby certify that this statement of contribution to the above-named paper is correct, and I give permission for the inclusion of the paper in the thesis.

Signed: [redacted] Date: 27/11/2017

Appendix F Customised surveys

Pilot quantitative study (Study One)
Please answer the following questions by circling the appropriate options or entering a figure/comment. If you work in more than one Queensland Health position please complete the following questions for the position where you spend most time.

About Yourself

Gender:
1) Male
2) Female

Age in years: _____

Postcode where you work: _____

Highest level of Qualification:
1) Post-graduate Degree Level
2) Graduate Diploma and Graduate Certificate Level
3) Bachelor Degree Level
4) Advanced Diploma Level
5) Certificate Level

Position Classification:
1) HP3
2) HP4
3) HP5
4) HP6
5) HP7
6) HP8
7) Other (please specify) _____

Work base:
1) Hospital
2) Community
3) Both
4) Other (please specify) _____

Domain/Main Specialities:
1) Aged Care
2) Mental Health
3) Community Health

4) Adult Physical
5) Paediatrics
6) Occupational Health and Safety
7) Other (please specify) _____

Please specify the amount of experience in this speciality area: ____ years ____months

Do you work in more than one position in Queensland Health:
1) Yes (Please provide details e.g., percentage of time spent in each position) -
_____
2) No

Predominant nature of job:
1) Clinical
2) Non-clinical
3) Both
4) Other (please specify) _____

Is your primary position:
1) OT-Specific
2) Generic
3) Other (please specify) _____

Is another clinician available on-site to provide face-to-face support
1) Yes
2) No

Please specify the time in your present position: ___ years ___ months

Experience as an Occupational Therapist: ___ years ___ months

Do you act as a clinical supervisor for others?
1) Yes
2) No

Type of Clinical Supervision you receive:
1) One-to-one
2) Group supervision
3) Peer supervision
4) Do not receive supervision
5) Other (please specify) _____

About your supervisor

Gender:
1) Male
2) Female

Approximate age in years: _____

Discipline of your supervisor:
1) Occupational Therapy
2) Physiotherapy
3) Speech pathology
4) Dietetics
5) Psychology
6) Podiatry
7) Exercise Physiology
8) Music Therapy
9) Other (please specify) _____

Supervisor's position classification:
1) HP3
2) HP4
3) HP5
4) HP6
5) HP7
6) HP8
7) Other (please specify) _____

Was your supervisor:
1) Allocated to you
2) Chosen by you
3) Other (please specify) _____

About your clinical supervision (CS) sessions

How long have you been receiving CS: Years_____ Months_____

When was your last supervision session: _____

How often are your sessions:
1) Weekly
2) Every 2 weeks
3) Monthly
4) 2-3 months
5) >3 months
6) Other (please specify) _____

Where do your sessions take place:
1) Within the workplace
2) Away from the workplace
3) Both

Are your CS sessions:
1) Face-to-face
2) Via video-conference
3) Via tele-conference

4) More than one mode (please specify) _____

How long are your CS sessions:
1) <15 mins
2) 15-30 mins
3) 31-45 mins
4) 46-60 mins
5) >60 mins

Have you attended any information session/s on CS and/or received any formal training in CS (e.g., Queensland Centre for Mental Health training, Cunningham Centre training):
1) Yes (please specify name of training)
_____
2) No

Do you have a current supervision contract:
1) Yes
2) No
3) Don't know

How many supervision sessions have you had in the last 6 months: _____

How would you rate the overall effectiveness of your last clinical supervision session:
1) Very Effective
2) Effective
3) Neither effective or ineffective
4) Ineffective
5) Very Ineffective
6) Not applicable

Comments–
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Please ensure that you've answered every question. Thank you for your participation

Main quantitative study (Study Three)
Please answer the following questions by ticking the appropriate options or entering a figure/comment. If you work in more than one position please complete the following questions for the position where you spend most time.

Section One: About Yourself

Gender:
- Male
- Female

Age:
1. 21-25 years
2. 26-30 years
3. 31-35 years
4. 36-40 years
5. 41-45 years
6. 46-50 years
7. 51-55 years
8. 56-60 years
9. 61-65 years

State:
1. Queensland
2. South Australia

Work location:
1. Rural
2. Remote
3. Very remote
4. Other _____

Profession:
1. Physiotherapy
2. Occupational therapy
3. Speech pathology
4. Psychology
5. Podiatry
6. Exercise physiology
7. Nutrition and Dietetics
8. Social work

Highest level of Qualification:
- Post-graduate Degree Level
- Graduate Diploma and Graduate Certificate Level
- Bachelor Degree Level
- Advanced Diploma Level
- Certificate Level

Position Classification/level:

_____

Work area:
1. Hospital
2. Community
3. Both

Do you work in more than one role? (e.g., in a clinical position and an education position or in two clinical positions)
1. Yes
2. No

Predominant nature of job:
1. Clinical
2. Non-clinical
3. Both
4. Other (please specify) _____

Practice area:
1. Mental Health
2. Adult physical
3. Paediatrics
4. Education/research/other

Is another clinician available on-site to provide face-to-face professional support?
1. Yes
2. No

Please specify the time in your present position:
1. Under 1 year
2. 1 - 2 years
3. 3 - 5 years
4. 6 - 10 years
5. 11 - 15 years
6. 16 - 20 years
7. Above 20 years

Experience in your profession:
1. Under 1 year
2. 1 - 2 years
3. 3 - 5 years
4. 6 - 10 years
5. 11 - 15 years
6. 16 - 20 years
7. Above 20 years

Do you act as a clinical supervisor for others?
1. Yes
2. No

Section Two: About your supervisor

Gender:
1. Male
2. Female

Approximate age of supervisor:
1. 21-25 years
2. 26-30 years
3. 31-35 years
4. 36-40 years
5. 41-45 years
6. 46-50 years
7. 51-55 years
8. 56-60 years
9. 61-65 years

Discipline of your supervisor:
1. Allied health (please specify) _____
2. Nursing
3. Medicine
4. Other (please specify)_____

Supervisor's position classification/level:
Please specify _____

Was your supervisor:
1. Allocated to you
2. Chosen by you
3. Other (please specify) _____

Section Three: About your clinical supervision sessions

How long have you been receiving clinical supervision?
1. Under 6 months
2. 6 months - 1 year
3. 1 - 2 years
4. 3 - 5 years
5. 6 - 10 years
6. 11 - 15 years
7. 16 - 20 years
8. Above 20 years

Type of clinical supervision you receive:
1. One-to-one
2. Peer group supervision
3. Do not receive supervision
4. Other (please specify) _____

When was your last supervision session?

1. Within the past week
2. A week ago
3. A fortnight ago
4. A month ago
5. Greater than a month ago
6. Other (please specify) _____

How often are your supervision sessions?

1. Weekly
2. Fortnightly
3. Monthly
4. 2-3 months
5. >3 months
6. Other (please specify) _____

How many supervision sessions have you had in the last 6 months?

1. None
2. 1 – 6
3. 7-10
4. 11-15
5. 16-20
6. 21-24
7. 25 and above

Where do your sessions take place?

1. Within my workplace
2. Within my supervisor's workplace
3. Away from the workplace
4. Both within and away from the workplace

What mode of clinical supervision do you receive?

1. Face-to-face
2. Via videoconference
3. Via teleconference
4. More than one mode (please specify) _____

How long are your clinical supervision sessions?

1. <15 mins
2. 15-30 mins
3. 31-45 mins
4. 46-60 mins
5. >60 mins

Have you completed any formal training in clinical supervision in the last 12 months?

1. Yes
2. No

Do you have a current supervision contract?

1. Yes
2. No
3. Don’t know

How would you rate the overall effectiveness of your last clinical supervision session?

1. Very ineffective
2. Ineffective
3. Neither effective nor ineffective
4. Effective
5. Very effective
6. Not applicable

Additional comments–

_____
_____
_____
_____
_____

Please ensure that you’ve answered every question. Thank you for your participation

Appendix G Interview guides

Pilot qualitative study (Study Two)

Introductory comments

1) Explain purpose and nature of the study - Clinical Supervision plays a big part in the Occupational Therapy profession and has recently gained wide recognition as being fundamental to clinical competence, and the maintenance and improvement of clinical practice. The aim of this research is to investigate the effectiveness of clinical supervision for Occupational Therapists in Queensland; as well as factors that influence clinical supervision and the barriers to effective clinical supervision. The rationale for addressing the barriers and facilitators of supervision is that this of great interest to our profession as it would provide greater depth of information regarding effective clinical supervision. Limited evidence currently exists in these areas for any of the allied health disciplines. Part 1 of this study consisted of completion of the Manchester Clinical Supervision Scale and additional survey questions by ~200 OTs in QH. This interview is part of the second phase of this study.

2) I would like to assure you that your responses will remain anonymous in any written reports growing out of the study and all of the data will only be managed by the research team. You will be de-identified in the transcripts of the data.

3) You may find some questions difficult to answer, as questions that are appropriate for one person are not always appropriate for another. There are no right or wrong answers. I am only interested in your opinions and personal experiences.

4) Please feel free to interrupt or ask for clarification

5) Please feel free to ask me to terminate the interview at any time should you wish to do so

6) Provide information about me

7) I would like to seek your permission to record the interview/take notes (explain why this needs to be done).

List of topic headings
(with possible key questions and a set of associated prompts)

1) Intro Questions
Tell me about the supervision you receive

Probes – how often, how is it structured, what sort of things do you talk about, who sets the agenda

How do you find the supervision you receive?

Probes: what aspects do you find useful/not useful? What aspects most benefit/least benefit you? How do you find you use/apply what is covered in the supervision sessions?

Tell me about a time when…

Can you think of a situation where…..

Is your supervisor also your line manager?

2) Supervisory relationship
Tell me about your relationship with your supervisor?

Probes – what are some words you would use to describe it?

How does this relationship affect your supervision?

Probes – how does it affect the way you feel about the supervision you receive; how does it affect what you get out of supervision.

How do you think your supervisor also being your manager impacts on your relationship?

3 & 4) Facilitators and Barriers of clinical supervision

Now let's think about what you would ideally like your supervision to be like

What you would like your supervision sessions to do for you?

If you could make your supervision exactly how you would like it to be, what would it be like? What would make it more effective?

What else could you get out of your supervision

Probe - how could you benefit more from it than you do now?

What outcomes do you get from your clinical supervision

What outcomes does your organisation get from your clinical supervision?

Probes – structure, style, topics covered, way it is delivered etc

What benefits do the patients get from your supervision?

Think about the ideal things that you just talked about. Are there things that get in the way of achieving that type of supervision?

- Practical issues, organisational issues, issues to do with people involved etc

Probes – Do you think there are things that can't be changed?

(How does the fact your supervisor is/is not your line manager (whichever is the case for them) impact on the effectiveness of your supervision?

Closing Comments

Thank you for your time and participation in this interview. The information you have provided is very valuable and will assist us in further understanding clinical supervision in Occupational Therapy.

I would like to seek your approval to contact you once the data is transcribed to check the summary, to ensure that I have interpreted correctly. (What is the preferred way of contacting you?)

Main qualitative study (Study Four)

The interview guide from Study Two was used along with the additional questions outlined below:

Questions on their clinical supervision arrangement at the outset

Do you receive clinical supervision via telephone or other technology (telesupervision)? How is that working for you?

What is different about rural/remote supervision?

Please share your perspective on dual roles (Line management and clinical supervision being offered by the same person) - How does the fact your supervisor is/is not your line manager (whichever is the case for them) impact on the effectiveness of your supervision?

Appendix H Sample interview transcript

QUESTION: So, you currently receive clinical supervision?
ANSWER: Yes.
QUESTION: And what type of supervision is that?
ANSWER: It's usually on the phone or via email once a month for one hour from another Senior Dietitian.
QUESTION: Are they within the same health service?
ANSWER: No, a different health service, but similar rural setting without patient and outreach clinics.
QUESTION: Excellent, and how long have you been in this supervision relationship for?
ANSWER: A year and a half.
QUESTION: Excellent, and how did you find out about this Supervisor? Were they allocated to you? Is it somebody you chose?
ANSWER: I chose them – I approached them after being their student many moons ago - - -
QUESTION: Okay.
ANSWER: - - - and just looked at whether they would be a good candidate for this sort of rural and remote work that I do, and they seemed to fit the bill pretty well, and so I found them. My Line Manager isn't a Dietician, she's an OT, and she just said find someone.
QUESTION: Excellent. So your Supervisor is somebody that you had previously met face to face and worked with as a student?
ANSWER: Yes.
QUESTION: Yes, and how did you make the decision that phone was probably the best mode for you to connect?
ANSWER: Mainly on locality, convenience, resources available.
QUESTION: Okay, yes.
ANSWER: So we considered video conference, telephone, email and actually caught up face to face in Brisbane at one of the food service workshops last year.
QUESTION: So like an opportunistic catch up?
ANSWER: Yes, so most of it is because we're both very remote – well, I'm very remote – so there's no face to face usually.
QUESTION: And how long have you been in this role for?
ANSWER: I've been in this role for probably two and a half years now.
QUESTION: And what sort of rural/remote experience do you have overall, in terms of working?
ANSWER: So I've been out remote for the last five and a half years.
QUESTION: Wow, excellent. Now, you said it's once a month. Can you tell me a little bit more about your supervision session in terms of how structured is it – do you use an agenda – what things do you talk about?
ANSWER: Generally we catch up by email to book a time that suits us both, and then we look at what we want to discuss – whether there's topics or recent cases that have come up, and it's quite informal but in the same regards we have an idea of what we're talking about and if there's any research linked we can read that beforehand - - -

QUESTION: Yes.
ANSWER: - - - and then we chat about what we discussed, and it may lead into other things as well or it may just really be the topics that we wanted to discuss or any current cases that it was good to case conference.
QUESTION: So you sort of drive it based on what you need? Would that be right?
ANSWER: Yes, needs based.
QUESTION: So how do you find that supervision is for you?
ANSWER: I find it really good - - -
QUESTION: Okay.
ANSWER: - - - and it's far less isolating.
QUESTION: Yes.
ANSWER: And it's good to have someone more experienced to be able to talk to about cases and understand the logistics of where you are.
QUESTION: So have they been out to your work area?
ANSWER: They haven't been out here.
QUESTION: So how do you think they go with understanding your work context and like the communities you serve?
ANSWER: They're in a similar rural location, but closer to the coast, where they also have outreach clinics. So they have a similar sort of workload, except without – quite so remote.
QUESTION: Yes, and so do you feel like they get your context and when you talk about your work does that make sense to them?
ANSWER: Yes, absolutely.
QUESTION: Okay.
ANSWER: I think they understand everything, and it's interesting because their hospital doesn't actually see paediatrics, they send them to the larger regional centre, and so that's my own area where I see everything so that's probably the only difference, and food service – they have a specific food service Dietitian whereas I am it.
QUESTION: So what do you do if you need advice or a second opinion in those areas that is not their area of expertise?
ANSWER: So I would contact the state-wide Food Service Co-ordinator, and we have rural and remote food service meetings once a month.
QUESTION: Okay.
ANSWER: And I've also got contacts in other rural hospitals that are in similar roles to mine, but they're not as experienced as my Clinical Supervisor.
QUESTION: Yes, okay.
ANSWER: So I kind of lean on him for all the clinical really good experience. In paediatrics I talk to the paediatric dietitians in Brisbane, because they're usually the experts - - -
QUESTION: Yes.
ANSWER: - - - and if I need help they're usually really good because we communicate on patients all the time when they're flown back or coming home.
QUESTION: Okay. So do receive any form of professional support? Like some people receive mentoring on top of supervision, or they're linked into peer group supervision. Do you do anything like that?
ANSWER: Not really.
QUESTION: Now, what are the most useful aspects of supervision for you?

ANSWER: I think it's having a more knowledgeable base to tap into – someone that's been around for many years.
QUESTION: Yes.
ANSWER: So that if there's a complex case you know that they've sort of seen those sort of situations before, generally.
QUESTION: Yes.
ANSWER: I find it's good to decrease the isolation, because I'm the one Dietitian for 12 sites, and so it can be very isolating.
QUESTION: Yes.
ANSWER: Yes, I guess even just day to day organisation. When I first started I sort of quizzed a bit on day to day sort of practical things.
QUESTION: Yes, so how much of this kind of support do you get from your colleagues who are not Dietitians but part of your team? Is there any bouncing off people from other professions for the more generic issues?
ANSWER: No, generally zero.
QUESTION: Okay. So if you wanted to debrief between those monthly sessions, or had a question between those sessions, what do you do apart from say like you've got other contacts in Brisbane that you might call and so on? Apart from that is there anything you would do?
ANSWER: Yes. Generally I just email my Supervisor and he'd generally just get back to me.
QUESTION: So you've got that email contact in between sessions?
ANSWER: Yes, he's pretty accessible via email. If it was something more urgent I would make some phone calls and if I couldn't find someone that could clear that up for me then I'd try and get my Line Manger to help me, but she's not generally much help because she has no idea with dietetics.
QUESTION: So can you talk to me a little bit about that, because other people I have interviewed have sort of raised that one of the challenges of working in a rural and remote context is reporting to somebody that is not from the same profession as you. In your case it's somebody from Allied Health still, but others talked to me about reporting to AO's and Nurses and so on.
ANSWER: I've had a NUM as a boss before - - -
QUESTION: Yes.
ANSWER: - - - and her direction was 'Show this to another Dietitian and if they say it's okay it's approved.'
QUESTION: Okay.
ANSWER: My current Line Manager has no issues with my work because she doesn't get any complaints. Equally she probably doesn't understand what I do on a day to day basis. It's very difficult, especially when you're trying to build a case for something to change or resources or even as far as HEN's programs and consumables – there's definitely knowledge deficit there.
QUESTION: Yes.
ANSWER: Day to day management stuff – well, that's fine, but the more clinical stuff it does lack a lot.
QUESTION: Okay. So going back to the clinical supervision that you receive, are there any aspects that are say like the least beneficial to you?
ANSWER: The only thing that it would be would be the time.
QUESTION: Yes.

ANSWER: Only because we're always on outreach, so sometimes it's really hard to dial in, particularly at times I've found when my Supervisor prefers the afternoon I'm generally on a highway and our travel days can be anywhere from two hours or generally it's two and a half hours each way, and it's generally through blackspots, so it's not an option to do it in the car, if it was it would be perfect, but that might change with NBN but for now it can be difficult to link in and find that time when reception is available.

QUESTION: Yes.

ANSWER: It sounds really basic, but that's how we are, being remote.

QUESTION: Yes, that's right. So that's really one of the challenges isn't it? Is finding the time – a suitable time to catch up with your Supervisor?

ANSWER: And my Supervisor is also doing outreach, so he's also got to find the time. So our office days don't always align, but when they do it's really good, and we generally find the time.

QUESTION: Yes. So in terms of the supervision that you actually receive, so the content and so on, is there any aspect of that that you find is not all that beneficial?

ANSWER: No, I find it all beneficial because it's on a needs basis. So if there's something that needs to be addressed it's brought up. If there's not, then we don't.

QUESTION: Excellent. So can you tell me about your relationship with your Supervisor?

ANSWER: Yes. So I was under him as a student, and I like the way that he I guess conducted his dietetics, and he's very experienced. So I prefer – I'm quite academic so I prefer someone that's quite academic and has experience to learn off to become to best. So he seemed to be one of those really nice natured, very experienced clinicians which I would aspire to become like.

QUESTION: What are some words that you can use to describe the relationship you have with your Supervisor, if you were to think of some words?

ANSWER: Symbiotic, appreciative, I guess – how do you say easy going or natural? Like it's quite easily – we easily connect, and I guess it's beneficial for both of us.

QUESTION: Okay, that's good. Now, can you tell me a little bit about – how aligned your clinical supervision arrangement is with the Line Management side of things? Does that make sense?

ANSWER: Actually like my EDP or my PAD?

QUESTION: Yes, or do your Clinical Supervisor and Line Manager ever – have you had a three way discussion at some stage, or do you link learning goals from your supervision contract to your PAD – so has there been any interaction between those two components?

ANSWER: I don't think so. My learning goals have been completed and sent via by Line Manger, but it's mainly left up to me to get those learning goals. In my learning goals with my clinical education do link really strongly with my PAD goals in that area. So they are in direct alignment with my future goals. My Line Manager doesn't really have anything much to do with it apart from filing down my goals and my supervision agreement.

QUESTION: The next part of it – I want to take to you about rural supervision. Now, you have extensive experience in rural/remote locations – working in

rural and remote locations – what do you think about rural and remote Clinical Supervision? Do you see any differences between rural and remote Clinical Supervision to maybe supervision in a bigger centre – a metropolitan centre? What are your thoughts?

ANSWER: I actually think it's really beneficial. I actually did do more intensive supervision with a Mentor as well as a Clinical Supervisor, as well as another supervisor – like I had three Supervisors when I first came out here – but I found it really good and it's really good to make contacts as well as just that nice sort of – I guess it's quite helpful with linking you with resources and people and processes and also really good for learning – really good for developing your clinical skills if you realise that an area needs development then you can either address that or look at ways you can future address that.

QUESTION: Yes.

ANSWER: I think it's really good, quite frankly, and it stops people from being too isolated and too cowboy-ish.

QUESTION: So those are the beneficial aspects of supervision that you have noticed?

ANSWER: Yes.

QUESTION: So have you noticed any differences about supervision in rural and remote, or do you think it's not really that different – it's all the same?

ANSWER: It's not really that different, no. It's just delivered a bit differently.

QUESTION: Yes.

ANSWER: And I think you've got to choose your Mentor differently. So I haven't chosen sort of one specific clinician that specialises in one area, which you might do in a metro area. So I have chosen another rural generalist. So I guess that's one difference.

QUESTION: Yes.

ANSWER: But I don't think it's that different. I just think the delivery method might alter a little bit, which to me it's far more beneficial and effective with email and phone. I find it really good.

QUESTION: So, you said that you find phone supervision good. Have you experienced any barriers to using telephone in supervision or any I guess negatives?

ANSWER: Apart from reception, but that's like a location thing. No, so we also do video conference.

QUESTION: Yes.

ANSWER: No, not really.

QUESTION: Do you find one better than the other, in terms of video conference and telephone:

ANSWER: I guess video conference is nicer because you can see each other, but then sometimes I find phone better because we don't have lap tops so you can be on your computer and send each other things while you're talking.

QUESTION: Okay, yes.

ANSWER: So they both have their advantages and disadvantages.

QUESTION: Do you have a CISCO/JABBAR?

ANSWER: Yes.

QUESTION: Is that what you use when you say video conference, or the proper video conference room and equipment?

ANSWER: It depends what's available.

QUESTION: Yes.

ANSWER: So either/or.
QUESTION: Yes, and what are your thoughts or your experiences with finding time for supervision? So like I was saying before rural and remote clinicians have such a diverse caseload – they have so many communities they have to look after – have competing priorities – so then how do you go with finding time for supervision?
ANSWER: It can be hard sometimes – it can be really hard to find the time where you can actually sit down for an hour, but once you work out a time that suits you once a month – my calendar seems to go sort of monthly. So once we've found a spot that fits in, as long as both your calendars align its okay.
QUESTION: Yes.
ANSWER: But then there's been months where it has been hard to find a time and we've had to re-schedule two or three times.
QUESTION: Now, are there any other gaps or barriers for rural and remote clinicians in regards to Clinical Supervision?
ANSWER: Well, I guess sometimes it's the caseload. So a lot of the really acute cases we don't see out here, so that could be a barrier if you wanted to get more expertise in different conditions. Also the face to face – sometimes it's nice to be face to face, especially if you wanted to do some mentoring with a supervisor to sit in on a consult.
QUESTION: Yes.
ANSWER: I find it far less intimidating that having a video conference in the room.
QUESTION: Yes.
ANSWER: Time is a major barrier - - -
QUESTION: Yes.
ANSWER: - - - but apart from that I don't think there's too many barriers.
QUESTION: Now, can you think if way or suggestions for making or addressing some of those gaps? For making supervision a more high quality experience?
ANSWER: Things like AHPEP placements are really good. So having that available to go to your Supervisor's site – that would be handy, because then you could get a real hands on running for how they're running their clinics and what they're seeing and how they're seeing people. But again that's sort of more I guess just ensuring that everyone has a clinical Mentor and having your Line Manager more involved might be good. It could be bad as well if they don't understand the profession.
QUESTION: What sort of roles would you think need to happen there? So if the Line Manager has to be involved a bit more, what sort of things would they be doing?
ANSWER: I would just hope that they would check up that your Supervisor that you've nominated is true and legit. I guess – I mean really I'm quite happy to not be mollycoddled or like I do my supervision every month, but perhaps if people are less likely to do that then perhaps they need a bit of a reminder or something.
QUESTION: Yes.
ANSWER: Yes, I'm not really sure to be honest.
QUESTION: So like more in terms of just ensuring that there's process in place like an audit or something like that to ensure that everyone's receiving it?

ANSWER: Yes, maybe even going through your goals because – well, not really because you go through them with your Mentor anyway – no. That would double up.

QUESTION: Yes. Is there anything else you wanted to say about rural and remote Clinical Supervision?

ANSWER: I find it really beneficial, so I find it's really nice to be able to call someone and know that they're there, even if it's a day or two later on email or phone. So I actually like the fact that I have someone to call if I have a more difficult case or need some advice. For instance I have a complex eating disorder patient who was moving to the other region - - -

QUESTION: Yes.

ANSWER: - - - and the Queensland Health Service said they didn't have capacity for an outpatient eating disorder clinic, and this patient was about to fall through the gap, so my Supervisor recommended a private dietitian that he knew that specialised in that area, so that was really handy.

QUESTION: Yes.

ANSWER: And they have special GP pathways so they could access funding to see them for free.

QUESTION: Yes.

ANSWER: So I mean they're beneficial. Their supervision is really good, and I think it's really important for clinicians that are coming out that are less experienced, because not everyone comes out west when they're experienced.

QUESTION: Yes.

ANSWER: So it's very important, I think, for less experienced clinicians to have that contact with the more experienced clinicians, and making sure they are more experienced supervisors. That's a big thing, rather than just last year's speechy or dietitian.

QUESTION: Yes. So the example that you gave to me is a nice example because it demonstrates the benefits of supervision, not just to the Supervisor but also extending to patient care, isn't it?

ANSWER: Yes, absolutely, and it's been beneficial for the patient in a couple of different ways. So I've had a few instances where the Supervisor could actually provide links or give advice about processes or what might be quickest to get for a patient – that sort of thing.

QUESTION: Excellent. Was there anything else you wanted to add at all?

ANSWER: No.

QUESTION: Okay, I'm just going to turn the recorder off.

Appendix I MCSS-26 licenses

Pilot quantitative study (Study One)

OC
Osman Consulting

OSMAN CONSULTING Pty Ltd
Sydney 2060, Australia [ABN: 47 098 731 714]
HEALTH CARE RESEARCH ◊ STATISTICAL CONSULTANCY

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PROFORMA INVOICE

Priya Martin
Clinical Education Support Officer [Occupational Therapy]
Allied Health Department
Level 2, Rockhampton Hospital
Canning Street, Rockhampton
Queensland 4700

Invoice number: EGWA11Rev

Date: 10 October 2011

	Amount [A$]	GST [10%]	Total
Supply:			
Individual User License [limited use; for a single, one-off, personal research study] The Manchester Clinical Supervision Scale© Package includes a scoring manual, disc copies of instruments, SPSS and Excel syntax, and postage and packaging	590.00	59.00	649.00

Reference:
Priya Martin
Telephone: [07] 4920 7396 [M: 0419677006]
Email address: Priya_Martin@health.qld.gov.au

Total payable **A$649.00**

Payment Terms: 30 days
Registered for Goods and Services Tax
GST included

Direct bank transfer:
Osman Consulting Pty Ltd
Westpac Bank, Crows Nest, New South Wales 2065, Australia
BSB: 032 298 Account: 177963

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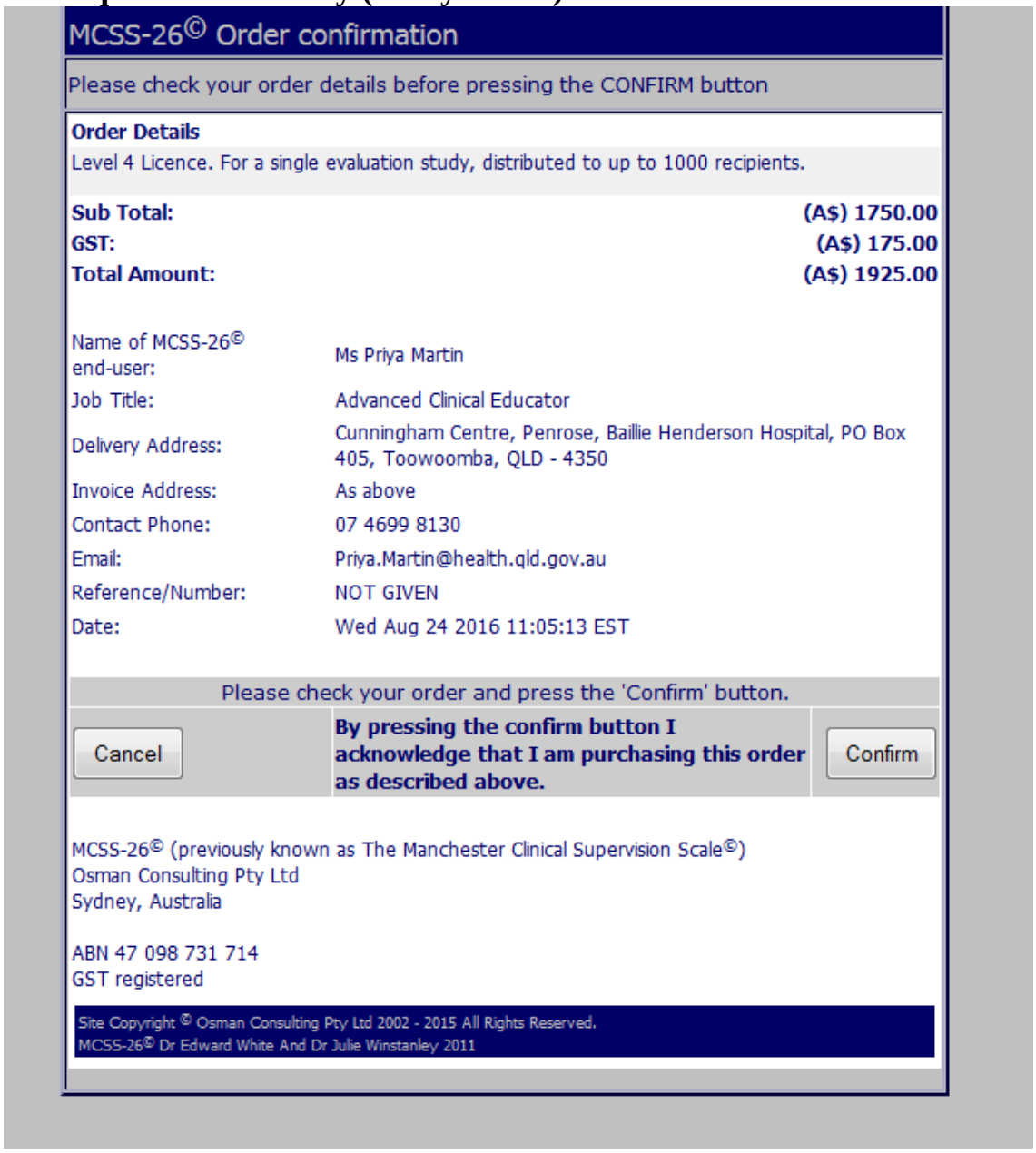
Main quantitative study (Study Three)



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Appendix J Awards and Prizes

ANZAHPE Prize Letter – 2017 Post-Registration Student Prize



A/Prof Monica Moran
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10th April, 2017

Dear Priya,

On behalf of the ANZAHPE Student Prize Selection Panel I would like to thank you for your application for the ANZAHPE Post-Registration Student Prize. Unfortunately your application has not been successful on this occasion.

All applications were of great interest and quality, demonstrating a wide range of important work being undertaken by students in health professional education and practice.

I hope that you will stay involved with ANZAHPE. We would welcome your attendance at our annual Conference at Adelaide Convention Centre from 11th – 14th July, 2017 as the prize winner in another category.

Thank you again for your interest in ANZAHPE. I wish you the very best for your future career as a health professional and educator.

Yours sincerely,

[redacted]

Monica Moran
President
ANZAHPE

HSRAANZ 2017 Best PhD Student Paper Award

From: Sarah Green
To: Priya Martin
Subject: HSRAANZ Best PhD Paper
Date: Monday, 18 September 2017 11:42:39 AM
Attachments: image001.png
image002.png

Dear Priya – I wanted to let you know that your paper "Factors influencing the perceived quality of clinical supervision of occupational therapists in a large Australian state" has been judged the overall winner of our Best PhD Paper Award. Congratulations.

We will be announcing the awards at the Welcome Reception of our Gold Coast Conference on the evening on 1 November.

Are you planning on attending the conference as it would be great to be able to give you the award in person?

We would like to keep the details of all awards private until after the welcome reception. However it would be good to get some publicity agreed to release immediately after the reception.

Can you send me a short bio and paragraph summarising your paper which I can use in a short media release about your win.

I'd also like to feature a blog style article about you and your winning paper/research on our website. I am thinking about 1000 words along the lines of the attached from one of last year's winners.

The HSRAANZ also runs a webinar series and we are keen to have all of our award winners present on their winning papers early in the new year.

I look forward to hearing from you.

Regards Sarah

Sarah Green, Executive Officer
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