SID: 440562270

Occupational therapy with Australian Indigenous children and their families: A rural and remote perspective

Corey Block

Master of Occupational Therapy

University of Sydney

2015

Research Supervisors: Associate Lecturer Kim Bulkeley

Professor Michelle Lincoln

Table of Contents

Acknowledgements

This thesis is an unfunded research project and there are no conflicts of interest to declare.

I would like to express gratitude to my research supervisors Kim Bulkeley and Michelle Lincoln for their continued support, understanding approach and valuable advice through the duration of my thesis. I would also like to thank all of the participants who contributed their time to make this research possible.

Thesis Abstract

Background: Occupational therapy service delivery must be adapted when working within Indigenous communities, as there is a diversity of beliefs, values and customs. There are currently no evidence-based models of service delivery to rural and remote Indigenous children and their families.

Aim: The aim of this thesis is to explore the question how are occupational therapy services delivered in rural and remote Australian community settings with Indigenous children and their families?

Method: This thesis is divided into two sections. The first section is the literature review starting with a brief history of Indigenous Australians. It then explores Indigenous representation in allied health, cultural sensitivity in occupational therapy and providing successful service delivery with Indigenous communities. Identifying that many articles focus on what therapists can do to modify their service, however there are currently no Indigenous focused evidence-based models of occupational therapy service delivery for therapists to inform their practice. The second section is the journal manuscript comprised of an inductive qualitative study that involved audio-recorded telephone interviews with seven occupational therapists with experience with Australian rural and remote Indigenous children and their families. This yielded six service delivery themes; flexible and accessible services, tailored services, culturally sensitive therapist, culturally inclusive services, occupational therapy awareness and collaboration. As well as the finding that limited access to occupational therapy is a social injustice that requires long term and sustainable solutions. This journal manuscript has been written according to the Australian Occupational Therapy Journal author guidelines, see appendix E.

Findings: The results from this thesis demonstrate that each Indigenous community is unique. Therapists work in collaboration with the community and use their critical reasoning skills to adjust practice accordingly.

List of Figures

Section 1: Literature Review

Table of Contents

A Brief Australian History

Australia is made up of many different Aboriginal and Torres Strait Islander communities, each having a diverse set of experiences, beliefs and values (Australian Human Rights Commission, 2010; Nelson & Allison, 2000). Through rock engravings in South Australia, historians have dated Aboriginal and Torres Strait Islander existence back 45, 000 years (Human Rights and Equal Opportunity Commission, 2007). In 1770 James Cook claimed to have discovered Australia and declared British possession (Elston & Smith, 2007; Human Rights and Equal Opportunity Commission, 2007). From then on policies and events have taken place that have denied the Aboriginal and Torres Strait Islanders people of Australia their basic human rights, depriving them of their culture and spirituality (Gibson, Butler, Henaway, Dudgeon, & Curtin, 2015).

Up until 1969 various acts allowed the removal of Aboriginal and Torres Strait Islander children from their families (Elston & Smith, 2007; Human Rights and Equal Opportunity Commission, 2007). The exact date citizenship was granted for Aboriginal and Torres Strait Islanders is a disputed topic; it was not until 1962 that they were given the right to vote in federal elections and not till 1967 that they were considered in the Australian Census (Australian Electoral Commission, 2006; Elston & Smith, 2007). In 1975 the Racial Discrimination Act was passed to help ensure equal treatment for all Australians of all backgrounds (Elston & Smith, 2007). In 2008 Prime Minister Ken Rudd, speaking as a representative of the Australian Parliament, officially apologised to the Aboriginal and Torres Strait Islander people that were removed from their families who were known as the Stolen Generation (Rudd K., 2008). As of 2009 Australia officially announced their support for the United Nations Declaration on the Rights of Indigenous People (Australian Human Rights Commission, 2010). Through this brief timeline of Australia's history it is clear that Aboriginal and Torres Strait Islanders have been deprived basic human rights, some of which still can be seen today.

One of the most evident basic human rights that Aboriginal and Torres Strait Islander peoples are deprived of is the right to equal health care (Australian Human Rights Commission, 2010). All Australians have the right to equal health care and proper health infrastructure despite location or cultural background (Australian Human Rights Commission, 2010). In relation to allied health services, many Aboriginal and Torres Strait Islander communities do not have the opportunity to access these services or they encounter barriers to

access due to westernized and culturally inappropriate service design (Battye & McTaggart, 2003; Jull & Giles, 2012). In this case cultural appropriateness is based on therapist's understanding of historical events relating to Aboriginal and Torres Strait Islander communities and understanding of the cultural context (Watts & Carlson, 2002; Zeldenryk & Yalmambirra, 2006).

"An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he [or she] lives" (Department of the Parliamentary Library, 2003, p. 4). The term Indigenous will be used throughout this paper to include both Aboriginal and Torres Strait Islanders. The term Indigenous is defined as "the experiences shared by a group of people who have inhabited a country for thousands of years, which often contrast with those of other groups of people who reside in the same country for a few hundred years." (Cunningham & Stanley, 2003, p. 403). Although Indigenous Australians live in metropolitan, rural and remote areas, the focus of this project will be on rural and remote communities. The Rural Remote and Metropolitan Areas (RRMA) classification system defines rural and remote according to the population and the geographical distance from a metropolitan centre (Australian Institute of Health and Welfare, 2015).

Disparity in Health and Wellbeing

Due to colonisation, introduced disease and forced relocation, Indigenous communities have faced disadvantage that still has effects today (Australian Indigenous Healthinfonet, 2015). This disadvantage is evident when comparing health outcomes of Indigenous Australians to non-Indigenous Australians in the areas of life expectancy, likelihood of hospitalisation and disability, to name a few (Australian Institute of Health and Welfare, 2011a). In 2011 it was found that half of the adult Indigenous population reported having some form of disability and 1 in 12 adults reported having a disability that affects their capacity to perform activities of daily living (Australian Indigenous Healthinfonet, 2014). When compared with non-Indigenous Australians it was found that the percentage of Indigenous Australians with disabilities causing limitations on their life was at least double in all age groups (Australian Indigenous Healthinfonet, 2014).

When looking at the health, education and wellbeing of children the Australian Early Development Index (AEDI) can be referred to (Australian Government, 2013). This index looks at five developmental domains; physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based) and communication skills and general knowledge (Australian Government, 2013). In a 2012 study it is important to note that the majority of the developmental domains of Indigenous children were on track, however when compared to non-Indigenous children it was found that they are more than twice as likely to be developmentally vulnerable (Australian Government, 2013). Of the 15,490 Indigenous children included in the study 43.2% were developmentally vulnerable in at least one of the AEDI domains (Australian Government, 2013). When looking at the results for language and cognitive skills it was found that 22.4% of Indigenous children were developmentally vulnerable compared to the 5.9% of non-Indigenous children.

Occupational therapists work in multiple fields, when working with children they aim to facilitate meaningful activity and the movement through developmental stages (Occupational Therapy Australia, 2015). In rural and remote areas it has been found that there is little to no access to occupational therapy and services that are provided are often limited to children in severe circumstances (Battye & McTaggart, 2003). It is expected that this situation may have arisen not only because of recruitment and retention difficulties in rural and remote communities but also because of the lack of evidence-based service delivery models making it difficult for practitioners to inform their services. With the current fly in fly out, infrequent and inconsistent method of service delivery, therapists are unable to reach their desired client centred practice outcomes (Lincoln, 2013).

Health and wellbeing in Indigenous communities is an issue that requires further research. From a human rights perspective the inequality in health, education and wellbeing between Indigenous and non-Indigenous children shows the need for culturally appropriate and accessible occupational therapy services. The aim of this literature review is to explore occupational therapy services in Australian rural and remote Indigenous community settings and examine how these services are delivered to Indigenous children and their families.

Method

The Kawa model has been used as a theoretical framework for this paper (Turpin & Iwama, 2011). Where the river symbolises the delivery of occupational therapy services in

rural and remote Indigenous communities to children and their families (Turpin & Iwama, 2011). The flow rate of the river represents the success of the services. The unique spirit of the children and the families can be seen within the flow through the spaces in the river. The surrounding river walls and floor is the social, physical and cultural context that provide the course, depth and width that allows the river to flow (Turpin & Iwama, 2011). The rocks found within the river symbolise the barriers to service delivery (Turpin & Iwama, 2011). The driftwood in the river is the attributes, resources, strategies and skills of the therapist and other aspects of the service that enhance or reduce the river's flow (Turpin & Iwama, 2011). Each community will have a unique river setting it's context with different river walls and filled with different rocks and driftwood that impact on the flow. Aspects of the Kawa model have been used to analyse and categorise the literature retrieved through a comprehensive database search, see figure 1.

Figure 1. Search strategy. Databases search was conducted 18th of March 2015 and again on the 24th of August 2015. To ensure the information gathered was based on current occupational therapy practice articles were excluded if they were published prior to 1980.

Indigenous Representation in Allied Health

There is an underrepresentation of Indigenous people employed in the Australian health system (Health Workforce Australia, 2014a). As a result many non-Indigenous

Australians work in rural and remote Indigenous communities. Recruitment and retention of health professionals in rural and remote areas has been found to be a limiting factor in delivery of services to Indigenous communities (Keane, Smith, Lincoln, & Fisher, 2011; Lincoln et al., 2014; Spiers & Harris, 2015). Many practitioners feel incapable and lack the confidence to work with these communities (Paluch, Allen, McIntosh, & Oke, 2011). Along with the lack of professional support and travel burden, many are discouraged from pursuing rural and remote employment (Lincoln et al., 2014). As a result, the community members are being disadvantaged receiving inconsistent and infrequent services (Battye & McTaggart, 2003).

Many suggestions have been made in regards to recruitment and retention, however research has not been completed to indicate whether the suggestions lead to successful implementation. Keane et al. (2011) advise to target high school students, promote the positive aspects of working in rural and remote communities, provide support for workers, develop programs to support stress management, increase advancement opportunities and develop models of care that will support a diversity of clients. A sustainable and culturally appropriate option to increase the rural and remote work force would be to educate and support local Indigenous health professionals (Keane et al., 2011; Lincoln et al., 2014).

Training of Indigenous health professionals in the area of occupational therapy has been reported to have multiple benefits (Paluch et al., 2011). As mentioned earlier a major factor in Indigenous communities not accessing medical services is the lack of cultural appropriateness and lack of promotion of health services leading to limited knowledge of services in the community (Battye & McTaggart, 2003; Smith, Edwards, Varcoe, Martens, & Davies, 2006). Increasing the number of Indigenous health professionals would assist in decreasing the impact of both of the above issues (Paluch et al., 2011; D. Thomas, Heller, & Hunt, 1998).

To promote Indigenous health professionals the community needs support in education past the secondary level. Educational barriers must first be addressed, such as funding, language and environmental context (Anonson, Desjarlais, Nixon, Whiteman, & Bird, 2008; Paluch et al., 2011). James Cook University has attempted to address the environmental barriers by offering a program that allows Indigenous students to be enrolled at the university and take all their classes by correspondence from their community (Anonson et al., 2008). This allows the social and environmental supports to be put in place that has been

hypothesised to allow for the successful completion of a university degree (Anonson et al., 2008).

Cultural Sensitivity and Occupational Therapy

Western culture dominates occupational therapy theory and practice (Jull & Giles, 2012; Nelson, 2007; Rudman & Dennhardt, 2008). It has also been established that occupational therapy itself has its own culture (Castro, Dahlin-Ivanoff, & Martensson, 2014). Iwama (2007) identifies that occupational therapy culture is deeply rooted within theory and practice, therefore it is often difficult for therapists to identify. Many of these theories and values that are identified in occupational therapy culture align with the values and beliefs of Indigenous communities (Hopkirk, 2013). Some examples of these shared concepts are; client centred practice, holistic view of health, influence of the environment and the impact of spirituality (Hopkirk & Wilson, 2014).

Although there are similarities between Indigenous cultures and occupational therapy therapists cannot take advantage of the inherent similarities and therapists must be vigilant about marginalising or stereotyping by grouping a population together (Gerlach, 2015). There is a need for practitioners to use critical reasoning through practice to let go of assumptions and to take time to build relationships and adjust practice accordingly (Gerlach, 2015). In a study that interviewed five occupational therapists working with a variety of different cultures four key themes emerged; “learning about culture”, “applying cultural knowledge”, “reflecting on culture” and “family centred partnerships” (Wray & Mortenson, 2011, p. 182). Achieving these four themes requires the profession of occupational therapy to work together towards closing the cultural gap by looking at the relationship between the client and the therapist (Y. Thomas, Gray, & McGinty, 2011; Trentham, Cockburn, Cameron, & Iwama, 2007). A key factor in closing this gap is cultural safety and the ability of the therapist to critically reason through service delivery (Gray & McPherson, 2005; Hammell, 2013; Kirsh, Trentham, & Cole, 2006; Trentham et al., 2007). For a practitioner to effectively use critical reasoning in practice they must first gain cultural awareness.

Cultural awareness can be broken down into three components; cultural safety, cultural competence, and cultural humility. Cultural safety is the awareness of the power imbalances that can occur during consultation with a client, leading to respectful practice (Gray & McPherson, 2005). Cultural competence is the understanding of unearned privileges

or advantages that one might have based on location, culture or position in society (Hammell, 2013; Nelson, 2007). Finally, cultural humility is the understanding of ones culture and beliefs and how to put these aside to achieve an unbiased approach when communicating with individuals of another culture (Booth & Nelson, 2013; Tervalon & Murray-Garcia, 1998). The education or training on these three concepts will help therapists working in cross-cultural environments, however the growth of this awareness is an ongoing process (Tervalon & Murray-Garcia, 1998). Self-reflection is required to help identify cultural difference; it enables the continued development of skills and increases cultural appropriateness of practice (Gray & McPherson, 2005; Rudman & Dennhardt, 2008; Tervalon & Murray-Garcia, 1998; Wray & Mortenson, 2011).

As cultural competence is important when working with Indigenous communities a good foundation must be built before entering a workplace, this must start during post secondary training (Health Workforce Australia, 2014b). It has been suggested that Universities partnering with Indigenous communities to design and oversee the Indigenous component of the occupational therapy curriculum could be a viable solution (Gibson et al., 2015). This should also include the opportunity to have exposure and experience with Indigenous communities while studying, as this is an important part of the learning process (Wilson, Magarey, Jones, O'Donnell, & Kelly, 2015). Students could be provided opportunities to have placements and volunteer with Indigenous communities, thus encouraging students to seek rural and remote employment upon completion of post secondary education (Spiers & Harris, 2015).

Beyond post secondary education it is important that occupational therapists are encouraged to continue their development through self-reflection, as working with Indigenous communities requires a comprehensive understanding of one's own culture and values before developing sensitivity to others (Tervalon & Murray-Garcia, 1998; Wilson et al., 2015). It is also important to note while developing this competence that although many papers highlight the importance of cultural awareness training therapists should be aware of developing a stereotypical view of Indigenous culture (Ewen, Paul, & Wilkin, 2014). This means that after cultural awareness training therapists must be able to move past assumptions and work towards culturally respectful practice specific to the context of the community they are working in (Ewen et al., 2014; Gerlach, 2015).

Providing Successful Service Delivery

Culturally Sensitive Service Delivery

It has been proposed that cultural insensitivities of medical practices have discouraged Indigenous peoples and communities from seeking health care (Smith et al., 2006). This means that therapists cannot approach every situation in the same manner. They must adjust their approach to fit the client rather than make the client fit the approach (Booth & Nelson, 2013; Nelson, 2009). As occupational therapy is dominated by Western culture, Indigenous communities may see it as perpetuating oppression if practice is not adjusted (Jull & Giles, 2012).

An Indigenous definition of heath aims to create a holistic picture of wellbeing by looking at physical, social, emotional and cultural aspects of the individual and of the community (Australian Institute of Health and Welfare, 2011b). Consequently when providing medical services to Indigenous individuals it is important that practitioners work together with the community (Bartik, Dixon, & Dart, 2007). This is looked at as a 'working with' approach rather than a 'working for' approach (Laliberte, Haswell-Elkins, & Reilly, 2009). Meaning that the practitioner will work alongside the community to support empowerment and thus promoting the community to take control of their health and wellbeing (Laliberte et al., 2009; Tsey et al., 2010). Vicary and Andrews (2001) emphasised the importance of consultation with community elders. In a 2001 study an Indigenous community responded well to a therapy program that was developed together with the community elders (Vicary & Andrews, 2001). The program created was of value to the community and culturally appropriate because the participants wanted to show their respect for the work done by their elders, thus emphasising the importance of working with the community to achieve sustainable results (Vicary & Andrews, 2001).

When working with Indigenous communities it is important to consider culturally appropriate terminology. This concern is twofold, each Indigenous community has an Indigenous language that they might prefer over English and a common term in the English language might have a different meaning in an Indigenous community. Two terms that have been questioned in the literature are 'occupation' and 'empowerment' (Hopkirk & Wilson, 2014; Iwama, 2007; Nelson, 2009; Y. Thomas et al., 2011; Yerxa, 2000). The term occupation is closely linked with culture; this is problematic because it is a common term

used in occupational therapy practice (Hopkirk & Wilson, 2014). Although at a broad level occupation can be seen in all cultures, the expression of occupation and terminology used will be different (Yerxa, 2000). For example in the English language occupation can be defined as "an activity in which one is employed, the act of possessing a place and an invasion, conquest or control of territory" (Y. Thomas et al., 2011, p. 13). It is clear to all familiar with occupational therapy that when the term occupation is used in the therapy context it is referring to an activity, however to an Indigenous community experiencing occupational therapy for the first time the term could be misinterpreted (Y. Thomas et al., 2011). This is problematic because if the term occupation is interpreted as the possession of land or conquest of territory given the history with Indigenous peoples this term could be considered oppressive.

The second term in question is the term empowerment. Nelson (2009) questions the use of this term as it suggests that occupational therapists have the ability to offer power through therapy, essentially questioning the capability of the client (Y. Thomas et al., 2011). However, it is important that the occupational therapist enter the community as a student rather a teacher, graciously accepting that they do not know everything and they are there to work together with the community learning as they go (Nelson, 2009). Iwama (2007) puts terminology and culturally acceptable practice into perceptive, implying that when communicating therapists must always consider the relevance to the client.

Along with appropriate terminology the following adjustments have been proposed to improve the cultural appropriateness of practice. Break down the power relationship by changing the role of the therapist from the expert to the learner, this is especially important when working with communities that experience disempowerment (Gerlach, 2015; Nelson, 2009). Take the time to learn about the unique Indigenous culture within the community (Nelson, 2009). Use an interpreter when needed, particularly when working with children as their Indigenous language is often more comfortable for them (Nelson, 2009; Nelson et al., 2011). Work with employers to adjust the pragmatics of service delivery, such as scheduling more time to allow the therapist to develop rapport and the use of mentors, elders and local experts in the community to assist practice (Hooper, Thomas, & Clarke, 2007; Nelson, 2009; Nelson et al., 2011). These strategies contribute to the understanding of culturally appropriate practice, however implementation has not been assessed in Australian rural and remote Indigenous communities.

Cultural Appropriateness of Assessment and Interventions

As explained above when working with Indigenous communities it is important that practice is modified so that it is culturally appropriate, this includes assessment and intervention. An approach that has been reported when working with communities is using an "Aboriginal lens" (Booth & Nelson, 2013, p. 115). The occupational therapist would use the community definition of health to guide their practice, focusing not just on the physical wellbeing but also on the social, emotional and cultural aspects (Aboriginal Health and Medical Research Council, 1989). This also means approaching therapy from a community perspective rather than an individual perspective, facilitating each individual to reach their full potential, which allows them to contribute to the wellbeing of the community (Aboriginal Health and Medical Research Council, 1989; Booth & Nelson, 2013). It is important to try to understand health and wellbeing from the broader perspective because it will give insight as to why health care services are not used. For example, community involvement is a valued part of Indigenous people's lives and if an individual has a disability they might take on a different role in the community (Gerlach, 2008). Often an individual is not seen as disabled instead they are seen as contributing to the community to the best of their ability (Gerlach, 2008; MCCubbin, Thompson, Thompson, MCCubbin, & Kaston, 1993). This view facilitates contribution and participation in the community.

The use of standardised assessment tools has been questioned for its appropriateness to the context of Indigenous children and their families (Thorley & Lim, 2011). Many of these standardised tests are norm referenced to children from North America, which may make them inappropriate to use with Indigenous children (Nelson, Allison, & Copley, 2007). They are also written in English and not translated to the relevant community language adding to the child's discomfort (Salter, 2013; Thorley & Lim, 2011). They also often test tasks and activities that are unfamiliar (Nelson et al., 2007; Thorley & Lim, 2011). This would mean the child would not be able to perform to their full potential in the assessment, producing invalid results. A literature review on school readiness of Australian Indigenous children concluded that there is a need for more research measuring the appropriateness of school readiness assessment tools and on the creation and evaluation of Indigenous specific assessment tools (McTurk, Nutton, Lea, Robinson, & Carapetis, 2008).

Through consultation with the communities in the Pilbara region of South Western Australia, Dender and Stagnitti (2009) saw the need for the development of culturally appropriate and specific Indigenous Australian assessment tools. The community members identified a concern that the children in the community were not being provided with the opportunity to have appropriate interventions compared to the opportunities afforded to non-Indigenous Australian children (Dender & Stagnitti, 2011). To address this concern the Indigenous Child-Initiated Pretend Play Assessment (I-ChIPPA) was created (Dender & Stagnitti, 2011). The community members were in direct consultation through all stages of the creation of the assessment tool; including the design, administration and evaluation (Dender & Stagnitti, 2011). An example of an adjustment that differed from the original Child-Initiated Pretend Play Assessment was that children were allowed to test in pairs, as this type of interaction was comfortable and appropriate for children in this community (Dender & Stagnitti, 2011). This is an example of a successful culturally appropriate tool to use with an Indigenous community, however as all Indigenous communities are unique different adjustments will need to be made to the standardised assessment tools to make them culturally appropriate and community specific. Therefore therapists must critically evaluate assessment tools before use, utilising client centred practice and self-reflection to increase the cultural appropriateness of service delivery (Gray & McPherson, 2005; Stedman & Thomas, 2011).

It has been found that culturally sensitive intervention strategies are successful in Indigenous communities (Anand et al., 2007). This means that occupational therapists need to take the time to become aware of their culture and their preconceived notions before working with an Indigenous community (Booth & Nelson, 2013). Therapists must gather the appropriate information from the community such as the social and kinship networks within the community, household structures, family rearing techniques, and environmental factors as all communities will be different (Alsop-Shields & Dugdale, 1995; Bailie et al., 2005; Gerlach, 2008; Nelson & Allison, 2000). Information may be difficult to gather so seeking the support of community members may facilitate this process (Hooper et al., 2007; Mares & Robinson, 2012). The community members will also be able to help with any language barriers or community customs that need to be adhered to (Mares & Robinson, 2012). This will be beneficial when working with children, adopting the same teaching strategies used in the community will assist in achieving desired outcomes (Gerlach, 2008).

Two key issues are linked with the cultural unsuitability of assessment and intervention strategies. First, a child's score on a standardised test often defines the inclusion

criteria when applying for funding (Thorley & Lim, 2011). As many of these standardised assessments will not produce accurate results it is difficult to access funding (Thorley & Lim, 2011). Second, as discussed previously many suggestions have been made for working with Indigenous children and their families, however limited literature has been published about evidence-based interventions (Mares & Robinson, 2012).

Identifying the Gap in the Literature

As discussed previously many articles focus on what therapists can do to modify their service, however there are currently no Indigenous focused evidence-based models of occupational therapy service delivery. A study conducted by Battye and McTaggart (2003) looked at allied health service delivery to rural and remote communities of Queensland. Their aim was to develop a model of allied health service delivery that was able to meet the needs of the community, address recruitment and retention issues of allied health professionals and find an amount of service delivery that is appropriate (Battye & McTaggart, 2003). This study interviewed members of the communities, local organisations and community service providers to determine the needs of the community (Battye & McTaggart, 2003). They also interviewed allied health professionals working in these communities, however the primary focus was recruitment and retention of allied health professionals (Battye & McTaggart, 2003). The study had less focus on finding specific service delivery strategies for working with Indigenous communities and did not address working with children and their families in these communities (Battye & McTaggart, 2003). The general findings that relate to Indigenous communities were that the community needed to have an active role in service delivery, the amount of service delivery that was appropriate depended on the community and the implementation of a mandatory Graduate Certificate in Health program should be set in place that would include cultural awareness/cultural safety component (Battye & McTaggart, 2003). The service delivery model that was created is based on information gathered exclusively in Queensland and has not yet been evaluated showing that there is still work to be done in this area.

Clarke and Denton (2013) identified the need for a model of service delivery to address poor child development, workforce challenges and disadvantage in rural and remote communities. It was found that some of these communities were receiving services but due to the lack of communication with community members these services were unable to fulfil their needs (Clarke & Denton, 2013). Therefore the Specialist Integrated Community Engagement

(SpICE) model was created (Clarke & Denton, 2013). This model focuses on the community and building relationships, working with the local people to determine what their needs are and responding appropriately (Clarke & Denton, 2013). This incorporates university students and supervisors, which in this model could be a member of the community (Denton, 2014). Denton (2014) suggests that incorporating a university student placement within the community not only builds the knowledge and capacity of the students but also of the supervisors. This model also ensures sustainability by having the primary focus on the community and by promoting the rural and remote workforce through incorporating university students (Clarke & Denton, 2013). Although this model has many positive aspects it has been developed primarily for speech pathology services and has not been successfully evaluated meaning that more research needs to be done in the occupational therapy field.

There is a lack of Indigenous representation in allied health professional roles, which results in non-Indigenous professionals working in these areas often using an outreach model of service due to limited therapy resources (Health Workforce Australia, 2014a). Little research has been done to measure the success of outreach service delivery as compared to services embedded within the community. It is also known that cultural awareness or cultural sensitivity training is beneficial when working in Indigenous communities, however there are no evidence-based methods on how to obtain high quality training in the existing literature. Much has been hypothesised about what contributes to the successful service delivery to Indigenous children and their families, however insufficient research has been done to look at how occupational therapy services are provided in these rural and remote communities.

Conclusion

By looking at service delivery to Indigenous communities it becomes clear that the basic human rights of Indigenous children and their families are not being met. The Australian government has identified that the gap between Indigenous and non-Indigenous Australians is an issue that needs to be addressed (Australian Institute of Health and Welfare, 2011b). The ‘Close the Gap’ initiative has been created to address this issue, focusing on life expectancy, mortality, education and employment of Indigenous Australians (Australian Institute of Health and Welfare, 2011b). As the profession of occupational therapy looks at health in a holistic way it is considered to have similar values as Indigenous communities, showing that occupational therapists can play a role in closing the gap (Jeffery, 2005; Wronski, Stronach, & Felton-Busch, 2011).

It has been identified that practice modification is required to deliver a culturally sensitive occupational therapy service to Indigenous Australians (Stedman & Thomas, 2011). However, many practitioners do not feel as though they have the knowledge to work with these communities and furthermore they do not know where to go to gain this knowledge (Paluch et al., 2011). Little has been published to show how occupational therapy is provided to children and their families in rural and remote Australian Indigenous communities (Mares & Robinson, 2012). Therefore this emphasises the need for research on how occupational therapy services are provided in Australian community settings to Indigenous children and their families with a focus on the strategies that contribute to the success of service delivery in these communities.

References

Aboriginal Health and Medical Research Council. (1989). *National Aboriginal health strategy*. Retrieved from http://ahmrc.org.au/index.php?option=com_content&view=article&id=35:definition-of-aboriginal-health&catid=4:about-ahmrc&Itemid=37

Alsop-Shields, L., & Dugdale, A. (1995). Influence of families on the growth of children in an Aboriginal community. *Journal of Paediatrics & Child Health, 31*(5), 392-394. doi:10.1111/j.1440-1754.1995.tb00844.x

Anand, S., Davis, A., Ahmed, R., Jacobs, R., Xie, C., Hill, A., . . . Share-Ap Action Investigators. (2007). A family-based intervention to promote healthy lifestyles in an Aboriginal community in Canada. *Canadian Journal of Public Health. Revue Canadienne de Sante Publique, 98*(6), 447-452. Retrieved from http://www.jstor.org/stable/41994983

Anonson, J., Desjarlais, J., Nixon, J., Whiteman, L., & Bird, A. (2008). Strategies to support recruitment and retention of First Nations youth in baccalaureate nursing programs in Saskatchewan, Canada. *Journal of Transcultural Nursing, 19*(3), 274-283. doi:10.1177/1043659608317095

Australian Electoral Commission. (2006). *History of the Indigenous vote*. Retrieved from http://www.aec.gov.au/indigenous/files/history_indigenous_vote.pdf

Australian Government. (2013). *A snapshot of early childhood development in Australia 2012 — AEDI national report*. Retrieved from https://www.aedc.gov.au/docs/default-source/public-documents/reports/report_nationalreport_2012.pdf?sfvrsn=2&download=true.

Australian Human Rights Commission. (2010). *The community guide to the United Nations declaration on the rights of Indigenous peoples*. Retrieved from https://www.humanrights.gov.au/sites/default/files/document/publication/declaration_community_guide.pdf

Australian Indigenous Healthinfonet. (2014). *Summary of Australian Indigenous health, 2013*. Retrieved from http://www.healthinfonet.ecu.edu.au/health-facts/summary

Australian Indigenous Healthinfonet. (2015). *Overview of Australian Indigenous health status, 2014*. Retrieved from http://www.healthinfonet.ecu.edu.au/health-facts/overviews

Australian Institute of Health and Welfare. (2011a). *Aboriginal and Torres Strait Islander people with disability: Wellbeing, participation and support*. Retrieved from http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737418952&libID=10737418951

Australian Institute of Health and Welfare. (2011b). *The health and welfare of Australia's Aboriginal and Torres Strait Islander people, an overview*. Retrieved from http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737418955

Australian Institute of Health and Welfare. (2015). *Rural, remote and metropolitan areas (RRMA) classification*. Retrieved from http://www.aihw.gov.au/rural-health-rrma-classification/

Bailie, R., Stevens, M., McDonald, E., Halpin, S., Brewster, D., Robinson, G., & Guthridge, S. (2005). Skin infection, housing and social circumstances in children living in remote Indigenous communities: Testing conceptual and methodological approaches. *BMC Public Health, 5*(1), 128. doi:10.1186/1471-2458-5-128

Bartik, W., Dixon, A., & Dart, K. (2007). Aboriginal child and adolescent mental health: A rural worker training model. *Australasian Psychiatry, 15*(2), 135-139. doi:10.1080/10398560701196745

Battye, K., & McTaggart, K. (2003). Development of a model for sustainable delivery of outreach allied health services to remote north-west Queensland, Australia. *Rural and Remote Health, 3*(3), 194. Retrieved from http://www.rrh.org.au/articles/subviewnew.asp?articleid=194

Booth, J., & Nelson, A. (2013). Sharing stories: Using narratives to illustrate the role of critical reflection in practice with First Australians. *Occupational Therapy International, 20*(3), 114-123. doi:10.1002/oti.1343

Castro, D., Dahlin-Ivanoff, S., & Martensson, L. (2014). Occupational therapy and culture: A literature review. *Scandinavian Journal of Occupational Therapy, 21*(6), 401-414. doi:10.3109/11038128.2014.898086

Clarke, K., & Denton, M. (2013). Red dirt thinking on child wellbeing in Indigenous, rural and remote Australian communities: The SpICE model "I just don't want my kid to struggle like I did at school". *The Australian Journal of Indigenous Education, 42*(02), 136-144. doi:10.1017/jie.2013.21

Cunningham, C., & Stanley, F. (2003). Indigenous by definition, experience, or world view: Links between people, their land, and culture need to be acknowledged. *British Medical Journal, 327*(7412), 403-404. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC188479/

Dender, A., & Stagnitti, K. (2011). Development of the Indigenous child‐initiated pretend play assessment: Selection of play materials and administration. *Australian Occupational Therapy Journal, 58*(1), 34-42. doi:10.1111/j.1440-1630.2010.00905.x

Denton, M. (2014). *Attitudes of hope, care and joy: Stories of collaborative learning mentors*. Retrieved from http://www.heti.nsw.gov.au/Global/rural/2012 RRCBP Graduates/M Denton - Final Report.pdf

Department of the Parliamentary Library. (2003). *Defining Aboriginality in Australia*. Retrieved from http://www.aph.gov.au/binaries/library/pubs/cib/2002-03/03cib10.pdf

Elston, J., & Smith, J. (2007). Indigenous Australia. In J. Smith (Ed.), *Australia's rural and remote health: A social justice perspective* (pp. 18-47). Croydon, Vic.: Tertiary Press.

Ewen, S., Paul, D., & Wilkin, A. (2014). Health disparities, cultural awareness, and Aboriginal health: Results from a health educator survey. *Journal of Nursing Education and Practice, 4*(10), 40-50. doi:10.5430/jnep.v4n10p40

Gerlach, A. (2008). "Circle of caring": A First Nations worldview of child rearing. *Canadian Journal of Occupational Therapy, 75*(1), 18-25. doi:10.1177/000841740807500107

Gerlach, A. (2015). Sharpening our critical edge: Occupational therapy in the context of marginalized populations. *Canadian Journal of Occupational Therapy, 82*(4), 245-253. doi:10.1177/0008417415571730

Gibson, C., Butler, C., Henaway, C., Dudgeon, P., & Curtin, M. (2015). Indigenous peoples and human rights: Some considerations for the occupational therapy profession in Australia. *Australian Occupational Therapy Journal, 62*(3), 214-218. doi:10.1111/1440-1630.12185

Gray, M., & McPherson, K. (2005). Cultural safety and professional practice in occupational therapy: A New Zealand perspective. *Australian Occupational Therapy Journal, 52*(1), 34-42. doi:10.1111/j.1440-1630.2004.00433.x

Hammell, K. (2013). Occupation, well-being, and culture: Theory and cultural humility. *Canadian Journal of Occupational Therapy, 80*(4), 224-234. doi:10.1177/0008417413500465

Health Workforce Australia. (2014a). *Australia's health workforce series: Aboriginal and Torres Strait Islander health workers / practitioners in focus.* Retrieved from https://www.hwa.gov.au/sites/default/files/HWA Aboriginal and Torres Strait Islander Health Workers in Focus_FINAL.pdf

Health Workforce Australia. (2014b). *Developing Aboriginal and Torres Strait Islander cultural capabilities in health graduates: A review of the literature*. Retrieved from http://www.hwa.gov.au/file/932/download?token=CVNkVpf3

Hooper, K., Thomas, Y., & Clarke, M. (2007). Health professional partnerships and their impact on Aboriginal health: An occupational therapist's and Aboriginal health worker's perspective. *Australian Journal of Rural Health, 15*(1), 46-51. doi:10.1111/j.1440-1584.2007.00849.x

Hopkirk, J. (2013). E rua ngā ao, kotahi te taura tangata: Two worlds and one profession. *New Zealand Journal of Occupational Therapy, 60*(1), 5-15. Retrieved from http://search.informit.com.au.ezproxy2.library.usyd.edu.au/fullText;dn=267180730886206;res=IELNZC

Hopkirk, J., & Wilson, L. (2014). A call to wellness - whitiwhitia i te ora: Exploring Māori and occupational therapy perspectives on health. *Occupational Therapy International, 21*(4), 156-165. doi:10.1002/oti.1373

Human Rights and Equal Opportunity Commission. (2007). *Track the history: The history of separation of Aboriginal and Torres Strait Islander children from their families*. Retrieved from https://www.humanrights.gov.au/sites/default/files/Track_History_A1poster_large2006.pdf

Iwama, M. (2007). Culture and occupational therapy: Meeting the challenge of relevance in a global world. *Occupational Therapy International, 14*(4), 183-187. doi:10.1002/oti.234

Jeffery, H. (2005). Culture clash: A discussion of the provision of mental health services for Maori consumers in New Zealand. *New Zealand Journal of Occupational Therapy, 52*(2), 15-21. Retrieved from http://search.informit.com.au.ezproxy2.library.usyd.edu.au/fullText;dn=080719013104543;res=IELNZC

Jull, J., & Giles, A. (2012). Health equity, Aboriginal peoples and occupational therapy. *Canadian Journal of Occupational Therapy, 79*(2), 70-76. doi:10.2182/cjot.2012.79.2.2

Keane, S., Smith, T., Lincoln, M., & Fisher, K. (2011). Survey of the rural allied health workforce in New South Wales to inform recruitment and retention. *Australian Journal of Rural Health, 19*(1), 38-44. doi:10.1111/j.1440-1584.2010.01175.x

Kirsh, B., Trentham, B., & Cole, S. (2006). Diversity in occupational therapy: Experiences of consumers who identify themselves as minority group members. *Australian Occupational Therapy Journal, 53*(4), 302-313. doi:10.1111/j.1440-1630.2006.00576.x

Laliberte, A., Haswell-Elkins, M., & Reilly, L. (2009). The healing journey: Empowering Aboriginal communities to close the health gap. *Australasian Psychiatry, 17*(s1), S64-67. doi:10.1080/10398560902948704

Lincoln, M. (2013). *Rapid review of Poche Centre supported allied health services*. Retrieved from http://sydney.edu.au/medicine/public-health/poche/clinics/evaluation.php

Lincoln, M., Gallego, G., Dew, A., Bulkeley, K., Veitch, C., Bundy, A., . . . Griffiths, S. (2014). Recruitment and retention of allied health professionals in the disability sector in rural and remote New South Wales, Australia. *Journal of Intellectual and Developmental Disability, 39*(1), 86-97. doi:10.3109/13668250.2013.861393

Mares, S., & Robinson, G. (2012). Culture, context and therapeutic processes: Delivering a parent-child intervention in a remote Aboriginal community. *Australasian Psychiatry, 20*(2), 102-107. doi:10.1177/1039856211432484

MCCubbin, H., Thompson, E., Thompson, A., MCCubbin, M., & Kaston, A. (1993). Culture, ethnicity, and the family: Critical factors in childhood chronic illnesses and disabilities. *Pediatrics, 91*(5), 1063-1070.

McTurk, N., Nutton, G., Lea, T., Robinson, G., & Carapetis, J. (2008). The school readiness of Australian Indigenous children: A review of the literature, May 2008, Menzies School of health research and School of Social and Policy Research – Charles Darwin University, Northern Territory. Retrieved from http://www.aracy.org.au/publications-resources/command/download_file/id/152/filename/The_school_readiness_of_Australian_Indigenous_children.pdf

Nelson, A. (2007). Seeing white: A critical exploration of occupational therapy with Indigenous Australian people. *Occupational Therapy International, 14*(4), 237-255. doi:10.1002/oti.236

Nelson, A. (2009). Learning from the past, looking to the future: Exploring our place with Indigenous Australians. *Australian Occupational Therapy Journal, 56*(2), 97-102. doi:10.1111/j.1440-1630.2009.00781.x

Nelson, A., & Allison, H. (2000). Values of urban Aboriginal parents: Food before thought. *Australian Occupational Therapy Journal, 47*(1), 28-40. doi:10.1046/j.1440-1630.2000.00206.x

Nelson, A., Allison, H., & Copley, J. (2007). Understanding where we come from: Occupational therapy with urban Indigenous Australians. *Australian Occupational Therapy Journal, 54*(3), 203-214. doi:10.1111/j.1440-1630.2006.00629.x

Nelson, A., Gray, M., Jensen, H., Thomas, Y., McIntosh, K., Oke, L., & Paluch, T. (2011). Closing the gap: Supporting occupational therapists to partner effectively with First Australians. *Australian Occupational Therapy Journal, 58*(1), 17-24. doi:10.1111/j.1440-1630.2010.00912.x

Occupational Therapy Australia. (2015). *What do occupational therapists do?* Retrieved from http://www.otaus.com.au/about/what-do-occupational-therapists-do

Paluch, T., Allen, R., McIntosh, K., & Oke, L. (2011). Koori occupational therapy scheme: Contributing to First Australian health through professional reflection, advocacy and action. *Australian Occupational Therapy Journal, 58*(1), 50-53. doi:10.1111/j.1440-1630.2010.00913.x

Rudd K. (2008, February 13). *Apology to Australia's Indigenous People*. Retrived from http://parlinfo.aph.gov.au/parlInfo/genpdf/chamber/hansardr/2008-02-13/0003/hansard_frag.pdf;fileType=application%2Fpdf

Rudman, D., & Dennhardt, S. (2008). Shaping knowledge regarding occupation: Examining the cultural underpinnings of the evolving concept of occupational identity. *Australian Occupational Therapy Journal, 55*(3), 153-162. doi:10.1111/j.1440-1630.2007.00715.x

Salter, C. (2013). Conducting communication assessments with school aged Aboriginal children in the Kimberley region of Australia. *Australian Review of Applied Linguistics, 36*(3), 316-334. Retrieved from http://search.informit.com.au.ezproxy1.library.usyd.edu.au/documentSummary;dn=765370482951038;res=IELHSS

Smith, D., Edwards, N., Varcoe, C., Martens, P., & Davies, B. (2006). Bringing safety and responsiveness into the foreground of care for pregnant and parenting Aboriginal people. *Advances in Nursing Science, 29*(2), E27-E44. doi:10.1097/00012272-200604000-00014

Spiers, M., & Harris, M. (2015). Challenges to student transition in allied health undergraduate education in the Australian rural and remote context: A synthesis of barriers and enablers. *Rural and Remote Health, 15*(2), 3069. Retrieved from http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=3069

Stedman, A., & Thomas, Y. (2011). Reflecting on our effectiveness: Occupational therapy interventions with Indigenous clients. *Australian Occupational Therapy Journal, 58*(1), 43-49. doi:10.1111/j.1440-1630.2010.00916.x

Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved, 9*(2), 117-125. doi:10.1353/hpu.2010.0233

Thomas, D., Heller, R., & Hunt, J. (1998). Clinical consultations in an Aboriginal community-controlled health service: A comparison with general practice. *Australian & New Zealand Journal of Public Health, 22*(1), 86-91. doi:10.1111/j.1467-842X.1998.tb01150.x

Thomas, Y., Gray, M., & McGinty, S. (2011). Occupational therapy at the 'cultural interface': Lessons from research with Aboriginal and Torres Strait Islander Australians. *Australian Occupational Therapy Journal, 58*(1), 11-16. doi:10.1111/j.1440-1630.2010.00917.x

Thorley, M., & Lim, S. (2011). Considerations for occupational therapy assessment for Indigenous children in Australia. *Australian Occupational Therapy Journal, 58*(1), 3-10. doi:10.1111/j.1440-1630.2010.00852.x

Trentham, B., Cockburn, L., Cameron, D., & Iwama, M. (2007). Diversity and inclusion within an occupational therapy curriculum. *Australian Occupational Therapy Journal, 54*(s1), S49-S57. doi:10.1111/j.1440-1630.2006.00605.x

Tsey, K., Whiteside, M., Haswell-Elkins, M., Bainbridge, R., Cadet-James, Y., & Wilson, A. (2010). Empowerment and Indigenous Australian health: A synthesis of findings from family wellbeing formative research. *Health & Social Care in the Community, 18*(2), 169-179. doi:10.1111/j.1365-2524.2009.00885.x

Turpin, M., & Iwama, M. (2011). Kawa model. In R. Demetriou-Swanwick & C. Jackson (Eds.), *Using occupational therapy models in practice: A fieldguide* (pp. 159-177). New York; Edinburgh: Churchill Livingstone/Elsevier.

Vicary, D., & Andrews, H. (2001). A model of therapeutic intervention with Indigenous Australians. *Australian & New Zealand Journal of Public Health, 25*(4), 349-351. doi:10.1111/j.1467-842X.2001.tb00592.x

Watts, E., & Carlson, G. (2002). Practical strategies for working with Indigenous people living in Queensland, Australia. *Occupational Therapy International, 9*(4), 277-293. doi:10.1002/oti.169

Wilson, A., Magarey, A., Jones, M., O'Donnell, K., & Kelly, J. (2015). Attitudes and characteristics of health professionals working in Aboriginal health. *Rural and Remote Health, 15*(1), 2739. Retrieved from http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=2739

Wray, E., & Mortenson, P. (2011). Cultural competence in occupational therapists working in early intervention therapy programs. *Canadian Journal of Occupational Therapy, 78*(3), 180-186. doi:10.2182/cjot.2011.78.3.6

Wronski, I., Stronach, P., & Felton-Busch, C. (2011). Indigenous health: Can occupational therapy respond to the challenge to 'Close the Gap'? *Australian Occupational Therapy Journal, 58*(1), 1-2. doi:10.1111/j.1440-1630.2010.00920.x

Yerxa, E. (2000). Occupational science: A renaissance of service to humankind through knowledge. *Occupational Therapy International, 7*(2), 87-98. doi:10.1002/oti.109

Zeldenryk, L., & Yalmambirra. (2006). Occupational deprivation: A consequence of Australia's policy of assimilation. *Australian Occupational Therapy Journal, 53*(1), 43-46. doi:10.1111/j.1440-1630.2005.00530.x

Section 2: Journal Manuscript

Table of Contents

Occupational therapy with Australian Indigenous children and their families: A rural and remote perspective

Author:	Corey Block Bachelor of Physical Education Second year student: Master of Occupational therapy (Hons)
Research Supervisors:	Associate Lecturer Kim Bulkeley Professor Michelle Lincoln
Research Location:	University of Sydney Cumberland Campus Lidcombe, NSW 2006
Correspondence:	Associate Lecturer Kim Bulkeley J114 - J Block Cumberland Campus The University of Sydney Lidcombe, NSW 2006 Telephone: +61 2 9351 9034 Email: kim.bulkeley@sydney.edu.au

Running Head:	Occupational therapy with Indigenous children and their families
Target Journal:	Australian Occupational Therapy Journal
Ethical Clearance:	Aboriginal Health and Medical Research Council
Key Words:	Community health services, culture, Indigenous health services**,** family health, rural health
Conflict of Interest:	No conflicts of interest known
Abstract Length:	249
Word Length:	4906
References:	35
Figures:	1
Tables:	None

Abstract

Background/aim: Occupational therapy service delivery must be adapted when working within Indigenous communities, as there is a diversity of beliefs, values and customs. There are currently no evidence-based models of therapy service delivery to rural and remote Indigenous children and their families. This study aims to explore occupational therapy service delivery to rural and remote Indigenous children and their families.

Methods: Semi-structured telephone interviews were conducted with 7 occupational therapists with experience with Australian rural and remote Indigenous children and their families. A thematic analysis was conducted on each interview with constant comparison to refine themes across interviews.

Results: A total of 6 service delivery themes emerged from the data gathered in the interviews; flexible and accessible services, tailored services, culturally sensitive therapist, culturally inclusive services, occupational therapy awareness and collaboration. The results linked with the need for long-term solutions, as the limited access to occupational therapy within these communities is a social injustice.

Conclusion: The findings demonstrate that each Indigenous community is unique. Therapists work in collaboration with the community and use their critical reasoning skills to adjust practice accordingly.

Significance of study: This study contributes to growing knowledge about occupational therapy service provision in rural and remote Indigenous communities with children and their families. The findings will assist therapists in these communities to provide culturally aligned services. They also advocate for these communities by emphasising the basic human right violations that Indigenous communities are experiencing by not having access to consistent and culturally appropriate occupational therapy services.

KEYWORDS community health services, culture, Indigenous health services**,** family health, rural health

Introduction

Australia is made up of many different Aboriginal and Torres Strait Islander communities, each having a diverse set of experiences, beliefs and values (Australian Human Rights Commission, 2010; Nelson & Allison, 2000). Due to colonisation, introduced disease and forced relocation, Aboriginal and Torres Strait Islander communities have faced disadvantage that still has effects today (Australian Indigenous Healthinfonet, 2015). "An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he [or she] lives" (Department of the Parliamentary Library, 2003, p. 4). The term Indigenous will be used throughout this paper to include both Aboriginal and Torres Strait Islanders. The term Indigenous is defined as "the experiences shared by a group of people who have inhabited a country for thousands of years, which often contrast with those of other groups of people who reside in the same country for a few hundred years." (Cunningham & Stanley, 2003, p. 403). Although Indigenous Australians live in metropolitan, rural and remote areas, the focus of this study will be on rural and remote communities. The Rural Remote and Metropolitan Areas (RRMA) classification system defines rural and remote according to the population and the geographical distance from a metropolitan centre (Australian Institute of Health and Welfare, 2015).

Occupational therapists working with children aim to facilitate meaningful activity and progression through developmental stages (Occupational Therapy Australia, 2015). The Australian Early Development Index (AEDI) is used to assess developmental outcomes and predict future health by evaluating five developmental domains; physical health and wellbeing, language and cognitive skills (school-based), communication skills and general knowledge, social competence and emotional maturity (Australian Government, 2013). In 2012 the majority of Indigenous children's developmental domains were on track, however when compared to non-Indigenous children it was found that Indigenous children were more than twice as likely to be developmentally vulnerable (Australian Government, 2013). Of the 15,490 Indigenous children included in the study 43.2% were developmentally vulnerable in at least one of the AEDI domains (Australian Government, 2013).

There is an underrepresentation of Indigenous Australians employed in the health system (Health Workforce Australia, 2014). As a result there are many non-Indigenous Australians working in rural and remote Indigenous communities. Many practitioners feel

incapable and lack the confidence to work in these communities (Paluch, Allen, McIntosh, & Oke, 2011). Consequently rural and remote community members are being disadvantaged, receiving inconsistent and infrequent services resulting in deprivation of their basic human right to equal health care which is accorded to all Australians regardless of location or cultural background (Australian Human Rights Commission, 2010; Battye & McTaggart, 2003).

Western culture dominates occupational therapy theory and practice with an emerging awareness that occupational therapy itself has its own culture (Castro, Dahlin-Ivanoff, & Martensson, 2014; Nelson, 2007). Iwama (2007) identifies that occupational therapy culture is deeply rooted within theory and practice, making it difficult for therapists to identify. Hopkirk and Wilson (2014) suggest that occupational therapy shares many perspectives on health with Indigenous communities such as; client centred practice, a holistic view of health, recognition of the influence of the environment and the impact of spirituality. However, we cannot take our inherent similarities for granted and therapists must utilise critical reasoning skills to avoid marginalising or stereotyping by grouping a population together (Gerlach, 2015).

It has been established that service delivery must be adjusted when working with Indigenous communities, requiring an understanding and awareness of culture (Stedman & Thomas, 2011). Cultural awareness can be broken down into three components; cultural safety, cultural competence, and cultural humility. Cultural safety is the awareness of the power imbalances that can occur during consultation with a client (Gray & McPherson, 2005). Cultural competence is the understanding of unearned privileges or advantages that one might have based on location, culture or position in society (Hammell, 2013; Nelson, 2007). Finally, cultural humility is the understanding of ones culture and beliefs and how to put these aside to achieve an unbiased approach when communicating with individuals of another culture (Booth & Nelson, 2013; Tervalon & Murray-Garcia, 1998). Education or training on these three concepts will help therapists working in cross-cultural environments, however the growth of this awareness is an ongoing process (Tervalon & Murray-Garcia, 1998).

Self-reflection contributes to the development of cultural awareness, as working with Indigenous communities requires a comprehensive understanding of one's own culture and values in order to develop sensitivity to others (Tervalon & Murray-Garcia, 1998). Many papers highlight the importance of cultural awareness training, however there can be a risk that therapists may develop a stereotypical view of Indigenous culture (Ewen, Paul, & Wilkin,

2014). Following cultural awareness training therapists must be vigilant to move past assumptions and work towards culturally respectful practice according to the context of the community with whom they engage (Ewen et al., 2014; Gerlach, 2015). Conducting assessments and implementing interventions within the community may involve negotiating with employers to adjust the pragmatics of service delivery in a culturally respectful way (Nelson et al., 2011).

Thorley and Lim (2011) suggest that therapists may consider reducing the use of standardised assessment tools because their appropriateness to the context of Indigenous children has been questioned. Many of these standardised tests are norm referenced with children from North America which may be an inappropriate comparison for use with Indigenous children and include culturally foreign language, tasks and activities (Nelson, Allison, & Copley, 2007; Thorley & Lim, 2011). This would potentially interfere with optimal performance in the assessment, producing invalid results (Thorley & Lim, 2011).

Building relationships and critical reasoning is important when working with Indigenous communities to assist therapists to let go of assumptions and adjust practice to ensure relevance to their client (Gerlach, 2015; Iwama, 2007). Therefore when providing medical services to Indigenous individuals it is important that practitioners work together with the community (Booth & Nelson, 2013). A 'working with' approach rather than a 'working for' approach is required, which is linked with the break down of the power relationship (Booth & Nelson, 2013; Laliberte, Haswell-Elkins, & Reilly, 2009). The role of the therapist changes from the expert to the learner, which is especially important when working with communities that experience disempowerment (Gerlach, 2015; Nelson, 2009). The Kawa model has been proposed as a culturally appropriate model for use with Indigenous cultures to open discussion and facilitate the movement from an expert to a student (Nelson, 2009; Turpin & Iwama, 2011). Each community will have their own unique river surrounded by different river walls and filled with different rocks and driftwood influencing the flow (Turpin & Iwama, 2011). This model can assist Western influenced therapists to understand the components of a collectivist society and therefore has been used as a theoretical framework for this study (Turpin & Iwama, 2011).

There is a lack of Indigenous representation in allied health professional roles, which results in non-Indigenous professionals working in these areas (Health Workforce Australia, 2014). It is known that service delivery must be adjusted when working within Indigenous

communities as there is a diversity of beliefs, values and customs, however there are currently no evidenced-based models of therapy service delivery to inform practice. Therefore this study will ask how are occupational therapy services delivered in rural and remote Australian community settings with Indigenous children and their families?

Methods

Research design

An inductive qualitative study design was used, which has been established to promote evidence-based and client centred practice within the occupational therapy profession (Hammell, 2001). It has been used effectively to provide practitioners with evidence to inform practice in the areas of intervention and service delivery (Hammell, 2001). As little research has been done on occupational therapy service delivery to rural Indigenous communities, a qualitative approach was chosen as the most appropriate way to gather evidence to create a better understanding.

A thematic analysis was conducted on the data, informed by a modified grounded theory approach (Olshansky, 2015). The systematic creation of a theory to explain a phenomenon based on data gathered through the study was linked with the theoretical framework of the Kawa model (Olshansky, 2015; Turpin & Iwama, 2011).

This study is part of a larger allied health study that aims to develop a model of allied health service delivery by listening to and getting advice from Indigenous community members in rural and remote New South Wales (NSW). The data gathered through this study will form part of the conversation with Indigenous community members about developing therapy services that are culturally aligned and responsive.

Participant recruitment

Participants were recruited on a volunteer basis using a purposive sampling strategy (Robinson, 2014). Participant recruitment targeted key informants who are occupational therapists that have worked with rural and remote communities in Australia with Indigenous children and their families. These participants were sourced through the Wobbly Hub research

team, the Occupation Therapy Australia conference and First Australian and Australian Occupational Therapists (FAnAOTs) Online. Participants were contacted initially via email, face to face or via an online discussion forum. Seven participants were recruited to participate in this study from four different states and territories in Australia in an attempt to collect a breadth of information from a variety of locations and services. Participants were provided with project details through the 'Participant Information Statement' and informed consent was obtained prior to the telephone interview. This study has received ethics approval from the Aboriginal Health and Medical Research Council (AH&MRC) (#996/14) and is an offshoot of a larger allied health study that involves partnering with Indigenous community members to develop localised service models.

Data collection

Data was gathered by the first author through semi-structured audio-recorded telephone interviews. The second author, provided the interview questions from the larger allied health project via email that were modified for use in this project (personal communication, March 13, 2015). The modifications have been informed through the Kawa model and relevant literature to focus the questions on the delivery of occupational therapy services (Turpin & Iwama, 2011). The semi-structured interview guide (available from the first author) was piloted prior to the commencement of the project to hone the interview questions (Turner, 2010).

Interviews with participants lasted 15-50 minutes and were scheduled at a mutually convenient time to reduce any burden to the participants. All interviews were audio recorded with the permission of the participants. The first author then transcribed the interviews verbatim, to ensure data was reliable and authentic. Transcriptions were then sent back to the participants to check if opinions and perspectives were captured accurately and if any changes were required.

Data analysis

Once data had been verified a thematic analysis was conducted on each interview (Braun & Clarke, 2006). A constant comparison method was also used to refine and summate across each interview (Boeije, 2002). Codes were created through transcribed data and combined to find reoccurring themes (Braun & Clarke, 2006). These themes were analysed and put together to build a framework of what occupational therapy looks like in rural and remote Australian Indigenous communities with children and their families.

To promote trustworthiness researcher triangulation was used, the first and second author discussed themes to reach a consensus (Curtin & Fossey, 2007). Field notes were taken to keep an audit trail and to promote reflexivity throughout the interview and data analysis process (Curtin & Fossey, 2007).

Results

Participant demographics

Seven participants were recruited to the study from Queensland, the Northern Territory, South Australia and NSW. All participants have been allocated a number that has been referenced following relevant quotations. Of the seven participants one participant was male and two are of Indigenous origin. Participant's ages ranged from 23-44 years (M=33.7, SD=6.7). The years practicing as an occupational therapist ranged from 0.5-23 years (M=11.6, SD=7.1) and the years of experience with Indigenous communities ranged from 0.5-16 years (M=7.3, SD=5.2).

Service delivery themes

Six themes emerged from the data gathered in the seven interviews; (i) flexible and accessible services, (ii) tailored services, (iii) culturally sensitive therapist, (iv) culturally inclusive services, (v) occupational therapy awareness and (vi) collaboration, see figure 1 for themes and sub themes.

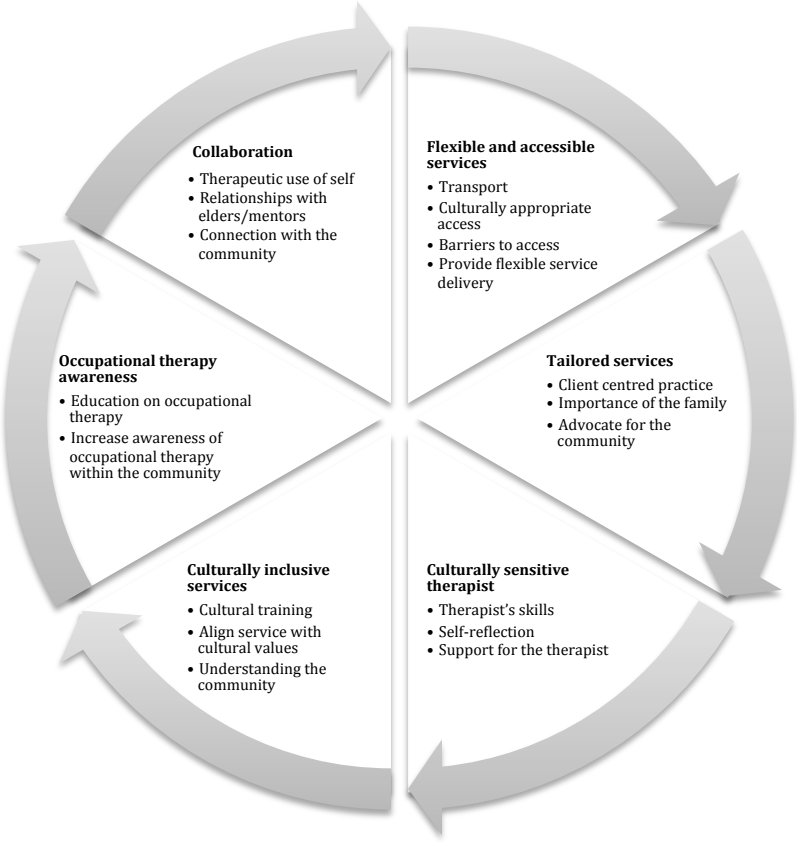


Figure 1. Themes and subthemes of service delivery in rural and remote Australian community settings with Indigenous children and their families.

Flexible and accessible services

Flexibility was a common term across the interviews that many participants said lead to accessibility and therefore success in service delivery. This included flexibility with inclusion criteria, service delivery locations, referrals and session times. This also linked with the flexibility of the service to provide culturally appropriate rules and regulations in relation to access.

> … we just sort of drive up to the house and say do you want to see me now or is there a better time? Do you want me to come back in a couple of hours? Then just being open to when the person is able to come or able to see me. We don't think that appointment times would work for most people. (P2)

Many participants spoke about accessibility not only in an occupational therapy context but also to other services within the community. Participants said they would provide

links and support to access other services, as often children did not need occupational therapy in isolation. Transport was also a common topic of discussion throughout the interviews.

> I think that even in small communities transport can be a challenge … so even if the community is only very small it still might be a 2 km walk in 40 degree heat … (P1)

Some participants provide transport for their clients to travel into the clinic, some visit their clients at their house and others distribute their services where the children attend other services. One participant expressed frustration questioning why transportation is still an issue posing a barrier to access and emphasised that it is not the only barrier and should not be considered in isolation. Other participants agreed listing barriers such as lack of resources, staff, time in the community, funding and waiting lists. Participants expressed the need for long-term solutions to these barriers, one identifying lack of access as a social injustice.

Tailored services

Participants described the importance of working with the client's family or who ever was part of the child's context. This assisted participants to find out what is important to them so they could build their services based on the needs of the family. In many cases this also included educating the family on occupational therapy and making sure the family knows what is going on. One participant expressed the concern that therapists could do a better job of explaining the meaning of reports to families.

Participants also spoke about client centred practice, family centred practice or community based practice depending on whom the participant saw as being their primary client.

> … making sure that we are looking at the families first … it is a family centred practice. So we will look at how we can make our service better for them and kind of sit around them quite well. (P7)

Participants emphasised the point that each community will be unique so it is important that services cater to their differences. These tailored services were discussed

through intake, assessment, intervention and discharge phases. This also encompasses the therapist showing respect for the expertise of the community and advocating for their needs.

> … it is just a constantly evolving thing that happens in response to what is needed at the time. Yeah and I think that if anything is needed then we will just make those changes. (P5)

Culturally sensitive therapist

All of the participants identified that an occupational therapist needs certain skills to work with rural and remote Indigenous children and their families. Some of these included time management, listening, long-term planning, creativity, communication and critical thinking skills. This includes the ability of the therapist to think critically about the occupational therapy theory.

> I think it is well placed, don't get me wrong but I think that our theoretical underpinnings actually limit the way that we work and limit how we do things … our profession needs to better understand how to critically reflect, and understand how individuals and the profession use its power and privilege. (P6)

The interviews showed a link between critical thinking and self-reflection. This finding includes the removal of therapist assumptions and showing respect for the community.

> So I think listening and being respectful that they might have different ideas of what's important from what I would think is important. (P2)

Another participant agreed saying.

> So you have to get to understand your own cultural background as well, definitely that is the most important thing. Just really looking at yourself as a person. Looking at your own beliefs and your own values … the kind of things that you think are important and then look at how they could possibly be impacting on how you deliver your services and things like that. (P7)

Participants reported feelings of isolation, heavy workloads and experiencing unique problems while having no other therapists to consult when working in rural and remote settings. Some participants expressed the need for support within the communities, especially for those therapists that are providing fly-in-fly-out services.

Culturally inclusive services

> I think what the cultural training really showed me was that in terms of history even by non-Indigenous standards, but particularly by Indigenous standards that the real, what's the word? Trauma of families is so recent … I just didn't really understand that families were still healing from that trauma. So I felt that it was really important. (P4)

All the participants acknowledged training in providing culturally sensitive services. Participants also expressed the view that cultural training is a journey for life. The variance in discussion about where to acquire cultural training shows that this knowledge can be acquired in many ways. However, participants expressed the opinion that formal cultural training is less effective than community specific cultural training through families, Aboriginal health workers or other health professionals in the community.

> I have found the best training that I have had has come from the clients themselves because I think just hearing all of the stories over time really gives you a picture of that. Obviously that takes a long time to collect that information and you are always learning. Like I will never know it all. (P5)

One participant explained that cultural training is of value, but expressed the opinion that to be successful a therapist just needs a set of basic occupational therapy skills.

> They just need a lot of, and this links in with being culturally sensitive. They need to be really non-judgmental, they need … a lot of patience, they need to be very flexible in their work and in their thinking, and they need to be persistent, willing to try over and over again, try many different things. (P3)

Understanding the community was also an important aspect of this theme. Participants expressed the importance of knowing the cultural protocols within the communities and the community dynamics and how they might affect practice. One participant acknowledged their lack of understanding of Indigenous culture before engaging in training. Another participant expressed the view that universities need to change the way cultural training is taught.

Participants also emphasised the importance of using the understanding of the community to align their services with their cultural values. Such as having culturally appropriate rules, flexible appointment times, a welcoming and non-threatening environment, culturally appropriate materials and awareness that English may not be their first language.

Occupational therapy awareness

Many participants expressed the need for an increased understanding of occupational therapy within the community. Participants expressed the need for the community members to understand occupational therapy in relation to their child, how to access occupational therapy and why they would need to access occupational therapy. Participants commented on the relevance of occupational therapy to the families' context.

> Often families are quite accepting of their child in whatever situation. So sometimes it is only then that there is a problem with occupation I guess where the child's skills do not match what they are expected to do in that new environment. (P5)

From the findings it was clear that the lack of awareness of occupational therapy in the community was leading to a lack of referrals. Participants also expressed the importance of early identification and that if community members and other community services such as preschools have an awareness of occupational therapy the rate of early identification will increase.

> … kids don't always get picked up as having a developmental problem say by the family… I get a lot of referrals from kindy and it is not until the child is at kindy sometimes when somebody is flagged something. (P5)

Collaboration

> Yeah I think that that is a real shift from having an expert model to having a really collaborative model of service delivery. (P1)

Many participants expressed the importance of collaboration with Aboriginal health workers and family support workers when providing services. Participants also commented on the skills that are required of therapists to collaborate within the community such as therapeutic use of self and ability to develop rapport. Participants emphasised the importance of building and maintaining trust and relationships within the community. However, this collaboration can be difficult when there is limited time in the community, when services are fly-in-fly-out or when clients are traveling outside of their community for services.

> I think you know for one or two kids who really stand out to me I think developing a trust that there are some non-Indigenous people within their community who they can trust and who take an interest in them as individuals. I think that happens for every kid I don't think that is necessarily an Indigenous thing. (P4)

Encompassed within building relationships with the community, participants discussed building relationships with mentors or elders with the community. Although some said it was difficult to connect with elders, as they are busy with other responsibilities within the community, many saw the importance of this relationship. However, one participant expressed the need for these elders and mentors to be compensated for their time and for therapists to understand the relationship they have with these people of respect within the community.

> … it shifts our profession away from needing to help … communities, to a place where partnerships are essential and learning is two way. (P6)

Discussion

This study aimed to find out how occupational therapy services are provided in rural and remote Indigenous communities with children and their families. Through analysis of the six service delivery themes five main findings have emerged: relationship building,

understanding of occupational therapy in the community, provide accessible services, cultural training and self-reflection.

Relationships building

Many participants placed value on building and maintaining relationships with the child and their family, the community and people of respect within the community. This is consistent with the literature that also emphasised the importance of working with the community (Booth & Nelson, 2013; Laliberte et al., 2009). However, this study went further to say that it is not enough to just build relationships there must be an understanding of the reason for these relationships and consideration of the burden on community members. These participants supported the shift from an expert model to a collaborative model of service delivery. This has been acknowledged in the literature on the importance of the break down of power relationships, which is embodied in therapists when they enter a community as a student rather than an expert (Gerlach, 2015; Nelson, 2009; Tervalon & Murray-Garcia, 1998).

Understanding of occupational therapy in the community

Participants discussed the understanding of occupational therapy in the community and the influence understanding has on access of services. Some participants reported a lack of understanding of occupational therapy in the community particularly within educators, which resulted in a lack of referrals. This was contrasted by other participant's views that the concerns of the family or the community were often not occupational therapy related and that the family was accepting of their child, which therefore did not trigger a need for therapy support. Iwama (2007) speaks about relevance to the client and how often the client is required to adjust to the therapy rather than the therapist adjusting service to be relevant to the client. Therefore when addressing referrals therapists must ask themselves is it a lack of understanding of the role of an occupational therapist in the community? Or is it the relevance of available occupational therapy services to the context of the children in the community?

Provide accessible services

A common topic of discussion in the interviews was the location of service delivery. The main point that most participants brought up in relation to providing accessible services was flexibility. Participants considered flexibility in relation to location, rules and regulations. Participants commented on having culturally appropriate rules to facilitate access. This is consistent with the literature proposing that pragmatics of services delivery should be looked at when working with Indigenous communities such as scheduling more sessions to allow the therapist time to build rapport (Nelson et al., 2011).

Participants spoke about delivering services in multiple locations, some providing outreach services within the communities and others embedded within the community. These comments identified transportation as a barrier to access, however transportation is not a new issue and was regarded as something that should no longer be impacting access. This lack of access to occupational therapy services can be seen as a social injustice as all Australians have the right to equal health care (Australian Human Rights Commission, 2010). Therefore long term and sustainable solutions need to be identified to address barriers to access.

Cultural training

All of the participants placed value on cultural training and discussed the many ways that they had engaged in this training. Some participants also spoke about cultural training as being a journey for life. This is consistent with the literature, which reports the growth of cultural awareness as an ongoing process for therapists (Tervalon & Murray-Garcia, 1998). Participants identified the importance of local cultural training, which is supported by the literature on cultural training creating stereotypes (Ewen et al., 2014; Gerlach, 2015). The wide variation in discussion showed that there are so many ways therapists can engage in this training, but it also indicated a need for evaluation of cultural training and a better understanding of where to gain high quality cultural training.

Self-reflection

The diversity in experiences, beliefs and values of each Indigenous community emphasises the need for critical thinking skills (Australian Human Rights Commission, 2010; Nelson, 2007; Nelson & Allison, 2000). As alluded to in the interviews these critical thinking skills allow therapists to adjust to the unique needs of each Indigenous community in the way of collaboration, assessment tools and intervention materials. Self-reflection is a critical thinking skill that is widely supported by literature to assist in developing cultural awareness (Gray & McPherson, 2005; Nelson, 2007; Tervalon & Murray-Garcia, 1998). Three out of the seven participants identified that they use self-reflection in their practice. This leads to the question why aren't all participants using self-reflection in their practice when it is so widely supported? It emphasises the need for a better understanding of high quality and time efficient reflective methods.

Limitations

The voluntary and purposive nature of recruitment has resulted in a mature and experienced sample of the Australian rural and remote workforce. Although this sample may not be representative of the entire rural and remote workforce it has yielded a breadth of data. It is also acknowledged that this paper does not present the views of the Indigenous community members receiving occupational therapy services, which will be reported in the larger study that is consulting with rural and remote communities in NSW. The information gathered from this study will be collated and presented for consideration by the NSW communities to develop models of allied health service delivery that are culturally appropriate for Indigenous people in those communities.

Implications for the future

This study contributes to the growing knowledge on occupational therapy service provision in rural and remote Indigenous communities with children and their families. These findings have clinical and political implications in the occupational therapy field. They will assist therapists working in these communities to provide culturally appropriate services. They also emphasise the basic human right violations that Indigenous communities are

experiencing by not having access to consistent and culturally appropriate occupational therapy services.

Future research is required to create a culturally appropriate model of therapy service delivery for rural and remote Indigenous children and their families. This would include sharing the information gathered from this study with Indigenous community members as part of a conversation about developing therapy services that are culturally aligned and responsive. It would also involve delving deeper into an investigation on services that are embedded in the community as compared to outreach services.

Conclusion

The aim of this study has been to find out how occupational therapy services are provided to rural and remote Australian Indigenous children and their families. The findings show that successful service delivery is based on six key themes; accessible and flexible services, tailored services, culturally sensitive therapist, culturally inclusive services, occupational therapy awareness and collaboration. Each Indigenous community will be unique so therapists must work in collaboration with the community and use their critical reasoning skills to adjust practice appropriately.

Acknowledgements

The authors would like to thank all of the participants who contributed their time to make this research possible.

References

Australian Government. (2013). *A snapshot of early childhood development in Australia 2012 — AEDI national report*. Retrieved from https://www.aedc.gov.au/docs/default-source/public-documents/reports/report_nationalreport_2012.pdf?sfvrsn=2&download=true.

Australian Human Rights Commission. (2010). *The community guide to the United Nations declaration on the rights of Indigenous peoples*. Retrieved from https://www.humanrights.gov.au/sites/default/files/document/publication/declaration_community_guide.pdf

Australian Indigenous Healthinfonet. (2015). *Overview of Australian Indigenous health status, 2014*. Retrieved from http://www.healthinfonet.ecu.edu.au/health-facts/overviews

Australian Institute of Health and Welfare. (2015). *Rural, remote and metropolitan areas (RRMA) classification*. Retrieved from http://www.aihw.gov.au/rural-health-rrma-classification/

Battye, K., & McTaggart, K. (2003). Development of a model for sustainable delivery of outreach allied health services to remote north-west Queensland, Australia. *Rural and Remote Health, 3*(3), 194. Retrieved from http://www.rrh.org.au/articles/subviewnew.asp?articleid=194

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity, 36*(4), 391-409. doi:10.1023/A:1020909529486

Booth, J., & Nelson, A. (2013). Sharing stories: Using narratives to illustrate the role of critical reflection in practice with First Australians. *Occupational Therapy International, 20*(3), 114-123. doi:10.1002/oti.1343

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. doi:10.1191/1478088706qp063oa

Castro, D., Dahlin-Ivanoff, S., & Martensson, L. (2014). Occupational therapy and culture: A literature review. *Scandinavian Journal of Occupational Therapy, 21*(6), 401-414. doi:10.3109/11038128.2014.898086

Cunningham, C., & Stanley, F. (2003). Indigenous by definition, experience, or world view: Links between people, their land, and culture need to be acknowledged. *British Medical Journal, 327*(7412), 403-404. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC188479/

Curtin, M., & Fossey, E. (2007). Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists. *Australian Occupational Therapy Journal, 54*(2), 88-94. doi:10.1111/j.1440-1630.2007.00661.x

Department of the Parliamentary Library. (2003). *Defining Aboriginality in Australia*. Retrieved from http://www.aph.gov.au/binaries/library/pubs/cib/2002-03/03cib10.pdf

Ewen, S., Paul, D., & Wilkin, A. (2014). Health disparities, cultural awareness, and Aboriginal health: Results from a health educator survey. *Journal of Nursing Education and Practice, 4*(10), 40-50. doi:10.5430/jnep.v4n10p40

Gerlach, A. (2015). Sharpening our critical edge: Occupational therapy in the context of marginalized populations. *Canadian Journal of Occupational Therapy*, *82*(4), 1-9. doi:10.1177/0008417415571730

Gray, M., & McPherson, K. (2005). Cultural safety and professional practice in occupational therapy: A New Zealand perspective. *Australian Occupational Therapy Journal, 52*(1), 34-42. doi:10.1111/j.1440-1630.2004.00433.x

Hammell, K. (2001). Using qualitative research to inform the client-centred evidence-based practice of occupational therapy. *The British Journal of Occupational Therapy, 64*(5), 228-234. doi:10.1177/030802260106400504

Hammell, K. (2013). Occupation, well-being, and culture: Theory and cultural humility. *Canadian Journal of Occupational Therapy, 80*(4), 224-234. doi:10.1177/0008417413500465

Health Workforce Australia. (2014). *Australia's health workforce series: Aboriginal and Torres Strait Islander health workers / practitioners in focus.* Retrieved from https://www.hwa.gov.au/sites/default/files/HWA Aboriginal and Torres Strait Islander Health Workers in Focus_FINAL.pdf

Hopkirk, J., & Wilson, L. (2014). A call to wellness - whitiwhitia i te ora: Exploring Māori and occupational therapy perspectives on health. *Occupational Therapy International, 21*(4), 156-165. doi:10.1002/oti.1373

Iwama, M. (2007). Culture and occupational therapy: Meeting the challenge of relevance in a global world. *Occupational Therapy International, 14*(4), 183-187. doi:10.1002/oti.234

Laliberte, A., Haswell-Elkins, M., & Reilly, L. (2009). The healing journey: Empowering Aboriginal communities to close the health gap. *Australasian Psychiatry, 17*(s1), S64-67. doi:10.1080/10398560902948704

Nelson, A. (2007). Seeing white: A critical exploration of occupational therapy with Indigenous Australian people. *Occupational Therapy International, 14*(4), 237-255. doi:10.1002/oti.236

Nelson, A. (2009). Learning from the past, looking to the future: Exploring our place with Indigenous Australians. *Australian Occupational Therapy Journal, 56*(2), 97-102. doi:10.1111/j.1440-1630.2009.00781.x

Nelson, A., & Allison, H. (2000). Values of urban Aboriginal parents: Food before thought. *Australian Occupational Therapy Journal, 47*(1), 28-40. doi:10.1046/j.1440-1630.2000.00206.x

Nelson, A., Allison, H., & Copley, J. (2007). Understanding where we come from: Occupational therapy with urban Indigenous Australians. *Australian Occupational Therapy Journal, 54*(3), 203-214. doi:10.1111/j.1440-1630.2006.00629.x

Nelson, A., Gray, M., Jensen, H., Thomas, Y., McIntosh, K., Oke, L., & Paluch, T. (2011). Closing the gap: Supporting occupational therapists to partner effectively with First Australians. *Australian Occupational Therapy Journal, 58*(1), 17-24. doi:10.1111/j.1440-1630.2010.00912.x

Occupational Therapy Australia. (2015). *What do occupational therapists do?* Retrieved from http://www.otaus.com.au/about/what-do-occupational-therapists-do

Olshansky, E. (2015). Overview of grounded theory. In M. de Chesnay (Ed.), *Nursing research using grounded theory* (pp.1-8). New York: Springer Publishing Company.

Paluch, T., Allen, R., McIntosh, K., & Oke, L. (2011). Koori occupational therapy scheme: Contributing to First Australian health through professional reflection, advocacy and action. *Australian Occupational Therapy Journal, 58*(1), 50-53. doi:10.1111/j.1440-1630.2010.00913.x

Robinson, O. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology, 11*(1), 25. doi:10.1080/14780887.2013.801543

Stedman, A., & Thomas, Y. (2011). Reflecting on our effectiveness: Occupational therapy interventions with Indigenous clients. *Australian Occupational Therapy Journal, 58*(1), 43-49. doi:10.1111/j.1440-1630.2010.00916.x

Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved, 9*(2), 117-125. doi:10.1353/hpu.2010.0233

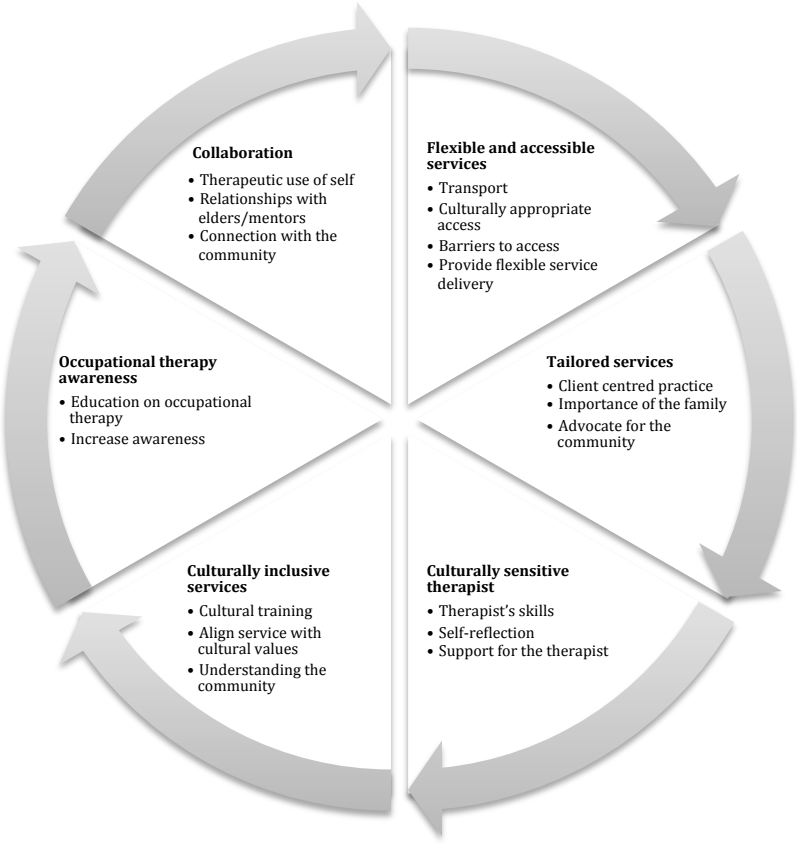
Thorley, M., & Lim, S. (2011). Considerations for occupational therapy assessment for Indigenous children in Australia. *Australian Occupational Therapy Journal, 58*(1), 3-10. doi:10.1111/j.1440-1630.2010.00852.x

Turner, D. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report, 15*(3), 754-760. Retrieved from http://nsuworks.nova.edu/tqr/vol15/iss3/19

Turpin, M., & Iwama, M. (2011). Kawa model. In R. Demetriou-Swanwick & C. Jackson (Eds.), *Using occupational therapy models in practice: A fieldguide* (pp. 159-177). New York; Edinburgh: Churchill Livingstone/Elsevier.

Figures

Figure 1: Themes and subthemes of service delivery in rural and remote Australian community settings with Indigenous children and their families.



Section 3: Appendices

Appendix A: Aboriginal Health and Medical Research Council Ethics Approval

Appendix B: Participant Information Statement

Appendix C: Consent Form

Appendix D: Semi Structured Interview Guide

Appendix E: The Australian Occupational Therapy Journal Author Guidelines

APPENDIX A: Aboriginal Health and Medical Research Council Ethics Approval

AH&MRC ETHICS COMMITTEE

19th June 2015

Professor Michelle Lincoln
Deputy Dean
Faculty of Health Sciences
Poche Centre for Indigenous Health
The University of Sydney
PO Box 170
Lidcombe NSW 1825

Dear Professor Lincoln,

RE: 996/14 - Designing a model for Allied Health Service delivery and practice in rural and remote towns and Aboriginal communities

I refer to the email correspondence from Kim Bulkeley, Associate Lecturer, Occupational Therapy, POCHE Fellow, Faculty of Health Sciences, University of Sydney, on 25th February 2015 providing an amendment request for the above project that has previously been approved by the Aboriginal Health and Medical Research Council (AH&MRC) Ethics Committee. Additional information received on 20th May 2015 is considered to form part of the amendment request.

The amendments requested are:

1. Expand the scope of the project to include interviews with services that provide therapy supports to Aboriginal and Torres Strait Islander people in other Australian locations. This will include conducting phone interviews with approximately 10-20 allied health clinician's delivery services in rural and remote Aboriginal or Torres Strait Islander communities. Participants will be recruited via the researchers' contacts and advertising via Services for Australian Rural and Remote Allied Health. Interviews will be audio recorded, transcribed and a content analysis conducted.

   The Committee noted that the extended interview scope will inform the development of models of service in the communities that are the focus of your research project by providing exemplars that are being used in other areas.

   The Committee understands that this amendment no longer includes other First Nations people.

Supported by the NSW Ministry of Health

Location
Level 3, 66 Wentworth Avenue
Surry Hills NSW 2010

Postal Address
PO Box 1565
Strawberry Hills NSW 2012

Contact
Phone: +61 (2) 9212 4777
Fax: +61 (2) 9212 7211
e-Mail: ahmrc@ahmrc.org.au
web: www.ahmrc.org.au

ABN
ABN 66 085 654 397

2. Addition of Corey Anne Block Masters of Occupational Therapy final year research student, to the research team.
   The Committee noted that Ms Block will undertake a literature review and conduct interviews with occupational therapy service providers in other jurisdictions via phone, collating this into a report for her research subject. This report will blend with interviews conducted by other team members with speech pathologists and physiotherapists.

The documents reviewed to support these amendments were:

- Cover letter received 20th May 2015.
- Revised ethics application received 20th May 2015.
- Cover letter received 25th February 2015

The Committee has agreed to approve the amendments.

The conditions of approval contained in the original approval letter will continue to apply.

On behalf of the AH&MRC Ethics Committee,

Yours sincerely,

Val Keed
Chairperson
AH&MRC Ethics Committee

APPENDIX B: Participant Information Statement

THE UNIVERSITY OF SYDNEY

Poche Centre for Indigenous Health
Faculty of Health Sciences

Prof Michelle Lincoln
Chief Investigator
A203, Cumberland Campus
PO Box 170, Lidcombe, NSW, 1825
Email: michelle.lincoln@sydney.edu.au
Phone: 02 9351 9430

Occupational Therapy in Community Settings with Aboriginal and Torres Strait Islander Children and Their Families

PARTICIPANT INFORMATION STATEMENT

What is the study about?

This study is part of a larger study that aims to develop a model of allied health service delivery by listening to and getting advice from the community in Walgett, Bourke, Brewarrina and Lightning Ridge. In this project we want to find out what the best ways are for providing occupational therapy services to children and their families living outside the target communities. As part of the larger study the information gathered will be used to develop a model of allied health service delivery that is culturally appropriate for Aboriginal and Torres Strait Islander communities. The results will be presented back to the target communities. We are hoping the research from this project will provide a better understanding of occupational therapy service delivery to rural Aboriginal communities resulting in increased cultural appropriateness of service delivery.

Who is carrying out the study?

The study is being conducted by the Faculty of Health Sciences and the Poche Centre of Indigenous Health, The University of Sydney. The chief investigator is Professor Michelle Lincoln and the research associates are Ms Tanya Martin and Ms Kim Bulkeley. Corey Block a research student from the University of Sydney will also conduct telephone interviews with occupational therapy service providers. Ms Kylie Gwynne, Ms Vanessa Lee from the University of Sydney and Ms Christine Corby from Walgett Aboriginal Medical Service (AMS) and Ms Karen Harding from Bourke AMS are also on the research team.

What does the study involve?

The research involves a 30-60 minute phone interview with the research student. The interview will be at a time convenient for you. The research student will ask you about yourself, for example your age, Aboriginality and years practising as an occupational therapist and then about your ideas, opinions and thoughts of how occupational therapy services are provided in the community you work with. Your interview will be audio recorded and notes will be taken.

You will be invited to receive a project summary at the conclusion of the project to hear about what other people thought and how the researchers have combined everyone's ideas into a potential occupational therapy service delivery model.

How much time will the study take?

30-60 minutes

Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney and the AMS. You may stop the interview at any time if you do not wish to continue, and should you wish, the audio recording will be erased and the information provided will not be included in the study. You are free to withdraw from the study at any time. Simply contact the researchers and tell them you want to withdraw from the study. We will remove your interview from the study and destroy any recordings or notes about it that we have.

Will anyone else know the results?

Only the researchers will have access to information on participants. A report of the study may be submitted for publication, but individual participants will not be identifiable. Results of the study that will be publically presented or written about will first be approved by the AMS research partners and the Aboriginal Health and Medical Research Council.

Will the study benefit me?

You may learn more about occupational therapy services and research by participating in the project.

Can I tell other people about the study?

Yes, you are welcome to discus your participation in this study with others.

What if I require further information about the study or my involvement in it?

When you have read this information, Kim Bulkeley Research Associate or Corey Block, Research Student, will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Kim Bulkeley 02 9351 9034 kim.bulkeley@sydney.edu.au or Corey Block cblo4905@uni.sydney.edu.au .

What if I have a complaint or any concerns?

Any person with concerns or complaints about the conduct of a research can contact, the Chairperson or CEO of the local Aboriginal Community Controlled Health Service; or the Chairperson of the AH&MRC Ethics Committee as follows:

The Chairperson
AH&MRC Ethics Committee
P.O. Box 1565
Strawberry Hills NSW 2012
Telephone: 9212 4777

This information sheet is for you to keep

APPENDIX C: Consent Form

THE UNIVERSITY OF SYDNEY

Poche Centre for Indigenous Health

Faculty of Health Sciences

Prof Michelle Lincoln
Chief Investigator
A203, Cumberland Campus
PO Box 170, Lidcombe, NSW, 1825
Email: michelle.lincoln@sydney.edu.au
Phone: 02 9351 9430

Occupational Therapy in Community Settings with Aboriginal and Torres Strait Islander Children and Their Families

Participant Consent Form

Chief Investigator: Professor Michelle Lincoln

I, …… …… consent to participate in the above research project on the following basis:

1. I have received the Participant Information Statement and have had the opportunity to ask questions. I understand the purpose of the research, the time it will take and my involvement in it.

2. I understand that interviews will be audio-taped, but the tapes will be secured and then destroyed at the completion of the project.

3. I have the right to withdraw my consent and cease any further involvement in the research project at any time without giving reasons and without any penalty. This will not affect any other services that I receive.

4. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

5. Any information I provide during the course of this research will remain confidential. Where the results of the research are published, my involvement and my personal results will not be identified.

6. I consent to:

- Audio-recording YES ☐ NO ☐
- Receiving Feedback YES ☐ NO ☐

If you answered YES to the "Receiving Feedback" question, please provide your details i.e. mailing address, email address.

Feedback Option

Address: _____

_____

Phone: _____

Email: _____

7. I understand that if I have any complaints or questions concerning this research project I can contact the Chairperson or CEO of the local Aboriginal Community Controlled Health Service; or the Chairperson of the AH&MRC Ethics Committee as follows:

The Chairperson
AH&MRC Ethics Committee
P.O. Box 1565
Strawberry Hills NSW 2012
Telephone: 9212 4777

Name: …….

Signature ……..… *Date* …….……...

Witnessed by ……..…… *Date* ……....

Researcher's signature : …….

Date ….……

THE UNIVERSITY OF SYDNEY

APPENDIX D: Semi-Structured Interview Guide

1. What is your date of birth?
   Age range: 16-20 21-25 26-30 31-35 36-40 41-45 46-50 51-60

2. How long have you been practising occupational therapy?

3. How long have you been working with Aboriginal and/or Torres Strait Islander people?

4. Are you of Aboriginal descent? Yes No

5. What other health services for children are in the community you work with? (tick any mentioned and add to the list if others are identified)
   Hospital
   Community Health
   Aboriginal Medical Service
   G.P.
   Natural Therapies: Massage Acupuncture Chiropractor
   Traditional Healers
   Private allied health practitioners
   Dental
   Other: _____

6. How are occupational therapy services accessed by children and their families in the community you work with? (how do you access them, where/how can you get them, how often are they available, who pays, how regular/reliable are they?)

7. How do children in the community benefit from occupational therapy services?

8. How would you like to change the delivery of occupational therapy services to children in the community you work with?

   a) Are there any other areas you could see that would benefit from occupational therapy services in the community that don't already? (schools, preschools AMS, other organisations)?

   b) Where would you like to see more occupational therapy work done with the children? (homes, schools, preschools, clinics, other places)?

9. Do you work with family/community members when providing occupational therapy services to the children?

10. What sort of cultural training does an occupational therapist need to work successfully with children and their families in the community you work with?

11. What strategies do you use to make your practice culturally appropriate for the children and families you work with?

12. Where is the best place or who is the best person to help with this cultural training?

13. Do you have an elder/mentor from your community to help you work within the community? If yes do you find this beneficial? How did you find the elder/mentor you work with in the community?

    If no, do you think it would be helpful to have an elder/mentor from your community to help you work within the community? How would you find a good elder/mentor in the community?

14. What do you think about the idea of having local, trained occupational therapy assistants who work with the children and families and receive advice/support and direction from qualified occupational therapists who visit from time to time?

15. What do you think the benefits would be of having local, trained occupational therapy assistants?

16. Do you have any concerns about children in the community you work with getting help from occupational therapy assistants?

17. Do you have any more ideas about occupational therapy services for the children in the community you work with?

APPENDIX E: The Australian Occupational Therapy Journal Author Guidelines

The *Australian Occupational Therapy Journal* is the official journal of Occupational Therapy Australia. The journal publishes original articles dealing with theory, research, practice and education in occupational therapy. Papers in any of the following forms will be considered: Feature Articles, Research Articles, Reviews, Viewpoints, Critically Appraised Papers, and Letters to the Editor.

Type of Article	Word limit	Number of references	Figure files	Abstract required - word limit
Feature Articles	5000	35	4	250
Review Articles	5000	-	4	250
Research Articles	5000	35	4	250
Viewpoints	2000	15	4	150
Critically Appraised Papers	800	10	0	
Letters to the Editor	500			

Research Articles
Research Articles should contain the following:
Structured abstract: 250 word limit.
Introduction: The aims of the article should be clearly stated and a theoretical framework (if applicable) should be presented with reference to established theoretical model(s) and background literature. A succinct review of current literature should set the work in context. The introduction should not contain findings or conclusions.
Methods: This should provide a description of the method (including subjects, procedures and data analysis) in sufficient detail to allow the work to be repeated by others.
Results: Results should be presented in a logical sequence in the text, tables and figures. The same data should not be presented repetitively in different forms.
Conclusion: The conclusion should consider the results in relation to the purpose of the article advanced in the introduction. The relationship of your results to the work of others and relevant methodological points could also be discussed. Implications for future research and practice should be considered. The conclusion section of your structured abstract should contain the key messages/take home points of your article.
Research Article manuscripts should not exceed 5000 words, and have no more than 35 references.
For manuscripts that report on randomised controlled trials, please include all the information required by the CONSORT checklist. All manuscripts must include a flow chart showing the progress of participants during the trial. Where applicable, reference should be made to the extension to the CONSORT statement for non-pharmacological treatment and the CLEAR NPT. When restrictions on word length make this difficult, this information may be provided in a separate document submitted with the manuscript.

EDITORIAL REVIEW AND ACCEPTANCE
The acceptance criteria for all papers are quality, originality and significance to our readership. Except where otherwise stated, Feature Articles, Research Articles, Reviews and Viewpoint manuscripts are blind peer reviewed by two anonymous reviewers. Final acceptance or rejection rests with the Editorial Board or the editor, who reserves the right to refuse any material for publication.
Manuscripts should be written so that they are intelligible to the professional reader who is not a specialist in the particular field. They should be written in a clear, concise, direct style. Where contributions are judged as acceptable for publication on the basis of scientific content, the Editor and the Publisher reserve the right to modify typescripts to eliminate ambiguity and repetition and improve communication between author and reader. If extensive alterations are required, the manuscript will be returned to the author for revision.

COVER LETTER AND ETHICAL CONSIDERATIONS
Papers are accepted for publication in the journal on the understanding that the content has not been published or submitted for publication elsewhere, and this must be stated in the covering letter. The covering letter must contain an acknowledgement that all authors have contributed significantly, and that all authors are in agreement with the content of the manuscript.
Authors must also state that the protocol for the research project has been approved by a suitably constituted Human Research Ethics Committee of the institution within which the work was undertaken and that it conforms to the provisions of the Declaration of Helsinki (as revised in 2008). All investigations involving humans must include a statement about the ethical review process. It is expected that most investigations will seek review by a Human Ethics Review Committee. Where ethical review has not been sought or obtained, justification must be provided. It is expected that most investigations involving humans will require informed consent for participant data to be collected and/or used; this process should be described. A statement is also required about preserving participant anonymity. The *Australian Occupational Therapy Journal* retains the right to reject manuscripts which do not describe these processes, or which describe unethical conduct related to human or animal studies.

Pre-submission English-language editing
Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. Visit our site to learn about the options. All services are paid for and arranged by the author. Please note using the Wiley English Language Editing Service does not guarantee that your paper will be accepted by this journal.

STYLE OF THE MANUSCRIPT
Manuscripts should follow the style of the Publication Manual of the American Psychological Association, 6th ed. (2009)**.**
Spelling. The Journal uses Australian spelling and authors should therefore follow the latest edition of the Macquarie Dictionary.
Units. All measurements must be given in SI or SI-derived units.
Abbreviations. Abbreviations should be used sparingly - only where they ease the reader's task by reducing repetition of long, technical terms. Initially use the word in full, followed by the abbreviation in parentheses. Thereafter use the abbreviation only. The abbreviation of OT is not allowed in the manuscript.

PARTS OF THE MANUSCRIPT
Manuscripts should be presented in the following order: (i) title page, (ii) abstract and key words, (iii) text, (iv)acknowledgements, (v) references, (vi) appendices, (vii) figure legends, (viii) tables (each table complete with title and footnotes) and (ix) figures. Footnotes to the text are not allowed and any such material should be incorporated into the text as parenthetical matter.

Title page
The title page should contain (i) the title of the paper, (ii) the full names, qualifications and designations of the authors and (iii) the addresses of the institutions at which the work was carried out together with (iv) the full postal and email address, plus facsimile and telephone numbers, of the author to whom correspondence about the manuscript should be sent. The present address of any author, if different from that where the work was carried out, should be supplied in a footnote.
The title should be short, informative and contain the major key words and consider including the study design for research articles. Do not use abbreviations in the title. A short running title (less than 40 characters) should also be provided.
All submitted manuscripts must indicate the total word length for the manuscript, word length of the abstract, number of references, figures and tables on the title page of the manuscript.

Abstract and key words
Research, Feature and Review articles must have a structured abstract that states in 250 words or fewer the purpose, basic procedures, main findings and principal conclusions of the study. Divide the abstract with the headings: Background/Aim, Methods, Results, Conclusions and significance of the study. Viewpoint articles should have an unstructured abstract of 150 words or fewer. Abstracts should not contain abbreviations or references.

Key words
Three to five key words must be supplied. They are required to index the content of the paper and should be selected from the US National Library of Medicine's Medical Subject Headings (MeSH) browser list. Key words should be arranged in alphabetical order. Please do not use words already written in your title or abstract.

Text
Authors should use the following subheadings to divide the sections of their manuscript: Introduction, Methods, Results and Conclusion. All articles should include an introduction that provide a background to the article, describes its purpose and outlines its relevance to occupational therapy. References should be made to an established theoretical background and/or background literature. The implications of the work for occupational therapy practice, and further research and/or conceptual development, should be clearly described.

Acknowledgements
The source of financial grants and other funding must be acknowledged, including a frank declaration of the authors' industrial links and affiliations. Authors should state any potential conflicts of interest. The contribution of colleagues or institutions should also be acknowledged. Personal thanks and thanks to anonymous reviewers are not appropriate**.**

References
The American Psychological Association (author, date, title, source) system of referencing is used (examples are given below). In the text give the author's name followed by the year in parentheses: Smith (2000). If there are two authors use 'and': Smith and Jones (2001), but if cited within parentheses use '&': (Smith & Jones, 2001). When reference is made to a work by three to five authors, cite all the authors the first time: (Davis, Jones, Wilson, Smith, & Lee, 2000); and in subsequent citations, include only the name of the first author followed by et al.: (Davis et al., 2000). When reference is made to a work by six or more authors, the first name followed by et al. should be used in all instances: Law et al. (1997). If several papers by the same author(s) from the same year are cited, a, b, c, etc. should be inserted after the year of publication. Within parentheses, groups of authors should be listed alphabetically. In the reference list, references should be listed in alphabetical order.
In the reference list, cite the names of all authors when there are six or fewer; when seven or more, list only the first six followed by et al. Do not use ibid. or op cit.
Reference to unpublished data and personal communications should not appear in the list but should be cited in the text only (e.g. A. Smith, unpublished data, 2000). All citations mentioned in the text, tables or figures must be listed in the reference list.
Authors are responsible for the accuracy of the references.
We recommend the use of a tool such as Reference Manager for reference management and formatting.

Journal article
Bennett, S., & Bennett, J. W. (2000). The process of evidence-based practice in occupational therapy: Informing clinical decisions. *Australian Occupational Therapy Journal*, *47*, 171-180. doi: 10.1046/j.1440-1630.2000.00237.x.

Advanced online publication of journal article with DOI
Rodger, S., Clark, M., Banks, R., O'Brien, M., & Martinez, K. (2009a). A national evaluation of the Australian Occupational Therapy Competency Standards (1994): A

multistakeholder perspective.*Australian Occupational Therapy Journal.* Advanced online publication. doi: 10.1111/j.1440-1630.2009.00794.x.

Book
Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.

Chapter in a book
Law, M., Cooper, B. A., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1997). Theoretical context for the practice of occupational therapy. In: C. Christiansen & C. Baum (Eds.), *Occupational therapy: Enabling function and well-being* (2nd ed., pp. 72-102). Thorofare, NJ: Slack Inc.

Electronic media
Occupational Therapy Australia. (2003). *Australian Occupational Therapy Journal author guidelines*. Retrieved from http://www.blackwell-publishing.com/journals/aot/submiss.htm.

Appendices
These should be placed at the end of the paper, numbered in Roman numerals and referred to in the text. If written by a person other than the author of the main text, the writer's name should be included below the title.

Tables
There is a limit of four tables or figures per manuscript. Tables should be self-contained and complement, but not duplicate, information contained in the text. Number tables consecutively in the text in Arabic numerals. Type tables on a separate sheet with the legend above. Legends should be concise but comprehensive - the table, legend and footnotes must be understandable without reference to the text. Vertical lines should not be used to separate columns. Column headings should be brief, with units of measurement in parentheses; all abbreviations must be defined in footnotes. Footnote symbols: †, ‡, §, ¶, should be used (in that order) and *, **, *** should be reserved for P-values. Statistical measures such as SD or SEM should be identified in the headings.

Figures
There is a limit of four tables or figures per manuscript. All illustrations (line drawings and photographs) are classified as figures. Figures should be cited in consecutive order in the text. Each figure should be labelled on the back in very soft marker or chinagraph pencil, indicating name of author(s), figure number and orientation. Do not use adhesive labels as this prohibits electronic scanning. Figures should be sized to fit within the column (80 mm), intermediate (114 mm) or the full text width (171 mm).
Line figures should be supplied as sharp, black and white graphs or diagrams, drawn professionally or with a computer graphics package. Lettering must be included and should be sized to be no larger than the journal text. Photographs should be supplied as sharp, glossy, black-and-white or colour photographic prints and must be unmounted. Individual photographs forming a composite figure should be of equal contrast, to facilitate printing, and should be accurately squared.
Magnifications should be indicated using a scale bar on the illustration.
If supplied electronically, graphics must be supplied as high resolution (at least 300 d.p.i.) files, saved as .eps or .tif. A high-resolution print-out must also be provided. Digital images supplied only as low-resolution print-outs and/or files cannot be used.

Colour figure publication charges
A charge of A$1000/US$530/¥64000 for the first three colour figures and A$500/US$265/¥32000 for each extra colour figure thereafter will be charged to the author.

Figure legends
Type figure legends on a separate sheet. Legends should be concise but comprehensive -

the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.

AUTHOR SERVICES
Author Services enables authors to track their article, once it has been accepted, through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated emails at key stages of production so they do not need to contact the production editor to check on progress. Visit the Author Services website for more details on online production tracking and for a wealth of resources, including FAQs and tips on article preparation, submission and more.

PROOFS
It is essential that corresponding authors supply an email address to which correspondence can be emailed while their article is in production. Notification of the URL from where to download a Portable Document Format (PDF) typeset page proof, associated forms and further instructions will be sent by email to the corresponding author. The purpose of the PDF proof is a final check of the layout, and of tables and figures. Alterations other than the essential correction of errors are unacceptable at PDF proof stage. The proof should be checked, and approval to publish the article should be emailed to the Publisher by the date indicated, otherwise, it may be signed off on by the Editor or held over to the next issue.

OFFPRINTS
Free access to the final PDF offprint of your article will be available via Author Services only. Please therefore sign up for Author Services if you would like to access your article PDF offprint and enjoy the many other benefits the service offers. A minimum of 50 additional offprints will be provided upon request, at the author's expense. These paper offprints may be ordered online. Please visithttp://offprint.cosprinters.com, fill in the necessary details and ensure that you type information in all of the required fields. If you have any queries about offprints, please email offprint@cosprinters.com.

EARLY VIEW
The *Australian Occupational Therapy Journal* is covered by our Early View service. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. Articles are therefore available as soon as they are ready, rather than having to wait for the next scheduled print issue. Early View articles are complete and final. They have been fully reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the traditional way. They are therefore given a Digital Object Identifier (DOI), which allows the article to be cited and tracked before it is allocated to an issue. After print publication, the DOI remains valid and can continue to be used to cite and access the article. More information about DOIs can be found athttp://www.doi.org/faq.html.

SUBMISSION OF MANUSCRIPTS
To submit a manuscript, please visit the *Australian Occupational Therapy Journal's* ScholarOne Manuscripts homepage.

COPYRIGHT, LICENSING AND ONLINEOPEN
Accepted papers will be passed to Wiley's production team for publication. The author identified as the formal corresponding author for the paper will receive an email prompting them to login into Wiley's Author Services, where via the Wiley Author Licensing Service (WALS) they will be asked to complete an electronic license agreement on behalf of all authors on the paper. FAQs about the terms and conditions of the standard copyright transfer agreements (CTA) in place for the journal, including terms

regarding archiving of the accepted version of the paper, are available at: CTA Terms and Conditions FAQs

OnlineOpen - 'Gold road' Open Access
OnlineOpen is available to authors of articles who wish to make their article freely available to all on Wiley Online Library under a Creative Commons licence. In addition, authors of OnlineOpen articles are permitted to post the final, published PDF of their article on a website, institutional repository or other free public server, immediately on publication. With OnlineOpen the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made open access, known as 'gold road' open access.

OnlineOpen licenses
Authors choosing OnlineOpen retain copyright in their article and have a choice of publishing under the following Creative Commons License terms: Creative Commons Attribution License (CC BY); Creative Commons Attribution Non-Commercial License (CC BY-NC); Creative Commons Attribution Non-Commercial-NoDerivs License (CC BY-NC-ND).