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# Experiences of Occupational Therapists Working in Rural Areas of Minnesota and North Dakota

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EXPERIENCES OF OCCUPATIONAL THERAPISTS WORKING IN RURAL AREAS  
OF MINNESOTA AND NORTH DAKOTA

by

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An Independent Study

Submitted to the Occupational Therapy Department

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Occupational Therapy

Grand Forks, North Dakota

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2018

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This Independent Study, submitted by Sarah Hanson, MOTS and Jessica Magee, MOTS, is in partial fulfillment of the requirements of the degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

  
Signature of Faculty Advisor

4/19/2018 \_\_\_\_\_  
Date

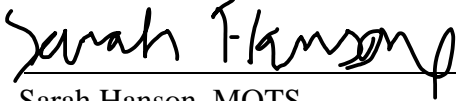
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We would like to take this opportunity to thank all of our participants for participating in this study and for sharing their personal experiences of being rural occupational therapy practitioners. In addition, we would like to thank our advisor, Dr. Sarah Nielsen, for all of her guidance and support throughout this research process. We couldn't have come as far as we have without your help. Not only have you helped us to grow as researchers but, you have also helped us to grow as individuals and future practitioners. Thank you for all that you do.

## **ABSTRACT**

There is limited research regarding the experiences of occupational therapy practitioners working in rural areas of the United States. The purpose of this phenomenological, qualitative study was to gain an understanding of the experiences of occupational therapy practitioners working in rural areas of Minnesota and North Dakota. Many of the occupational therapy practitioners working in these states encounter experiences that are unique to the rural context. These experiences help to form an occupational therapy practitioner's professional identity. The Professional Identity Model (Tornebohm, 1991) was utilized to further understand the impact of the rural context on a practitioner's professional identity. The four components of the Professional Identity Model (Tornebohm, 1991) guided data collection and analysis and include: (a) interests, (b) field of action view, (c) world view, and (d) competency (Tornebohm, 1991). The components of the model were utilized as predetermined codes. From the codes, ten themes emerged, and these themes were used to formulate the final assertion. The results from the data analysis indicated that a rural occupational therapy practitioner's professional identity is impacted by personal interests and experiences. Practitioners indicated that all four areas of the Professional Identity Model (Tornebohm, 1991) can be developed and/or challenged by the rural context. Components of rural practice that practitioners did not appreciate included increased travel time and a lack of professional supports and networks. Positive aspects of rural practice include the variety of

clientele, increased flexibility and freedom within practice, and feeling better connected to the community and/or facility. Due to the limited sample size, it is recommended future research be completed on a larger sample size and geographic area.

**Key words:** rural occupational therapy, rural practitioners, rural occupational therapy practice

## **CHAPTER I**

### **INTRODUCTION**

Working as an occupational therapy practitioner in a rural area can be both rewarding and challenging. Unlike their urban counterparts, rural practitioners often feel isolated and lack professional supports (Solowiej, Upton, & Upton, 2010). Moreover, rural practice often requires practitioners to spend increased time on the road (Waite, 2015). On the other hand, there are occupational therapy practitioners who find rural practice to be rewarding because it is easier to connect with clients and develop a wide variety of professional skills (Solowiej, Upton, & Upton, 2010; Waite, 2015). Waite (2015) describes how it is easier to develop relationships with clients in rural areas because the practitioner becomes part of the community.

#### **Background and Nature of Problem**

There has been little research conducted on occupational therapy practitioners practicing in rural areas of the United States. This is problematic since rural areas often have a difficult time recruiting and retaining staff for a variety of reasons (Solowiej et al., 2010). Furthermore, individuals living in rural areas have difficulty accessing services due to a shortage of practitioners. MacDowell, Glasser, Fitts, Nielsen, and Hunsaker (2010) emphasized that there is a real concern regarding the retainment of staff in the rural settings. There are a variety of reasons that rural areas are experiencing increased difficulty recruiting and retaining occupational therapy professionals. For one, Weinhold and Gurtner (2014) found that practitioners in rural areas experience professional

isolation. In North Dakota, Molmen et al. (2017) mentions the shortage of practitioners working in rural areas. In an effort to address these shortages, Molmen et al. (2017) discuss a program called the University of North Dakota Healthcare Workforce Initiative, which aims to promote rural practice. The United States Department of Health and Human Services (2017) indicates that “rural” includes areas with 10,000 residents or less; this number encompasses the many regions of North Dakota and Minnesota.

Most practitioners choose not to work in a rural setting, unless they grew up in a rural area and/or had a fieldwork experience in a rural setting (Daniels, VanLeit, Skipper, Sanders, & Rhyne, 2007 & Gallego; Chedid, Dew, Lincoln, Bundy, Veitch, Bulkeley, & Brentnall, 2015; Jedlicka, Hanson, Klug, & Harris, 2016; Keane, Smith, Lincoln, & Fisher 2011). The lack of rural fieldwork/practical experiences can present challenges, as urban students are less likely to take the positions in rural settings (Chedid et al., 2015; Jedlicka et al., 2016). Lloyd, Pfeiffer, Dominish, Heading, Schmidt, and McCluskey (2014) found that practitioners who work in rural settings are passionate about their work and they enjoy rural practice; however, not all practitioners enjoy rural practice, which can decrease motivation and job satisfaction (Lloyd et al., 2014).

Rural occupational therapy practitioners work with a variety of populations (Bath, Gabrush, Fritzler, Dickson, Bisaro, Bryan, & Shah, 2015; Waite, 2015). Working with the wide spectrum of clients can be a drawback for practitioners and therefore, they may refrain from obtaining desired certifications because they are expected to be generalists (Bath et al., 2015). Roots, Brown, Bainbridge, and Li (2014) acknowledge that there are limited opportunities for accessing resources in rural facilities. Moreover, when settings

have a limited number of practitioners, there are fewer individuals to act as mentors and professional networks (Roots, Brown, Bainbridge, & Li).

There can also be concerns regarding management. Sometimes management occurs off-site and/or practitioners have managers who are unfamiliar with the discipline of occupational therapy (Lloyd, Pfeiffer, Dominish, Heading, Schmidt, & McCluskey, 2014). In rural areas, practitioners will often experience increased travel time to commute to various facilities (Lincoln et al., 2013; Weinhold & Gurtner, 2014; Waite, 2015). Without optimal management or resources, rural practitioners have little guidance. Limited resources can increase uncertainty regarding ethical issues (Waite, 2015). Furthermore, implementing occupation-based models can be challenging and time consuming in a rural area, due to the diverse population (Weinhold & Gurtner, 2014).

In addition, it can be challenging for new graduates to develop skills for rural practice (Lincoln et al., 2013). Accessing continuing education also poses concerns, due to limited availability of courses and the increased travel time required to get to the courses (Devine, 2006). Furthermore, there are inadequate opportunities to participate in professional development (Solowiej et al., 2010). Solowiej et al. (2010) found that a lack of professional development opportunities can increase job dissatisfaction and decrease retainment rates. New graduates often lack rural experience, causing decreased confidence in their skills and abilities (Lee & Mackenzie, 2003).

## **Purpose**

The aim of this study is to investigate the different factors that can influence a practitioner's decision to work in a rural setting. The study also aims to identify the drawbacks to rural practice. In addition, the study looks at the level of preparedness that



practitioners feel when they enter rural practice and how interests can impact a practitioner's decision to practice in a rural area. An alternative goal for completing this study was to provide research on rural practice in the United States because that is currently an area with limited research. Furthermore, Tornebohm's (1991) Professional Identity Model was used as the primary model to guide the current study.

### **Study Design**

The population of interest throughout this independent study includes occupational therapy practitioners who are working in rural areas of Minnesota and North Dakota. For the purposes of this study, a rural population is defined as 10,000 residents or less in the community. The study is qualitative in nature and aims to capture an understanding of the individual experiences of rural practitioners.

A phenomenological approach was utilized to gain a more thorough understanding of the experiences of the study participants. Additionally, this approach was selected to assist the researchers in identifying commonalities between participant experiences (Creswell, 2007). Researchers interviewed six participants using a semi-structured format. Inclusion criteria specified that participants had to have at least one year of experience working as an occupational practitioner in a rural setting in either North Dakota or Minnesota.

### **Theoretical Framework**

The research design selected to describe the experiences of rural occupational therapy practitioners was a qualitative phenomenological design (Creswell, 2007). The Professional Identity Model (Tornebohm, 1991) was used to structure the study. The four

components of the Professional Identity Model include: (a) interests, (b) field of action view, (c) world view, and (d) competency (Tornebohm, 1991).

### **Influencing Factors**

Qualitative studies aim to gain perspectives unique to the persons being interviewed (Creswell, 2007). Since questions can be interpreted in a variety of ways, responses are not always what the researchers are looking for; however, new information that the researchers are not expecting can surface. Also, educational requirements do vary from state to state. Most of the participants worked in rural practice for their entire career. The participants had volunteered to participate in the study as well, so it was not randomized.

### **Scope and Delimitation**

To remain reflexive and eliminate biases, the student researchers conducted the interviews together. The researchers discussed components of the interviews that supported the literature and those that were surprising. Both researchers read through the interviews prior to transcribing. The interviews occurred between August and October. Interviews were conducted via phone call or FaceTime, after participants agreed to an email explaining what the study would entail. The six occupational therapy practitioners selected to be in the study were registered occupational therapy practitioners. The participants were able to provide the researchers with details pertaining to their experiences of working as an occupational therapy practitioner in a rural setting in either North Dakota or Minnesota.

### **Assumptions**

The researchers assumed that of the targeted participants that were invited to the

study, six would voluntarily agree without any compensation. The participants were expected to have different life and work experiences. Researchers assumed that participants understood basic occupational therapy jargon and would be able to answer questions from the semi-structured interview without extensive explanation.

### **Definition of Terms**

The following definitions are important for gaining an understanding and appreciation of this study.

*Rural*- under 10,000 residents (The United States Department of Health and Human Services, 2017)

*Professional Identity Model*- adapted from Tornebohm's (1991) views that, "The paradigm of an occupational therapy practitioner may be represented by a geometric figure called a rhomb" (p. 451). "The four paradigm components [interests, field of action view, world view, and competency] are interrelated" (Tornebohm, 1991, p. 451).

*Interests*- include the life experiences of an occupational therapy practitioner and personal traits (Tornebohm, 1991).

*Field of Action View*- consists of the workplace context and professional socialization (Tornebohm, 1991).

*World View*- comprised of the concepts, values, and constructs of the occupational therapy profession (Tornebohm, 1991).

*Competency*- encompasses continuing education and professional development (Tornebohm, 1991).

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Introduction**

Healthcare professionals, including occupational therapy practitioners, can be difficult to recruit and retain in rural areas due to numerous barriers (Solowiej et al., 2010). Some of the barriers include staff shortages, high physical and or emotional demands, and the lack of supports (Solowiej et al., 2010). Moreover, Weinhold and Gurtner (2014) indicated that the main reasons for healthcare shortages in rural areas include a lack of transportation, a lack of orientation in rural settings, heavier caseloads, lack of familiarity with rural life, lack of social supports, lower incomes, and lack of funding. Other factors impacting retention include family ties, job satisfaction, professional supports, and lifestyle (Winn, Chisolm, & Hummelbrunner, 2014). Furthermore, Winn et al. (2014) found that health professionals are more likely to practice in rural settings if they grew up in a rural area. Additionally, education on rural practice impacts the choice of practitioners to practice in rural settings (Maseko, Erasmus, Di Rago, Hooper, & O'Reilly, 2014).

Weinhold and Gurtner (2014) mentioned that the definition of the word “rural” varies from place to place. Rural areas are typically determined based on the number of people who reside in the area (Weinhold & Gurtner, 2014). In the healthcare world, the term “rural” is often associated with less access to medical services (Weinhold &

Gurtner, 2014). According to the Rural Health Information Hub (2014), there are three main definitions for the term, “rural.” As defined by the United States Department of Health and Human Services (2017), rural includes any area that is not considered urban. Urban areas are those with a population of 50,000 people or more (Rural Health Information Hub, 2014). Rural practice involves offering occupational therapy services to clients in rural settings (Roots, Brown, Bainbridge, & Li, 2014). The findings of the study by Roots et al. (2014) indicated the importance of defining what “rural” means due to the impact of rural settings on practice. Roots et al. (2014) considered areas of Canada to be rural if they had a population of 15,000 or less. The United States Department of Health and Human Services (2017) further breaks down the definition of rural into micropolitan (between 10,000-50,000 people) and rural (less than 10,000 people). Defining rural practice is imperative to better understand the impacts that rural settings have on the recruitment and retention rates of occupational therapy practitioners. Moreover, defining rural practice will help to inform the current study, as the researchers are interested in understanding the experiences of occupational therapy practitioners working in rural areas of Minnesota and North Dakota. For the purposes of the current study, the researchers consider areas to be rural if they contain 10,000 people or less.

Occupational therapy practitioners working in rural areas of the United States face a number of challenges. Unlike their urban counterparts, rural practitioners have less access to the professional supports and resources they need (Roots et al., 2014). As a result, it can be difficult to recruit and retain health professionals in rural settings. Recruitment is a concern according to MacDowell, Glasser, Fitts, Nielsen, and Hunsaker

(2010) because there is a shortage in the number of healthcare professionals working in rural areas of the United States. An example of recruitment efforts at a state-wide level is the University of North Dakota Healthcare Workforce Initiative which is making efforts towards promoting rural practice (Molmen et al., 2017). Moreover, although previous researchers have looked at the impact of rural settings on occupational therapy practice, few studies have looked specifically at the experiences of rural practitioners in the United States. Therefore, it is important to understand the experiences of rural practitioners in the United States.

The literature review will be presented through the lens of the professional identity of rural occupational therapy practitioners. It is the authors' belief that understanding professional identity development may better inform education, recruitment and retention of rural practitioners; especially in Minnesota and North Dakota. Therefore, the authors first define the Professional Identity Model (Tornebohm, 1991) and then present an analysis of the literature reflecting the model. The Professional Identity Model was originally developed by Hakan Tornebohm in 1991 to better understand the development of occupational therapy practitioners' professional identity (Tornebohm, 1991). Tornebohm (1991) describes the model as a paradigm in the shape of a rhomb with four corners and each corner represents a different component of an occupational therapy practitioner's professional identity (Tornebohm, 1991). Originally, the corners represented a practitioner's knowledge, views, abilities, and interests; however, the four components have since been updated into four elements: (a) interests, (b) field of action view, (c) world view, and (d) competence (Tornebohm, 1991). Together, these four elements help to form an occupational therapy practitioner's

professional identity, which impacts a practitioners' decision where to practice and their career trajectory. The Professional Identity Model was chosen due to the strong applicability to the current research question and the phenomenon being studied.

According to Tornebohm (1991), interests incorporate an occupational therapy practitioner's life experiences, along with their personal traits. A practitioner's life experiences tend to have a large influence on the setting in which they choose to work. Within the field of action view, an occupational therapy practitioner starts to develop different viewpoints about the profession based on the workplace context and professional socialization (Tornebohm, 1991). The world view of the Professional Identity Model encompasses the concepts, values, and constructs of the occupational therapy profession (Tornebohm, 1991). Entry level practitioners must have knowledge of different models and theories so that they can further develop their professional identity in practice (Tornebohm, 1991). Additionally, for occupational therapy practitioners to successfully develop their professional identity, they must first achieve some level of competency. Some ways to develop competency include participating in continuing education and professional development courses (Tornebohm, 1991). Moreover, a greater level of competency can be achieved with more years of experience (Tornebohm, 1991). Finally, in order for occupational therapy practitioners to truly develop competency, they must understand how they learn best so that they can get the most out of their professional experiences (Tornebohm, 1991).

### **Interests**

Tornebohm (1991) suggested that interests incorporate a practitioner's life experiences, along with their personal traits. Literature consistent with Tornebohm's

(1991) definitions of interests will be present here and include: (a) personality characteristics, (b) demographic information of the practitioner, (c) his or her upbringing, (d) social aspects of working in a rural setting, and (e) the community in which one is involved.

There are four factors that influence where an occupational therapy practitioner chooses to work (Maseko et al., 2014). These factors are the physical environment, human environment, incentives and individual factors. According to Maseko et al. (2014), it is important that occupational therapy practitioners enjoy working their chosen setting. Additionally, practitioners identified being close to home and service to community as key factors in choosing to work (Maseko et al., 2014).

In order to understand occupational therapy practitioners in rural practice, several researchers have studied personality characteristics of allied health practitioners who work in rural areas. According to Lloyd, Pfeiffer, Dominish, Heading, Schmidt, and McCluskey (2014), personality characteristics are correlated to enjoyment working in rural settings. Allied health practitioners working in rural areas felt that it was important to have passion for their job and have a good attitude (Lloyd et al., 2014). In general, the majority (94%) of rural practitioners indicate that they find the rural lifestyle enjoyable (Gallego et al., 2015). Practitioners are motivated to continue learning new things for the benefit of their clients. (Lloyd et al., 2014). For continued learning to be effective, workplace learning needs to be thought of as helpful and valued (Lloyd et al., 2014). Furthermore, in rural areas it is important for occupational therapy practitioners to be creative (Waite, 2015).



Additionally, Waite (2015), indicates the importance of adapting to the environment to support the practitioners' success in daily life and through work. Adaptation requires occupational therapy practitioners to be resourceful with treatments and supplies (Waite, 2015). According to Campbell, Eley, and McAllister (2013) many practitioners choosing to work in rural areas score high in novelty seeking. This can be a drawback to practicing in a rural area since there are limited leisure opportunities. In addition, women working in remote settings had a significantly lower score in harm avoidance and scored higher in self-transcendence, indicating increased confidence and decreased anxiety (Campbell et al., 2013). Moreover, rural practitioners feel content with believing they belong where they are and are at peace (Campbell et al., 2013). According to Zango Martin, Flores Martos, Moruno Millares, & Bjorklund (2015) practitioners are willing to participate in leisure activities available in the community, which has a positive impact in their overall health.

In rural areas, practitioners typically work in public or private settings. The general trend is for younger practitioners to work in public settings and for older practitioners to work in the private sector (Keane, Lincoln, Rolfe, & Smith, 2013). Keane et al. (2013) indicated that a higher percentage of private sector workers are married and have dependents compared to those in the public sector. More females were working in the public sector than private (Keane et al., 2013). Moreover, according to Gallego et al. (2015), practitioners prefer to work in a public setting.

While comparing practitioners who practice in rural and urban areas, there are a number of differences. In general, practitioners in rural areas have less research experience (Pain, Plummer, Pighills, & Harvey, 2015). Various authors come to different

conclusions regarding the average age of rural practitioners. For example, Daniels, VanLeit, Skipper, Sanders, and Rhyne (2007) states that younger adults are less likely than older adults to practice in a rural area (Daniels et al., 2007). On the other hand, Pain et al. (2015), comes to a different conclusion indicating that health care providers working in rural settings are typically younger than regional city health providers (Pain et al., 2015). In addition to being younger, practitioners in rural areas have fewer postgraduate degrees than those more urban settings (Pain et al., 2015).

According to Gallego et al. (2015), rural health practitioners often practice in areas where they have family present. Due to the closeness of family in rural communities, the schedules of rural practitioners need to be flexible, as family commitments can often interfere with work. In fact, 74% of the practitioners with dependent family members report only working part time due to family commitments (Gallego et al, 2015). Moreover, Gallego et al. (2015) indicated concerns regarding spousal employment and limited childcare options. Lack of employment opportunities and suitable childcare significantly limit the number of hours that rural practitioners are able to work (Gallego et al., 2015). Keane, Smith, Lincoln, and Fisher (2011) found that 89% of the spouses of allied health professionals also worked, making it more difficult to care for dependents. Additionally, 53% of the participants considered their spouses as having an influence on the decision of where to work (Maseko et al, 2014). Practitioners with families indicated increased difficulty for their spouses to find suitable employment in rural areas (Weinhold & Gurtner, 2014). Furthermore, children of rural practitioners may experience limited academic opportunities due to location and lack of educational resources (Weinhold & Gurtner, 2014). In smaller communities, 84% of rural allied

health practitioners found good social interaction opportunities; however, a lack of social opportunities is often a deterrent to working in a rural area (Gallego et al., 2015). A practitioner's early life experiences can contribute to the choice to work in a rural area. If an allied health practitioner grew up in a rural area or had a fieldwork/practicum experience in one, they are more likely to work in a rural setting (Daniels, et al., 2007). Gallego et al. (2015) finds a similar result with 71% rural practitioners indicating that they grew up in a rural or remote area. Approximately 60% of the respondents in a rural survey indicated that they grew up in an area that was not metropolitan (Keane et al., 2011; Keane et al., 2013). In comparison to their urban counterparts, rural practitioners indicated a desire to work in a smaller community and an increased desire to return to their hometown (Daniels, et al., 2007).

When choosing a job placement, the two most frequent selections include, "enough work to support self/family" and the "opportunity for professional experiences" (Daniels et al., 2007). The next highest category includes "income potential" and "serving health needs in the community" (Daniels et al., 2007, p.65). Returning to one's hometown is also an important predictor for job placement (Daniels et al., 2007). Practitioners most likely to work in a rural area of Northern Ontario were those with family or personal ties to the rural setting (Winn et al., 2014). Moreover, lifestyle options and growing up in the rural area influenced a practitioner's choice to practice in a rural area (Winn et al., 2014).

Additionally, training experiences may influence a practitioner's decision to work in a rural setting. Keane et al. (2011) found that over half of the rural practitioners participating in the study had a previous placement experience in a rural practice setting.

Occupational therapy practitioners who had a rural level 1 and/or level 2 fieldwork were more likely to work in a rural setting in comparison to practitioners who completed their fieldworks in urban settings (Jedlicka, Hanson, Klug, & Harris, 2016). Page et al. (2016) emphasized the importance of advocating for students to complete rural placements to heighten interest in rural practice.

During rural training experiences, medical students indicated an increased desire to stay in the rural community, however, that was not always possible (Silvestri et al., 2014). Students in sub-Saharan African and South Asian medical schools were asked about future practice areas (Silvestri et al., 2014). A small portion (15%) of those surveyed were ‘very unlikely’ to move out of the rural areas they grew up in and/or are currently residing (Silvestri et al., 2014). Many students in these regions indicated a plan to leave the rural areas and work elsewhere, increasing the prevalence of healthcare provider shortages (Silvestri et al., 2014).

In rural settings, community plays a major role in a practitioner’s practice and life. In the culture of, Honduras, Morocco, Burkina Faso, Tanzania, and Ecuador, occupation is intertwined in the life of everyone living there and cannot be separated from other aspects of the person (Zango Martin et al., 2015). Practitioners working in rural communities indicated an increased value in occupation when the occupations were intertwined in the community (Zango Martin et al., 2015). Occupations that foster a sense of belonging in the community aid in a person’s ability to feel connected (Zango Martin et al. 2015). Moreover, Zango Martin et al. (2015) found that meaningful occupations in the community have a positive influence on the health and well-being of rural residents.

In rural settings, occupational therapy practitioners are part of the same community as their clients (Waite, 2015). The relationships formed with the clients are present both within and outside of practice, also known as dual relationships (Waite, 2015). These inter-personal relationships can be both beneficial and a barrier to rural practice (Roots et al., 2014). Positive interpersonal relationships with rural clients facilitate positive therapy outcomes (Roots et al., 2014). Moreover, in rural settings practitioners tend to emphasize general health as opposed to offering specialized services (Roots et al., 2014). The practitioner is often expected to meet the needs of the population he or she is practicing in (Waite, 2015). In a rural setting, practitioners often may have to stretch their role to meet the needs of that community (Roots et al., 2014).

### **Field of Action View**

Tornebohm (1991) states that the field of action view enables an occupational therapy practitioner to develop different viewpoints about the profession based on the workplace context and professional socialization. As a practitioner working in a rural area, he or she may do things differently than one working in a more urban setting. Even though different authors agree there are differences, there is not a single consensus to what is different about the two types of settings. One view is that rural physical therapy practitioners are more likely than urban practitioners to provide direct patient care (Bath et al., 2015). Another is that rural practitioners spend a fair amount of time doing administrative tasks. Many rural practitioners in the study by Lincoln et al. (2013) found that ‘paperwork’ types of duties were taking much time to complete, in part due to accountability in being responsible for so many things, but also decreased productivity because increased responsibilities may take away from direct patient care. Another set of

authors found similar results that there may be more paperwork requirements that rural practitioners are completing (Weinhold & Gurtner, 2014). Lincoln et al. (2013) found that these administrative tasks were getting more intense and it negatively impacts whether people want to continue working there due to decreased job satisfaction.

Rural occupational therapy practitioners often provide services differently than their urban counterparts. For example, rural practitioners are more likely than their urban counterparts to provide care to people of all age groups (Bath et al., 2015; Waite, 2015). Along with seeing all age groups, these practitioners are traveling and working for many different organizations. In fact, the group with the highest percentage of having three or more employers were those working in rural areas (Jedlicka, Hanson, Klug, & Harris, 2016). Rural physical therapy practitioners are more likely to have a variety of clients (Bath et al., 2015). For instance, rural practitioners may be transitioning from two different diagnoses in a matter of hours (Bath et al., 2015). Long wait lists and large caseloads can increase stress for rural practitioners (Roots et al., 2014).

Even with the diverse settings, the interviewed population stated that the top two responses for why rural practitioners like their current job are as follows: “*work/life balance*” and “*type of work/clients*” (Keane et al., 2011). For rural health practitioners, they specialize in general practice (Roots et al., 2014). Along with the generalized practice, rural practitioners need to possess a wide variety of skills and practice in multiple settings (Roots et al., 2014). Practitioners can be expected to work with a diagnosis they have never seen before and lack access to other practitioners with whom they can collaborate (Weinhold & Gurtner, 2014). Rural areas tend to have fewer services available, and the occupational therapy practitioner may have more responsibilities

(Roots et al., 2014). Additionally, most rural facilities cannot afford some of the equipment bigger facilities may have access to (Weinhold & Gurtner, 2014). Overall, it may be difficult to stay current on various skill areas because there is less access to resources and fewer professional networks available (Roots et al., 2014).

Travel can be a barrier for both the practitioners and clients in rural areas (Weinhold & Gurtner, 2014). Some reasons that travel is difficult includes a lack of available transportation and poor weather (Lincoln et al., 2013; Weinhold & Gurtner, 2014; Waite, 2015). An occupational therapy practitioner in South Dakota would drive 200 miles every week getting to the different facilities. Therefore, scheduling and availability can be difficult (Waite, 2015). With limited transportation in rural areas, clients may miss needed therapy sessions, which changes the course of therapy and recovery (Waite, 2015). Commuting long hours is often preferred over spending the night away from home (Lincoln et al., 2013). Occupational therapy had the highest percentages of home visits of the 21 disciplines surveyed (Keane et al., 2011). Home health is another area that requires increased travel time and sometimes alternative forms of documentation and training.

Additionally, Maseko et al. (2014) found that the environment has an influence on a practitioner's choice to practice in a rural area. Certain environmental factors that impact the recruitment and retention of rural practitioners include: (a) the environment of the entire organization, (b) the availability of quality resources, and (c) overall safety. Remote allied health practitioners have the highest annual turnover rate (Chisholm, Russell, & Humphreys, 2011). This is a cause for concern because the more remote the position, the more it costs to replace that health care practitioner (Chisholm et al., 2011).

Recruiting is also thought to be challenging due to the long hours of work that rural occupational therapy practitioners maintain (Lincoln et al., 2013). In fact, almost one fourth of the participants said they would voluntarily leave their job in the next year (Gallego et al., 2015). Even though most (80%) of the respondents were satisfied with their job, 35% of the respondents had no plans to leave their job in their current location (Keane et al., 2011). The practitioners from the public population were more likely to be satisfied with their jobs; however, more of the practitioners in the public sector wanted to leave their job in the next five years than the private group (Keane et al., 2013).

Since occupational therapy positions in rural areas are difficult to fill, incentives are often offered to promote and fill the empty positions (Solowiej et al., 2010). Upon filling that vacant position, managers experienced a positive impact in their work environment (Solowiej et al., 2010). Stipends are provided in other settings for those who are willing to work rural areas (Winn et al., 2013).

Allied health practitioners may not want to accept a rural position if they are not guaranteed consistency (Gallego et al., 2015). That consistency would be a permanent position as stated by one of the occupational therapy respondents (Gallego et al., 2015). Both full and part time employees were working over 30 hours a week on average and only 55% were employed in full-time positions. Almost two thirds of the participants indicated that they work more than 35 hours a week while just under one half said that they work full time (Keane et al., 2011). These statistics can potentially justify the amount of work that is needed to be completed by the employed practitioners. The practitioners often have more after hour responsibilities as well (Weinhold & Gurtner,



2014). In addition, practitioners have more on-call hours in rural areas (Weinhold & Gurtner, 2014).

Kuipers, Hurwood, and McBride (2015) looked at utilizing therapy assistant roles in the rural settings. Qualifications, provision of duty statements, and formal supervision arrangements are the same in both rural and urban areas; however, the rural settings have positions that are lacking in qualification (Kuipers et al., 2015). For example, the jobs in the rural settings have lower levels of supervision, in-service training, and a less extensive scope of practice (Kuipers et al., 2015).

Access to peers, expertise, and ‘learning networks’ contributed to workplace learning (Lloyd et al., 2014). More experienced practitioners had inconsistent reports, regarding the learning of new skill sets from other professionals with experience (Lloyd et al., 2014). Some peers indicated that workplace learning was not beneficial because they “already know everything” (Lloyd et al., 2014, p. 11).

To remain successful in rural practice, participants indicated that it is important to network and collaborate with other professionals (Roots et al., 2014). When rural practitioners have access to mentors and continuing education, they are more inclined to accept a job in a rural setting and stay there (Roots et al., 2014). Rural practitioners often experience isolation and a lack of professional supports (Weinhold & Gurtner, 2014). For example, it is important for a practitioner practicing in a rural area be able to access other practitioners in metropolitan areas for additional support (Devine, 2006).

Management appears to have an impact on the experience of a rural practitioner (Lloyd et al., 2014). When allied health practitioners have good supervision from someone with more experience, it helps individual practitioners to stay in their current

job (Lloyd et al., 2014). In situations where there are few peers, technology can aid in connecting an isolated practitioner to other workplaces (Lloyd et al., 2014). Some allied health practitioners practicing in rural areas, have fewer opportunities for learning, due to the lack of support from management (Lloyd et al., 2014).

There can be a number of factors that cause sub-par supervision. Management can be frustrating when there isn't a qualified professional in the area (Lloyd et al., 2014). An occupational therapy practitioner comments that she and another part time occupational therapy practitioner have a manager that does not know what the profession of occupational therapy entails (Lloyd et al., 2014). Occupational therapy practitioners reported several concerns including: (a) not being supervised for extended periods of time, (b) supervision from a distance, and (c) management and other team members not understanding the role of occupational therapy (Lincoln et al., 2013; Roots et al., 2014). Ducat, Martin, Kumar, Burge, and Abernathy (2016) studied effective supervision in rural and remote areas. Time, travel, technology and organizational factors were the factors that would help or hinder effective supervision. Additionally, they found that the researchers established was that the supervisor and supervisee have to get along well. It is important for new graduates to have some supervision since being alone is not conducive to them thriving in their job (Lincoln et al., 2013). As a new graduate working in a rural area, a practitioner mentions that not having support makes it difficult to develop skills (Lincoln et al., 2013). Mentorship allows practitioners with more experience to help those with less experience (Lincoln et al., 2013). Not all settings provide an adequate environment for mentoring to occur and that is cause for concern.

## **World View**

The world view of the Professional Identity Model encompasses the concepts, values, and constructs of the occupational therapy profession (Tornebohm, 1991). Together, these concepts, values, and constructs help to guide occupational therapy practitioners. This guidance is especially important for practitioners working in rural settings because, as indicated by Roots et al. (2014), occupational therapy practitioners are typically on their own in rural settings. Two main constructs which help to guide occupational therapy practitioners, include the Occupational Therapy Code of Ethics and the Occupational Therapy Framework (OTPF) (Peloquin, 2007). The Occupational Therapy Code of Ethics (AOTA, 2015) presents the values and concepts which guide occupational therapy practitioners. The Occupational Therapy Code of Ethics encompasses six principles that guide occupational therapy practitioners and these include: (1) beneficence (2) nonmaleficence (3) autonomy (4) justice (5) veracity and (6) fidelity (AOTA, 2015). Additionally, the Occupational Therapy Practice Framework (OTPF) (AOTA, 2014) was created as a guide for occupational therapy practitioners. Within the OTPF there are two main sections which help to guide practitioners, and these include the domain and process (AOTA, 2014). The domain includes an overview of areas of occupation, client factors, performance skills, performance patterns, as well as the different contexts and environments that can impact a client's occupational performance (AOTA, 2014). Then, the process is used to describe the different methods of service delivery (AOTA, 2014).

Within the profession of occupational therapy, there is a guiding philosophy which provides occupational therapy practitioners with a framework for practice (Schell,

Gillen, & Scaffa, 2014). According to Schell, Gillen, and Scaffa (2014), the philosophy of occupational therapy can be broken down into three elements: (a) ontology, (b) epistemology, and (c) axiology. Ontology is a term used to describe reality for the profession of occupational therapy (Schell, Gillen, & Scaffa, 2014). Occupational therapy practitioners view humans through an occupational lens, looking at the connections between a human's environment, occupations, and health (Schell, Gillen, & Scaffa, 2014). Epistemology describes the purpose of knowledge within occupational therapy practice (Schell, Gillen, & Scaffa, 2014). According to Schell, Gillen, and Scaffa, (2014) occupational therapy practitioners must possess knowledge about occupation and be able to integrate new knowledge because situations and contexts are constantly changing. Furthermore, axiology is a term used to describe values present in the field of occupational therapy (Schell, Gillen, & Scaffa, 2014). Occupational therapy practice emphasizes the value of client-centered practice where there is collaboration between the occupational therapy practitioner and the client in order to achieve successful participation in meaningful occupation (AOTA, 2011). Together the three elements of the philosophical framework provide occupational therapy practitioners in rural settings with a framework for developing their professional identity.

In addition, when considering the world view of the Professional Identity Model (Tornebohm, 1991), it is important to consider the impact that an occupational therapy practitioner's entry level education has on rural practice. After all, as indicated by Maseko et al. (2014), the entry level education that a student receives in school has a huge influence on the choice to practice in a rural setting. Students are more likely to practice in a rural setting if they have exposure to rural practice settings during the course

of their education (Page et al., 2016). Furthermore, students are more likely to practice in a rural area if their university is affiliated with the work site (Maseko et al., 2014). An entry level education is not always sufficient because rural practitioners require a larger array of skill sets because occupational therapy practitioners are often on their own in rural settings (Roots et al., 2014). Moreover, rural practitioners do not have the professional supports in place that practitioners working in urban setting would have access to (Weinhold & Gurtner, 2014). Given the lack of professional supports, it may be difficult for an entry level practitioner to practice in a rural setting (Weinhold & Gurtner, 2014); however, as indicated by Maseko et al. (2014) students who have exposure to rural settings while in school feel better equipped to practice in rural settings following graduation.

The world view takes into account the different models and theories that can further develop an occupational therapy practitioner's professional identity in practice (Tornebohm, 1991). Models help to explain the impact of different components on occupational performance (Turpin & Iwama, 2011). Some models which apply to the world view of the Professional Identity Model include: the Model of Human Occupation (MOHO) (Kielhofner, 2008), the Person-Environment-Occupation (PEO) Model (Law, Cooper, & Strong, 1996), and the Canadian Model of Occupational Performance (CMOP) (CAOT, 1997). Each of these models will be discussed in further detail below.

One model which fits in with the current study and world view of the Professional Identity Model is MOHO. According to Lee, Taylor, Kielhofner, and Fisher (2008) MOHO is the most commonly used model. MOHO has four main components, and these include motivation, habituation, performance capacity, and the environmental context

(Kielhofner, 2008). MOHO can be utilized to explain how occupational therapy practitioners and/or clients are motivated to perform in various environments and settings (Lee et al., 2008). In rural settings there are a variety of motivational factors that impact the performance of occupational therapy practitioners. One such motivational factor is pay or salary. According to Daniels et al. (2007), jobs are frequently chosen for financial reasons (loan payback programs) and can act as an incentive for a first job in a rural area. Another motivational factor is prior experience. If occupational therapy practitioners have had a positive fieldwork experience in a rural area, they will be more likely to work in a rural setting (Maseko et al., 2014). Furthermore, occupational adaptation is another component of MOHO, which can be impacted by personal factors and the environment (Turpin & Iwama, 2011). Occupational therapy practitioners coming to rural practice settings have to adapt to the rural environment. Adaptation may be difficult if practitioners lack prior experience and/or exposure to a rural setting. Daniels et al. (2007) found that practitioners were more likely to work in a rural area if they grew up in a rural area or had previous experience in rural settings. Practitioners without rural experience are more likely to experience job dissatisfaction and leave rural practice (Devine, 2006).

Another applicable model is the Person-Environment-Occupation (PEO) Model. The PEO Model can be used to understand how different transactions between the person, environment, and occupation impact the professional identity of rural practitioners (Law et al., 1996). In applying the model, there are three possible transactions that can take place, the transaction between the person and the occupation, the transaction between the person and the environment, and the transaction between the occupation and the environment. For the purposes of the current study, the person would

be the occupational therapy practitioner, the environment would be the rural practice setting, and the occupation would be the profession of occupational therapy. Each of these components are interdependent on one another and therefore it is necessary to understand and see how they interact to form an occupational therapy practitioner's professional identity (Law et al., 1996). Depending on the fit between the different components, occupational performance will either be optimal or dysfunctional (Law et al., 1996).

When looking at the transaction between the person and the occupation, there are several factors to consider. For one, when looking at an occupational therapy practitioner as the person, the different roles should be considered (Law et al., 1996). According to Pigeon (2015), occupational therapy practitioners have a variety of roles in rural settings. In addition to having the role as the professional, occupational therapy practitioners often have the role as a co-worker, friend, family member, and community member and each of these roles will impact the occupational performance of occupational therapy practitioners in rural settings (Lee & Mackenzie, 2003). Another component of the person, which impacts occupation, is motivation (Law et al., 1996). According to Law et al. (1996), motivation encompasses the practitioner's interests and culture. As noted by Maseko et al. (2014) occupational therapy practitioners are more likely to practice in a rural setting if they are from a rural area or had previous experience working in a rural setting. Furthermore, when applying the PEO model to the current study, it is important to consider possible transactions between the person and the environment (Law et al., 1996). Multiple studies have looked at the transaction between occupational therapy practitioner and the rural setting. One study involving the person-environment transaction

was Winn et al. (2014). Winn et al. (2014) considered the fit between the person and the environment in a cross-sectional study on allied health professionals working in rural areas of Northern Ontario, Canada. Little research had been done regarding the recruitment and retention of health professionals in the area. Therefore, Winn et al. (2014) aimed to understand what influenced health professionals' decision to remain and continue practicing in rural Canada. Results from the study indicated that there are a number of factors impacting retention and these included family ties, satisfaction with the job, professional supports, and lifestyle. These factors were especially prevalent among individuals who were from rural areas of Northern Ontario (Winn et al., 2014). Individuals who were not originally from Northern Ontario were more likely to work there and stay if they completed a clinical there or if their spouse was employed in that area (Winn et al., 2014). MacDowell et al. (2010) was interested in looking at the fit between the person factors and environmental factors. The purpose of the study by MacDowell et al. (2010) was to understand the impact of health professional's perspectives on recruitment and retention rates in rural settings within the United States. According to MacDowell et al. (2010) it can be difficult to recruit healthcare professionals in rural practice areas because the setting may not fit the healthcare professionals' interests.

The transaction between the environment and the occupation should be considered when applying the PEO model. According to Law et al. (1996), the environment in which an occupational therapy practitioner practices can have a profound impact on occupation and occupational performance which in turn impacts a practitioner's professional identity. According to Bath et al. (2015), occupational therapy



practice in rural settings looks very different than practice in more urban settings. In rural settings, practitioners are often required to utilize technology to help meet client needs; however, according to Chedid, Drew, and Veitch (2013), practitioners do not always feel comfortable utilizing technology for client care. Rather, Chedid et al. (2013) found that technology is used more frequently for professional communication. Some barriers to the use of technology in rural settings included lack of professional supports and training (Chedid et al., 2013). Each of these environmental barriers had a negative impact on the occupational performance of practitioners in rural settings. The lack of professional supports in rural areas was also seen as a barrier to practice in a study conducted by Lee and Mackenzie (2003). Lee and Mackenzie (2003) found that new graduates working in rural settings require increased professional support. Many of the participants in the study discussed calling more experienced practitioners over the telephone.

### **Canadian Model of Occupational Performance**

Additionally, the Canadian Model of Occupational Performance (CMOP) can be used to explain the professional identity of occupational therapy practitioners in rural settings. According to Polatajko, Townsend, and Craik (2007), application of CMOP involves looking at the person, the environment, and occupational performance. The person component encompasses three factors, and these involve cognitive, physical, and affective factors (Polatajko et al., 2007). Then, the environment is where the person exists and/or occupational performance takes place (Polatajko et al., 2007). The environment can be physical, social, cultural, and/or institutional (Polatajko et al., 2007). Finally, occupation is the means by which the person interacts with the environment (Polatajko et al., 2007). The application of CMOP is evident in a study by Roots et al. (2014). Roots et

al. (2014) was interested in acquiring a better understanding of rehabilitation services in rural areas of Canada. To gain a better understanding of rural practice, Roots et al. (2014), looked at the impact that the rural setting had on the occupational performance of occupational and physical therapy practitioners. Roots et al. (2014) inadvertently took into consideration all the components of CMOP by looking specifically at how the interactions between the practitioners and the rural environment impacted performance. Roots and Li (2013) found that the rural context had a huge impact on practice, requiring many of the practitioners to look outside the practice area for resources and supports. Moreover, Roots and Li (2013) indicated that in order for the practitioners to be successful in their practice, they had to expand their knowledge, stretch their roles, and rely on other practitioners for support. Each of these components was important for allowing practitioners to perform successfully in the rural settings (Roots & Li, 2013).

Overall, the world view of the Professional Identity Model has a profound impact on the professional identity of occupational therapy practitioners practicing in rural settings. The world view describes the guiding principles and constructs that allow occupational therapy practitioners to be successful (Tornebohm, 1991). Additionally, the world view can be used to explain the development of an occupational therapy practitioner's professional identity through the lens of various models (Tornebohm, 1991). Furthermore, the world view will help to inform the current research, as the researchers are interested in looking at the phenomenon of being an occupational therapy practitioner in a rural practice setting.

## **Competency**

For an occupational therapy practitioner to successfully develop their professional identity, they must first achieve some level of competency. Some ways to develop competency include participating in continuing education and professional development courses (Tornebohm, 1991). Moreover, a greater level of competency can be achieved with more years of experience (Tornebohm, 1991). Finally, in order for an occupational therapy practitioner to truly develop competency, he/she must understand how he/she learn best so that they can get the most out of his/her professional experiences (Tornebohm, 1991). Understanding of one's learning can be achieved through the use of meta-cognitive strategies (Tornebohm, 1991). Each element of competency and the relation to the professional identity of rural occupational therapy practitioners will be described in further detail below.

Within the field of occupational therapy, practitioners are constantly working towards developing a higher level of competency through participation in continuing education and professional development opportunities. The American Occupational Therapy Association (AOTA, 2017a) offers a variety of continuing education and professional development opportunities for occupational therapy practitioners. Some activities that qualify as a continuing education activity include attending a conference, workshop, or in-service (AOTA, 2017a). Other examples of continuing education opportunities are completion of a college course, supervising a student, or teaching a college course (AOTA, 2017a). Continuing education courses are highlighted both on the AOTA website and through the AOTA Publications & CE Catalog (AOTA, 2017b). In order for a practitioner to receive credit for a continuing education course, the course

must be an approved AOTA provider (AOTA, 2017b). Continuing education requirements vary depending on the state in which occupational therapy practitioners work. For the purposes of the current study, the researchers are interested in the continuing education requirements for Minnesota and North Dakota. In Minnesota, occupational therapy practitioners are required to have 24 contact hours and occupational therapy assistants must obtain 18 contact hours within a two-year period of time (AOTA, 2016). North Dakota requires both occupational therapists and occupational therapy assistants to have 20 contact hours within a 24-month period (AOTA, 2016). Not only do continuing education requirements push occupational therapy practitioners to stay up date on evidence-based practice, but also continuing education promotes the development of competency. Furthermore, AOTA (2017c) offers a Professional Development Tool to members of AOTA. The tool includes various opportunities for learning based on an occupational therapy practitioner's interests and needs (AOTA, 2017c). The tool also assists practitioners in developing a professional development plan and portfolio (AOTA, 2017c). By using the professional identity tool, occupational therapy practitioners can further develop competency. In addition to AOTA, the National Board for Certification in Occupational Therapy (NBCOT) is another professional organization that ensures competency for occupational therapy practitioners. On the NBCOT there is a navigator that assists occupational therapy practitioners in maintaining competency through the use of tools and resources (NBCOT, 2017). Additionally, the navigator helps occupational therapy practitioners in tracking their performance (NBCOT, 2017). The navigator tool addresses all areas of practice, and the resources are available to occupational therapy practitioners at all times (NBCOT, 2017). Moreover, the NBCOT navigator provides

occupational therapy practitioners with an avenue for renewing their certification (NBCOT, 2017).

Lloyd et al. (2014), describes professional development in terms of workplace learning. Workplace learning is “*the means by which members of the profession maintain, improve and broaden their knowledge, expertise and competence, and develop the personal and professional qualities required throughout their professional lives*” (Lloyd et al., 2014). Similar to professional development, workplace learning is focused on gaining more knowledge about the profession of occupational therapy; however, unlike professional development which usually involves attending workshops, workplace learning can occur in any location (Lloyd et al., 2014). According to Lloyd et al. (2014), workplace learning can either be enhanced or inhibited, depending on a number of factors. One factor that can impact workplace learning is the location and/or setting in which learning takes place (Lloyd et al., 2014). The rural context can make workplace learning difficult due to the remote location and limited resources available (Lloyd et al., 2014). Workplace learning can also be difficult due to a limited number of occupational therapy practitioners (Lloyd et al., 2014). In larger departments and locations, occupational therapy practitioners can participate in in-services and learn from one another by reviewing case studies and evidence-based articles (Lloyd et al., 2014). Occupational therapy practitioners working in rural settings do not always have access to inter-professional networks at their practice site, Therefore, practitioners may have to network with occupational therapy practitioners in other settings to promote workplace learning (Lloyd et al., 2014). Other barriers to professional development in rural settings include increased travel time and larger caseloads (Devine, 2006). According to Devine

(2006), increased travel time costs additional dollars and time off of work. In order to overcome the barriers to learning in rural practice, some rural practitioners have found alternative ways to promote workplace learning including the use of teleconferencing, videoconferencing, and webinars (Lloyd et al., 2014). Pigeon (2017) mentioned that videoconferencing can be beneficial to practitioners when they are limited by weather or the cost of travel. Although videoconferencing and technology can assist rural practitioners in accessing continuing education opportunities, there are some drawbacks. Devine (2006) found that the use of technology, such as videoconferencing, can be a barrier for rural occupational therapy practitioners. Since rural occupational therapy practitioners are often isolated, they do not always have access to support staff needed to operate the technology (Lloyd et al., 2014). Moreover, a lack of access to professional development opportunities has been found to be a barrier (Solowiej et al., 2010). Solowiej et al. (2010) found that practitioners are more likely to leave their jobs in rural practice settings due to a lack of professional development opportunities. A lack of professional development opportunities in rural settings has led to increased difficulty developing competency. Numerous efforts have been made to overcome some of the barriers experienced by occupational therapy practitioners in rural areas who are looking for continuing education and professional development opportunities. In some rural practice settings, practitioners have been given the opportunity to work in larger settings to gain more knowledge and establish professional networks (Lloyd et al., 2014). Some rural settings have even established mentorship or supervisory opportunities to assist occupational therapy practitioners (Lloyd et al., 2014). According to Lloyd et al. (2014), supervision of students provides a great continuing education opportunity for rural

practitioners. Supervising a student promotes new learning because occupational therapy practitioners are challenged to gain more knowledge so they can answer student questions and facilitate student learning (Lloyd et al., 2014). Moreover, supervision of student counts towards continuing education contact hours when an occupational therapy practitioner is a Level II Fieldwork supervisor (AOTA, 2017a). According to AOTA (2017a), the number of contact hours that a practitioner receives for supervising a student does vary from state to state.

Another component of competence within the Professional Identity model is experience (Tornebohm, 1991). As occupational therapy practitioners gain more experience, their level of competency is enhanced (Tornebohm, 1991). In rural practice settings, experience is especially beneficial because as noted by Roots and Li (2013) occupational therapy practitioners often work with a wide variety of clients, which requires a greater amount of professional skills. Experience helps practitioners to gain the professional skills needed to be a competent practitioner in rural areas (Roots & Li, 2013). Additionally, Roots and Li (2013) mentioned how experience in rural settings helps to enhance knowledge of rural practice, which further develops competency. After all, occupational therapy practitioners with more years of clinical experience tend to have higher retention rates in comparison to new graduates or practitioners with fewer years of experience (Roots et al., 2014).

Furthermore, Solowiej et al. (2010) mentioned that students are more likely to feel competent in rural settings if they have exposure to rural settings while in school. Exposure to rural settings is important for students because rural experience can help students learn strategies and acquire skills needed to be a competent practitioner (Solowiej

et al., 2010). After all, in school students have access to a wide variety of networks including fellow students, instructors, and fieldwork supervisors (Lloyd et al., 2014). These networks provide students with the opportunities to ask questions and acquire professional skills while gaining practical experience in a rural setting (Lloyd et al., 2014).

Experience in a rural practice setting tends to result in better recruitment and retention rates because students feel more competent and confident in rural practice skills and knowledge (Solowiej et al., 2010). Moreover, Roots and Li (2013) found that experience helps occupational therapy practitioners to further their understanding of rural practice, which in turn impacts recruitment and retention rates. Practitioners who do not have rural practice experience do not feel prepared to practice in a rural setting because they do not understand what rural practice looks like (Roots & Li, 2013). Limited understanding of rural practice was shown to have a negative impact on recruitment and retention rates (Roots & Li, 2013). Occupational therapy practitioners who have either worked or lived in a rural setting were shown to have better recruitment and retention rates because the rural experience enhanced their understanding of rural practice (Roots & Li, 2013). Rural experience not only improves recruitment and retention rates, but experience also improves overall competency. According to Lee and Mackenzie (2003), new occupational therapy practitioners often lack rural experience, which decreases confidence and increases self-criticism. Occupational therapy practitioners have identified confidence and independence as essential features for new graduates and practitioners to succeed in rural settings because, independence and confidence are both essential components of competency (Lee & Mackenzie, 2003).



According to Schell, Gillen, and Scaffa (2014), metacognitive strategies involve reflecting on one's own thoughts. Metacognition also involves thinking about new abilities that one wants to gain (Schell, Gillen, & Scaffa, 2014). In order for an occupational therapy practitioner to become more competent, they need to acquire metacognitive skills. Some ways to acquire metacognitive skills involved the use of action and self-reflection (Bjorklund, 1994). According to Bjorklund (1994), there are three types of reflection and these include: negative reflection, positive reflection, and reflection on required knowledge. Turner and Knight (2015) found that occupational therapy practitioners tend to be more focused on negative reflection due to increased insecurity in rural settings. The negative reflections and reports of professional insecurity might explain why it is difficult to recruit and retain occupational therapy practitioners in rural settings (Turner & Knight, 2015).

Additionally, Turner and Knight (2015) found that occupational therapy practitioners often lack an understanding of the profession, which in turn impacts a practitioner's professional identity. In rural practice it is imperative that practitioners are able to reflect on their professional identity so that they can build professional competence (Turner & Knight, 2015). When occupational therapy practitioners reflect on their professional identity they must take a wide variety of situations and contexts into consideration (Turner & Knight, 2015). Turner and Knight (2015) mentioned that occupational therapy practitioners should consider the workplace and social context, as well as gender, race, and class because all these factors impact a practitioner's professional identity. Moreover, it is important to remember that a practitioner's professional identity is always changing, and therefore practitioners need to constantly

reflect on their perceptions of occupational therapy practice (Turner & Knight, 2015). As noted by Bjorklund (1994) there are a number of strategies that can be utilized by occupational therapy practitioners to overcome barriers to professional identity and one of these strategies is reflection. Reflection is especially important for rural occupational therapy practitioners because there are additional barriers present in rural practice (Bjorklund, 1994). Solowiej et al. (2010) found that there are a number of barriers related to recruiting and the retaining health professionals in rural areas. Some of the barriers include staff shortages, high physical/emotional demands, and the lack of supports (Solowiej et al., 2010). Additionally, rural practitioners are faced with larger caseloads and less professional support than practitioners employed in more urban settings (Roots et al., 2014). With the use of reflection, rural practitioners can expand their knowledge and build professional competence (Roots et al, 2014; Bjorklund, 1994).

## **Conclusion**

To summarize, there is a need for additional research in the United States on occupational therapy practitioners practicing in rural settings, including ways to identify and overcome barriers (Winn et al., 2014). The four components of the selected Professional Identify Model include: (a) interests, (b) field of action view, (c) world view, and (d) competence (Tornebohm, 1991). Interests encompass a practitioner's life experiences and personality traits (Tornebohm, 1991). Many occupational therapy practitioners practicing in rural settings grew up in a rural area and enjoy being in that kind of environment (Winn et al., 2013; Keane et al., 2011; Keane et al., 2013; Daniels, et al., 2007). Field of action view is broken down into workplace context and professional socialization. In rural settings occupational therapy practitioners tend to be generalized in

their practice and can experience professional isolation (Bath et al., 2015; Waite, 2015; Weinhold & Gurtner, 2014). The world view includes concepts, values, and constructs of the profession. Many of these are illustrated through the lens of occupation-based models such as MOHO, PEO, and CMOP (Turpin & Iwama, 2010). Finally, competency includes continuing education, professional development, experience, and metacognitive strategies (Tornebohm, 1991). Together, the different components of the professional identity model will help to inform the current study, as the researchers are interested in exploring the experiences of occupational therapy practitioners working in rural areas of Minnesota and North Dakota.

### **CHAPTER III**

#### **RESEARCH METHODOLOGY**

A qualitative research design was chosen for this research study. The aim of the study was to understand the experiences of occupational therapy practitioners working in rural areas of Minnesota and North Dakota. Qualitative research was utilized to encourage the participants to openly share their experiences regarding rural practice. Qualitative research involves looking at the individual meaning of life experiences and how these experiences relate to a larger societal problem (Creswell, 2007). Interviewing occupational therapy practitioners practicing in rural areas allowed researchers to gather valuable data for analysis with the use of theory. In order to gain a better understanding of the experiences of occupational therapy practitioners working in rural settings, a qualitative research design was chosen. More specifically, a phenomenological study design was selected because it helps researchers uncover commonalities between the individual experiences of participants (Creswell, 2007).

The theory guiding this study is the Professional Identity Model (Tornebohm, 1991). Within the Professional Identity Model, there are four main concepts and these include: (a) interests; (b) field of action view; (c) world view, and (d) competence. Each of these elements helps to form the professional identity of an occupational therapy practitioner. In utilizing this model, the researchers aimed to look at the phenomenon of being an occupational therapy practitioner in a rural practice setting.

## **Role of Researchers**

The researchers play an important role in collecting, analyzing, and interpreting qualitative data (Creswell, 2007). Careful measure was taken to control for researcher bias including the use of reflexivity to examine the researchers' attitudes and relationships (Creswell, 2007). Researchers need to recognize their personal biases associated with the phenomenon they are studying. In this case, the researchers were interested in learning about the experiences of occupational therapy practitioners practicing in rural areas of Minnesota and North Dakota. The researchers reflected on their biases and became aware of them so that their personal biases did not influence the study results (Creswell, 2007).

The student researchers had one semester of qualitative research prior to starting this study. Each of the student researchers has been in the Occupational Therapy program at the University of North Dakota for the past two years. During the research course, the student researchers demonstrated competency in accurately evaluating the performance skills and activity demands of research participants. The students also demonstrated competency in analyzing and transcribing the information obtained from participant interviews. The academic advisor also had previous experience and expertise in conducting qualitative research. In addition to supervising the student researchers, the advisor was also involved in offering the students council and instruction.

## **Data Collection/Locale of Study**

A phenomenological study focuses on similarities between the life experiences that participants have faced (Creswell, 2007). In an effort to eliminate personal biases, the student researchers had to identify and discuss their personal experiences and thoughts.

Identifying personal biases allowed the researchers to gain a better understanding of the personal experiences of the participants. Semi-structured interviews were used to collect the data. The interview questions were created with the use of the language from the Professional Identity Model. Questions are provided in Appendix A. Six selected participants gave informed consent to be a part of the study approved by the University of North Dakota's Institutional Review Board. The participants were emailed an informed consent document prior to the interviews taking place and asked to provide verbal consent upon the start of the interview. They were also given the opportunity to drop out at any point with no repercussions. The interviews were conducted over the telephone or FaceTime and recorded for transcription using a digital audio recorder. After completing each interview, the recordings were transcribed verbatim by the student researchers. Confidentiality of the participants was ensured with the use of pseudonyms. Assigning pseudonyms assisted the researchers in deciphering between individual participant information without breaching confidentiality. The demographic information from each participant was not recorded. Each interview took place in a scheduled room within the University of North Dakota School of Medicine and Health Sciences. The transcriptions were stored on the researcher's personal computers within a password protected file. Following the completion of transcriptions, the audio recordings were destroyed. The accuracy of the transcriptions was ensured by sending the transcribed interviews back to the individual participant who was interviewed. After completing the data analysis, the transcriptions were printed and placed in Dr. Sarah Nielsen's office within a locked cabinet, where they will be kept for a duration of three years. Once printed, the electronic

copies of the interviews were destroyed. After 3 years, the hard copies will be destroyed.

### **Study Participants**

The participants were obtained through convenience sampling through a database from the University of North Dakota's Occupational Therapy Department. All the participants needed to be practicing in either Minnesota or North Dakota. Since the location is remote, place of employment will not be published to adhere to privacy concerns. The inclusion criteria specified that participants had to be practicing in a rural area and have been there for at least 12 months. Occupational therapy practitioners who had been practicing for less than 12 months or not in a rural setting for at least 12 months were not eligible to be in the study. The occupational therapy practitioners that met the inclusion criteria were contacted via a protected email. The practitioners could only see who the email was from but not the other potential participants. Interviews were then scheduled for occupational therapy practitioners who were interested in participating in the study. Email was used to schedule the interviews.

The interviews were completed with the use of FaceTime and/or telephone. Each interview was recorded using an audio recorder. Telephone calls were placed on speaker so that the interviews could be recorded. Each interview took place in a scheduled and confidential room within the University of North Dakota's School of Medicine and Health Sciences. Each participant was involved in the research process, starting with the interviews and ending with the data analysis. The interviews took place between August 29, 2017 and October 31, 2017. The interviews ranged from 24 to 47 minutes. It took additional time outside of the interviews to complete transcriptions and review the interviews with the participants.

## Participant Profiles

Below is a chart detailing the profiles of each participant. As mentioned previously, the names of each participant were replaced with pseudonyms to ensure confidentiality. Following each pseudonym are the corresponding number of years that each participant has been in practice and the number of years in rural practice. The chart also details the state in which each participant practices.

Table 1: Participant Profiles

<b>Participant Pseudonym</b>	<b>Number of years in practice</b>	<b>Number of years in rural practice</b>	<b>State practiced in</b>
Agnes	12	12 (9 in ND)	ND
Betty	18	18	MN
Charles	18	18	MN
Dorothy	3.5	3.5	MN
Erin	2	1	ND
Frankie	8	8 (3 settings)	ND

Agnes is a female who has been practicing as an occupational therapy practitioner within a rural setting for her entire career. Most of her rural practice experience has been in North Dakota, where she is originally from.

Betty has been practicing as a rural occupational therapy practitioner since graduating from an accredited occupational therapy program. Betty identifies as a female. All her experience has been in the state of Minnesota.

Charles identifies as a male occupational therapy practitioner. He has been practicing in a rural setting in Minnesota for his entire profession. He practices in the state that he is originally from.



Dorothy has been an occupational therapy practitioner for the past three years. Dorothy is a female practitioner. Dorothy started practicing in a rural setting in Minnesota shortly after graduating from an accredited occupational therapy program.

Erin is a female occupational therapy practitioner who has been practicing as an occupational therapy practitioner for the last two years. For the past year she has practiced in a rural practice setting within North Dakota.

Frankie has practiced as an occupational therapy practitioner in North Dakota for the past eight years. Frankie identifies as a female practitioner. All eight years of her practice experience have been in rural settings. Throughout the duration of her practice she has practiced in three different rural settings.

### **Unit of Analysis**

The unit of analysis included the interviews with occupational therapy practitioners who have experience working in a rural practice setting. The participants practiced in rural Minnesota and/or North Dakota for at least one year. After receiving consent to participate, interviews were completed and transcribed using audio recorders.

### **Data Analysis**

The researchers were actively involved in the process of collecting and analyzing data. In an effort to limit researcher bias, the student researchers met with each other and their academic advisor on a weekly basis. A phenomenological approach was utilized to complete the data analysis (Corbin & Strauss, 2008). Interviews were recorded and transcribed verbatim. Once the interviews were transcribed, copies of the transcriptions were sent back to the individual participants to review and to ensure accuracy. After all the data was collected, a data analysis was conducted to paint a thorough picture of the

participants' personal experiences as rural practitioners. Each individual transcription was read in detail by each of the student researchers in an effort to better understand the phenomenon being studied (Corbin & Strauss, 2008).

The researchers then began the process of coding the data from each interview. Data from each interview was coded by cutting out pertinent phrases and assigning a code to each phrase. The codes were predetermined by the Professional Identity Model (Tornebohm, 1991). Each interview was assigned a different color to help the researchers determine which interview the data came from. After determining codes, the data were placed into categories and themes. The categories were also predetermined by the Professional Identity Model. Themes were then created and utilized to formulate a final assertion. The Corbin and Strauss (2008) approach to phenomenology was useful for analyzing the data and assisting the researchers in better understanding some of the factors that impact the experiences of rural occupational therapy practitioners.

### **Credibility and Reliability**

According to Corbin and Strauss (2008), credibility is determined based on how believable and trustworthy the research findings are. Reliability is a term used to describe how easy it would be to replicate the study and produce similar results (Creswell, 2007). To ensure that researcher bias was minimized, the interviews were conducted by both researchers. The interview transcriptions were split in half, so that each researcher transcribed three interviews a piece. Then, the researchers read each other's transcriptions with the coding to check for accuracy. Transcriptions were then sent to the participants to look over and add or modify information. Triangulation was used to improve the credibility of the study data.

## **CHAPTER IV**

### **RESULTS**

#### **Qualitative Findings**

The overall research question guiding the study included: “What are the experiences of occupational therapy practitioners who work in rural areas of Minnesota and North Dakota?” Following the broad question, are various sub-questions which included: (a) How have your interests impacted your decision to practice in a rural area? (b) How do you engage with other occupational therapy practitioners and other professionals within the rural setting? (c) What impact has the rural context had on your practice? (d) How did your entry-level education prepare you for rural practice? (e) How have you developed skills and competency in a rural setting? This chapter presents the qualitative findings pertaining to the experiences of rural occupational therapy practitioners.

#### **Data Analysis**

The data analysis closely resembles the data analysis process described by Corbin and Strauss (2008) and described in detail in Chapter III. The main focus of the data analysis was to gain a better understanding of the experiences of rural occupational therapy practitioners. The Professional Identity Model (Tornebohm, 1991) was utilized to help formulate interview questions and to guide the data analysis. Participants were asked questions related to their professional identity. The four components of the Professional

Identity Model (Tornebohm, 1991) helped to guide the interview questions and gain a better understanding of the impact that a rural setting has on an occupational therapy practitioner's professional identity. As mentioned in Chapter II, the four components of the Professional Identity Model include (Tornebohm, 1991): (a) interests, (b) field of action view, (c) world view, and (d) competency. In an effort to follow qualitative procedures, the participants were provided the opportunity to share their personal experiences as rural occupational therapy practitioners in Minnesota and North Dakota. For the specific procedures used to complete the data analysis, please refer to Chapter III.

### **Presentation of the Findings**

Consistent with Corbin and Strauss's (2008) analysis procedures, the data are presented first by using themes. The themes were created based off four predetermined categories. A total of ten themes were created. Some of the themes were present in more than one component of the Professional Identity Model (Tornebohm, 1991) and therefore, are presented separately. After determining the themes, a final assertion in the language of the Professional Identity Model (Tornebohm, 1991) was formulated.

### **Themes**

Ten themes were identified in through the interview summaries. These themes support the general structure of the overall experience of occupational therapy practitioners practicing in rural areas of Minnesota and North Dakota. Each theme reflects the different components of the Professional Identity Model (Tornebohm, 1991). The researchers identified the ten themes and they include: *a) rural practitioners growing up in a rural area, b) rural practitioners working their entire career in a rural area, c) enjoyment of the flexibility, variability, and people in rural practice, d) the skills needed*

*to succeed as a rural practitioner, e) challenges related to working in a rural practice setting, f) the impacts of entry-level education, g) use of models and occupation-based interventions, h) impact of rural practice on knowledge and skill sets, i) barriers to completing continuing education in a rural setting, and j) the lack of mentors in rural practice.* Each theme reflects the different components of the Professional Identity Model (Tornebohm, 1991). Interests are most reflected in the themes of: *(a) growing up in a rural area, (b) working in rural practice for an entire career, and (c) enjoyment of the flexibility, variability, and people in rural practice.* Moreover, the field of action view is evident in eight of the themes and these include: *(a) growing up in a rural area, (b) rural practitioners working their entire career in a rural area, (c) enjoyment of the flexibility, variability, and people in rural practice, (d) the skills needed to succeed as a rural practitioner, (e) challenges related to working in a rural practice setting, (f) the impacts of entry-level education, (g) impact of rural practice on knowledge and skill sets, (h) barriers to completing continuing education in a rural setting, and (i) the lack of mentors in rural practice.* Then, the world view of the Professional Identity Model (Tornebohm, 1991) includes: *(a) the impacts of entry-level education, (b) the use of models and occupation-based interventions, and (c) knowledge and skill sets.* Finally, competence is apparent in the following themes: *(a) enjoyment of the flexibility, variability, and people in rural practice, (b) the skills needed to succeed as a rural practitioner, (c) the impacts of entry-level education, (d) use of models and occupation-based interventions, (e) impact of rural practice on knowledge and skill sets, and (f) barriers to completing continuing education in a rural setting.* Figure 1 below, highlights the ten themes within the model.

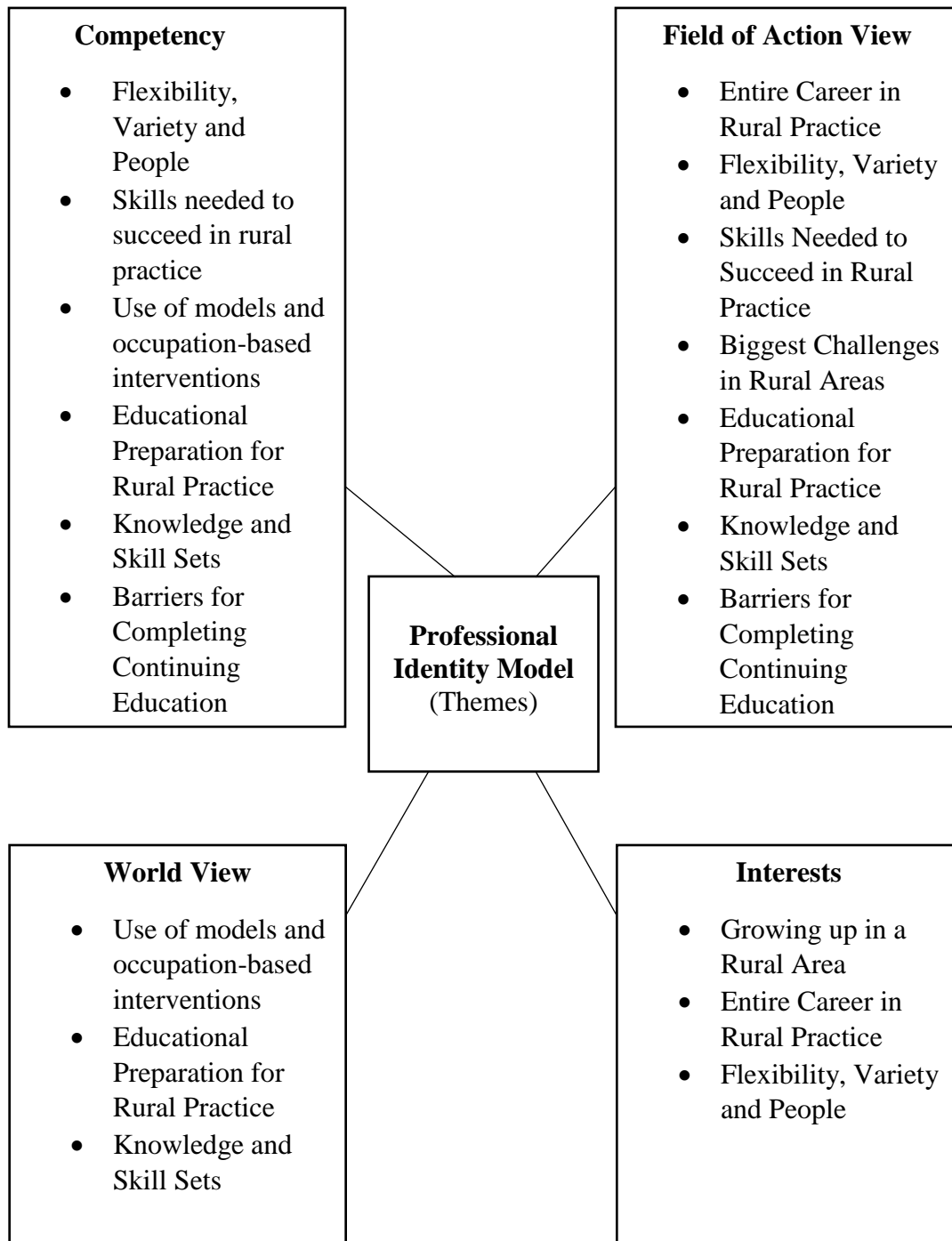


Figure 1. Themes Presented Using the Professional Identity Model

### **Growing Up in a Rural Area**

Most practitioners chose to practice in a rural setting because they either grew up in a rural setting or had a spouse who worked in a rural area. Four out of the six participants indicated that they were interested in rural practice because they grew up in a rural area. The participants that grew up in rural areas included Agnes, Betty, Charles, and Frankie. The other two participants, Dorothy and Erin, did not grow up in rural areas but rather, came to the rural setting because their significant others either lived or worked in a rural area. In addition to Agnes being from a rural area, she was also drawn to rural practice because of her spouse's job. Betty wanted to live in a smaller city because she grew up in a rural area and did not like big cities. Since Betty's home is in a rural area, she was more open to accepting an occupational therapy position in a rural setting. Charles works in a clinic which is located in the same rural area that he grew up in. Charles enjoys working in the area he grew up in because he can enjoy his outdoor hobbies and spend time on the family farm. Frankie also grew up in a rural area which increased her interest in working in a rural setting. Frankie felt a connection to the clients in the rural setting because of her experiences growing up. Overall, growing up in a rural area did increase interest in working in a rural setting.

### **Entire Career in Rural Practice**

Agnes, Betty, Charles, Dorothy, and Frankie have all worked in a rural setting for their entire career. Since graduating from occupational therapy school, Agnes has worked in two different rural settings. She first came to the rural setting due to her husband's job but, has continued to practice in the rural setting because she enjoys the broad spectrum of clients. Betty has worked with pediatric clients in a rural setting for her whole career.

Although most of her clients are pediatric clients, she will occasionally see adult clients due to the shortage of practitioners in rural settings. Charles started working in a rural setting shortly after graduation. He now works in his hometown, which happens to be in a rural setting. When a job opened up in his hometown, he applied for the position and has worked there ever since. Dorothy is not from a rural area but entered rural practice because she didn't know what area of occupational therapy she wanted to work in. Additionally, Dorothy's husband had a job in a rural area. She has continued to work in rural practice because she enjoys the clients and loves being a part of the rural community. Initially, Erin worked with pediatric clients. She enjoyed her clients but was feeling burned out and she wanted more variety. Therefore, after a year of working with pediatric clients, Erin decided to enter rural practice and has continued to work in the rural setting. Frankie worked in rural practice for her entire career but due to burnout and increased time spent traveling, Frankie recently stopped working as an occupational therapy practitioner in a rural setting and now works in an administrative position.

### **Flexibility, Variety, and People**

All of the participants highlighted similar components of rural practice that they most enjoy. These include the flexibility, variety, and the individuals associated with rural practice. Agnes, Erin, and Betty enjoy how flexible rural practice is because they have the flexibility to create new programs and try new interventions with their clients. Agnes, Betty, Dorothy, Erin, and Frankie feel that the flexibility and independence of rural practice has helped to increase their confidence. Erin likes the flexibility of rural practice because she can create her own schedule and the productivity standards aren't as rigid as they would be in a larger city. Agnes, Dorothy, and Erin enjoy the wide variety of clients



and contexts they get to see because they are not limited to a single location, and they see clients of all ages. Agnes works with clients in schools, nursing homes, outpatient clinics, inpatient settings, and swing bed settings. Dorothy works in outpatient, inpatient, swing bed, and home health settings. Although Betty works primarily with pediatric clients, she also experiences a certain level of variety. She has had to work with adults in inpatient settings and nursing homes because there is a shortage of rural occupational therapy practitioners in her area. To highlight Agnes's enjoyment of the rural setting, she stated, "I just like the whole broad spectrum. I never get bored. I get to see everything." Agnes and Dorothy also talked about each day being different because of the fact that they see a variety of clients in different practice settings. Betty also has experienced variety in the rural setting. Betty stated, "in a rural setting you kind of have to have a lot of tools in your box and you can't just specialize in one area; you have to have a lot of varied skills." Betty enjoys the variety she experiences because it pushes her to keep up with the latest evidence.

Moreover, Agnes, Betty, Charles, Dorothy, and Erin love the clients and families they get to work with. Betty's clients and their family members embrace the rural pediatric services because they can get their therapy needs met close to home. Dorothy enjoys working with rural clients because of the close connections she forms with them over time. Charles enjoys working with the rural community members because he feels it is easier to build rapport with rural residents than it would be in a larger city. Erin enjoys working with rural residents because she feels they are more appreciative for the services offered. Agnes enjoys working with clients in all different age groups because it has increased her overall confidence.

### **Skills Needed to Succeed in Rural Practice**

In order to be successful in a rural practice setting, the rural occupational therapy practitioners specified some of the characteristics and skill sets needed. For instance, Dorothy claims it is important to be flexible, creative, have good time management skills, and be self-driven. Agnes mentioned independence, confidence, organization, and self-motivation as being pivotal in rural practice. Agnes attends conferences and asks her colleagues for advice to develop her skill sets. Betty emphasized the importance of being flexible, creative, and patient. Betty works to develop her skills for rural practice by collaborating with families and completing job training. Erin stated, “you need to be able to change your mindset really quickly” due to working with such a wide variety of clients. Erin also mentioned the importance of being assertive and taking the initiative to get things done. Charles believes that rural practitioners need to be creative and understanding of the work conditions of the rural residents. Charles has developed skills for rural practice by touring area companies to gain a better understanding of the work conditions. Moreover, Frankie feels that in order for practitioners to succeed in a rural setting, they need to be flexible, independent, and self-motivated. Frankie has developed skills for rural practice by trying new things and keeping an open mind.

### **Biggest Challenges in Rural Areas**

There are various challenges associated with practicing in a rural setting. Each of the participants noted some of these challenges. One challenge that Frankie, Betty, and Erin have faced is increased travel time. At one time, Frankie was traveling almost 140 miles a day. Frankie felt the increased travel time decreased her productivity and quality

time with clients. Due to the increased travel associated with rural practice, Frankie recently stopped working as an occupational therapy practitioner in a rural setting and now holds an administrative position. Travel is a challenge for Betty as well because she has to watch for deer on the side of the road and she drives about two hours each day. Erin also dislikes the increased travel time associated with rural practice, especially in the winter months.

Another common challenge associated with rural practice is the lack of other occupational therapy practitioners for collaboration. Agnes, Betty, Dorothy, Erin, and Frankie experienced a lack of other practitioners and mentors to collaborate with. Agnes mentioned that there are a limited number of occupational therapy practitioners in her rural setting. Agnes has overcome this challenge by contacting occupational therapy practitioners in surrounding areas when she has questions. Additionally, Agnes will collaborate with other disciplines, such as physical therapy. Similar to Agnes, Betty feels a disconnect from other practitioners. In order to collaborate, Betty has to put forth extra effort to contact area practitioners when she has questions or concerns. Dorothy has overcome the challenge of a limited number of rural practitioners by calling and emailing former professors and classmates. When Erin first entered rural practice, she was completely on her own. There were no other occupational therapy practitioners around, so Erin had to reach out to the physical therapists, former classmates, and professors. Frankie mentioned that it is difficult to collaborate with other occupational therapy practitioners in rural areas because in rural areas, practitioners are “spread so thin.” Frankie stated, “there are just so few and far between that you don’t really get the OT department feel.”

Some additional challenges to rural practice include increased difficulty maintaining confidentiality, gaining the acceptance of rural residents, and a decreased number of referrals from physicians in larger communities. Dorothy mentioned that it can be challenging to maintain confidentiality in rural areas because everyone knows each other, and clients will try asking about one another. Dorothy addresses the challenge of confidentiality by stating to her clients, “I can’t say” when they ask how someone else is doing. Dorothy is able to do this because she has built up rapport with the clients. Additionally, Dorothy discussed how difficult it was for her to gain the acceptance of the community members. Dorothy was not from the area, and the clients knew nothing about her. She gained their acceptance by taking notes on their interests and sharing some small details about herself. Opening up to clients, has helped Dorothy to build rapport and gain the trust of her clients. Charles experiences challenges related to a lack of referrals for neurological deficits. Most of the clients who have had a stroke are sent to larger cities, which is frustrating for Charles because the rural clinic that he works at has the services and equipment needed to help clients who have had strokes. Charles has overcome this challenge by advocating for his practice and calling physicians in the larger towns to build rapport with them and gain their trust. Erin has also experienced increased difficulty getting appropriate referrals. Erin has addressed the issue of inappropriate referrals by offering in-services to area physicians and by publishing articles in the area newspaper to educate the community on the profession of occupational therapy.

### **Educational Preparation for Rural Practice**

Overall, most of the rural occupational therapy practitioners felt that their entry level education did help to prepare them for rural practice. Agnes, Frankie, and Charles

especially felt that their entry level education helped to prepare them for rural practice. Agnes highlighted the importance of continuing to learn new information when in practice. Agnes gained knowledge by attending continuing education courses that are applicable to her practice setting. Then, Charles and Erin felt that their fieldwork experiences helped to solidify what they learned in school. Charles stated, “school does a good job of setting up that base, but then your fieldworks really solidify your skills.” Betty felt that her pediatric instructor provided her with a solid base for practicing pediatric therapy in the rural setting. Betty felt like she had the observational and clinical decision-making skills necessary to succeed in rural practice due to her educational experience. Betty wishes she would have had more education on developing new programs. Dorothy felt that her entry-level education helped to prepare her for rural practice, but she didn’t necessarily feel ready to be on her own in a rural setting. Dorothy had to use her resources and network when she first entered rural practice because she was on her own. Moreover, Dorothy feels that more case studies on clients in rural settings would have better prepared her for rural practice. Dorothy sees clients in many different settings due to practicing in a rural area. Erin did not feel that her entry-level education helped to fully prepare her for rural practice. Erin did not feel that she had enough education on treating shoulders. Similar to Dorothy, Erin feels it would have been beneficial to have more case studies that are focused on working with clients in different settings. Erin also feels it would have been beneficial if her educational program had more days spent on splinting. Frankie felt that her entry level education did help to prepare for rural practice, but she wishes that the pediatric coursework would have been more spread out throughout her education. It was challenging for Frankie to work with

pediatric clients initially because it had been so long since she had her pediatric coursework. In fact, Frankie stated, “Having pediatrics more split up throughout all of our schooling or placed at the end because that is what I used and you only get peds...I think it’s your first year in the program and so it was...I had to dig when I finally switched into peds because I hadn’t used it...I mean it was my first year and then I practiced for two years without it and so I really had to go back to all of my notes.”

### **Use of Models and Occupation-Based Interventions**

All of the participants mentioned the use of occupation-based interventions in their practice; however, only Frankie, Erin, and Dorothy regularly apply occupation-based models to their practice. Both Frankie and Dorothy believe that occupation-based models help guide their practice. The use of models has helped Frankie determine goals and interventions specific to the needs of her clients. Erin mentioned that she does think about the Model of Human Occupation (MOHO) to determine what her clients want and need to be able to do. Dorothy feels that the use of models has helped her to grow as a practitioner. Although Agnes does not utilize models, she is always incorporating occupation-based interventions into her practice. For example, in inpatient settings Agnes will work with clients on occupations such as hygiene, to help prepare her clients to discharge home. Agnes especially incorporates occupation into her practice when seeing clients in their homes. Agnes completes home evaluations to determine which occupation-based intervention would most meet her clients’ needs. In addition, since Betty works primarily with the pediatric population, she regularly utilizes the childhood occupation of play to help her clients succeed and meet their goals. Charles believes it is important to use occupation-based interventions because it is motivating to clients, and

occupation promotes client engagement. Charles especially utilizes occupation-based interventions when working on daily living skills with his clients.

### **Knowledge and Skill Sets**

The occupational therapy practitioners identified that their overall knowledge and skill sets have increased as a result of working in a rural setting. Agnes, Betty, and Erin have developed skills for rural practice by going to continuing education courses. Erin will choose continuing education courses that meet the unique needs of her clients. For instance, Erin found a continuing education course on shoulders. Erin did not feel as comfortable treating shoulders, and she had a number of clients with shoulder injuries/surgeries. In addition to attending courses, Agnes also utilizes her professional networks, and she isn't afraid to try new things. As a rural practitioner, both Agnes and Betty have had to try new things to meet the needs of the populations they work with. For example, at Agnes' setting, she had to learn how to do more industrial work, such as mask fitting and pre-work screening. Betty had to learn a lot of her skills on the job. Betty mentioned learning a lot from the mistakes she made when she first started practicing in a rural setting. Charles has developed his skills for rural practice by touring area factories so that he can better serve the needs of the clients he is serving. Dorothy discussed how her professional relationship with the physical therapy practitioners has helped her to develop skills and knowledge for rural practice. Co-treating clients with physical therapy has been especially beneficial for Dorothy, as she has gained a tremendous amount of knowledge from them. Frankie feels that the variety in rural practice has helped her to develop skills because she has to be able to "do a little bit of everything."

## **Barriers to Completing Continuing Education**

The occupational therapy practitioners identified that the largest barrier to completing continuing education was the increased travel time needed to get to the courses. Frankie mentioned having to travel long distances. Fortunately, Frankie's workplace paid for her courses and the travel time. Betty has also had to travel long distances to complete her continuing education courses, but she often flies which helps to decrease time on the road. Cost can be another barrier to completing continuing education courses. In an effort to reduce the cost of attending courses, Betty tries to attend the local conferences. Unfortunately, the local conferences do not always have the training or information that Betty needs for her setting. When Betty is not able to travel she tries to find continuing education courses online. Agnes also has completed some of her continuing education courses online. When Agnes does travel to complete her continuing education she often has to travel a distance, which means time away from her clients. Dorothy often has to travel "4-5 hours" to get to her continuing education classes. Although there are options for completing the courses online, Dorothy prefers to attend the classes in person because she likes hands on learning. Charles also has had to travel long distances to complete his continuing education. Erin tries to attend courses in areas where she has family to cut the expense of travel. Additionally, Erin has overcome the barrier of distance by completing her continuing education online.

## **Mentors in Rural Practice**

Most of the occupational therapy practitioners did not have occupational therapy practitioners as their mentors. Some of the practitioners reported having physical therapists as mentors when they first started working in the rural setting. Frankie did not



have occupational therapy practitioners as mentors in any of her rural positions. When Frankie first came to the school setting, a physical therapist was her mentor. The physical therapist taught Frankie a lot about school-based therapy. Similar to Frankie, Charles did not have mentors when he entered rural practice either. Therefore, Charles had to use his resources and network with occupational therapy practitioners in surrounding areas. Since Charles did not have as much experience with hands, he would call an area practitioner so that he could help clients with hand injuries. Charles also completed courses and read articles to increase his knowledge on hands. Agnes and Betty did not have mentors either and therefore, they had to look back at their textbooks and attend courses to gain more knowledge. Betty also discussed contacting other occupational therapy practitioners if she had questions. Dorothy relied on the physical therapy practitioners in her setting if she had site specific questions. Otherwise, Dorothy would contact her former professors and classmates. Dorothy learned a lot by co-treating her clients with the physical therapists at her site. Erin mentioned having no mentors on site but, she considered her long-distance occupational therapy networks to be mentors. Furthermore, Erin would ask questions to the physical therapist that she worked with. When Erin had questions that her networks could not help her to answer, she would do research and look up information.

### **Final Assertion**

The final assertion directly reflects the four components of the Professional Identity Model (Tornebohm, 1991). The experiences of occupational therapy practitioners working in rural areas is largely influenced by personal interests and experiences. Other factors that influence the experiences of rural practitioners include the changing contexts and professional networks available. The rural context provides

practitioners with variety and a chance to connect with members of the community. Unfortunately, many rural practitioners experience extended travel time which decreases productivity. Moreover, the rural practitioners indicated that rural practice is both rewarding and challenging. Many of the challenges associated with rural practice are evident in all four components of the Professional Identity Model (Tornebohm, 1991). For instance, the impact of motivation and drive can be seen in both the world view and competency components of the Professional Identity Model. The qualitative findings of the study help to increase understanding of each component of the Professional Identity Model (Tornebohm, 1991) which helps to improve success in rural practice. Overall, the qualitative findings support the different components of the Professional Identity Model (Tornebohm, 1991). Each element of the model was found to be important to understanding rural practitioners and can be applied when preparing and maintaining practitioners in these settings.

## **CHAPTER V**

### **DISCUSSION, CONCLUSION, LIMITATIONS**

Chapter V provides a discussion of the qualitative findings. Some of the similarities and differences between the current study and the supporting literature will be presented in this chapter. This chapter also summarizes some of the key findings and implications of the qualitative study. In addition, the chapter will include some of the limitations and recommendations for future research on rural occupational therapy practitioners.

#### **Discussion of Qualitative Data Analysis**

The main purpose of this qualitative study was to gain an overall understanding of the experiences of occupational therapy practitioners working in rural areas of Minnesota and North Dakota. The data analysis was completed with the use of the Professional Identity Model (Tornebohm, 1991) and Corbin and Straus's (2008) phenomenological methods. Data was gathered by interviewing six occupational therapy practitioners, practicing in rural areas of Minnesota and North Dakota. The interview questions reflected the different components of the Professional Identity Model (Tornebohm, 1991) and included: the (a) interests of the rural practitioners, (b) opportunities for professional socialization, (c) the workplace context, (d) the impact of entry-level education, (e) the use of models, and (f) competency in rural practice.

Before interviewing the rural practitioners, the researchers completed a thorough review of literature that pertained to rural practice. The literature review revealed that there is limited literature on rural practice in the United States. Although the researchers found limited research in the United States, there was literature on rural occupational therapy practice in Australia, Canada, and South Africa. Moreover, few of the studies were specific to occupational therapy. Many of these studies pertained to recruitment and retention rates of allied health professionals in rural areas (Solowiej et al., 2010; Weinhold & Gurtner, 2014; Winn et al., 2014).

It is not uncommon for occupational therapy practitioners in Minnesota and North Dakota to practice in rural areas. After all, Minnesota and North Dakota are primarily rural states, with a majority of the counties comprising of populations with 10,000 people or less (United States Department of Health and Human Services, 2017). Occupational therapy practitioners working in rural areas of these states, have a wide variety of experiences. The experiences of rural occupational therapy practitioners are directly related to their professional identity.

The four components of the Professional Identity Model (Tornebohm, 1991) can be used to help explain the experiences of rural occupational therapy practitioners. As mentioned in previous chapters, the four components of the Professional Identity Model (Tornebohm, 1991) include: (a) interests, (b) field of action view, (c) world view, and (d) competency (Tornebohm, 1991). Previous studies on rural occupational therapy practice have not utilized the Professional Identity Model (Tornebohm, 1991) to understand the experiences of the rural practitioners, making this study one of a kind. Furthermore, previous research has looked at the experiences of rural healthcare workers, but few have

looked specifically at the experiences of occupational therapy practitioners working in rural areas (Solowiej et al., 2010; Roots et al., 2014). The experience of working as an occupational therapy practitioner in a rural area of Minnesota and North Dakota influences and is influenced by a practitioner's professional identity. The experiences of rural occupational therapy practitioners can be best understood by looking at the following ten themes: (a) *rural practitioners growing up in a rural area*, (b) *rural practitioners working their entire career in a rural area*, (c) *enjoyment of the flexibility, variability, and people in rural practice*, (d) *the skills needed to succeed as a rural practitioner*, (e) *challenges related to working in a rural practice setting*, (f) *the impacts of entry-level education*, (g) *use of models and occupation-based interventions*, (h) *impact of rural practice on knowledge and skill sets*, (i) *barriers to completing continuing education in a rural setting*, and (j) *the lack of mentors in rural practice*.

Ten themes emerged from the analysis of the interviews with the rural occupational therapy practitioners. These themes are evident in the four components of the Professional Identity Model (Tornebohm, 1991). The first theme that is evident within the interest component of the Professional Identity Model (Tornebohm, 1991) includes: (a) *rural practitioners growing up in a rural area*, (b) *rural practitioners working their entire career in a rural area*, and (c) *enjoyment of the flexibility, variability, and people in rural practice*. The second component of the Professional Identity Model (Tornebohm, 1991) is the field of action view, which is supported by eight of the ten themes. The eight themes that support the field of action view include: (a) *rural practitioners working their entire career in a rural area*, (b) *enjoyment of the flexibility, variability, and people in rural practice*, (c) *the skills needed to succeed as a rural practitioner*, (d) *challenges*

*related to working in a rural practice setting, (e) the impacts of entry-level education, (f) impact of rural practice on knowledge and skill sets, (g) barriers to completing continuing education in a rural setting, and (h) the lack of mentors in rural practice.*

Furthermore, the world view can be seen in three of themes and these include: *(a) the impacts of entry-level education, (b) use of models and occupation-based interventions, and (c) impact of rural practice on knowledge and skill sets.* Finally, the competency component of the Professional Identity Model (Tornebohm, 1991) is supported by the following themes: *(a) enjoyment of the flexibility, variability, and people in rural practice, (b) the skills needed to succeed as a rural practitioner, (c) the impacts of entry-level education, (d) use of models and occupation-based interventions, (e) impact of rural practice on knowledge and skill sets, (f) barriers to completing continuing education in a rural setting, and (g) the lack of mentors in rural practice.*

### **Discussion of Findings**

Similar to the literature, the rural practitioners were more likely to practice in a rural setting if they grew up in a rural area (Daniels, et al., 2007; Gallego et al., 2015). Four out of the six participants indicated that they were interested in practicing in a rural practice setting because they had grown up in a rural area. This is consistent with the first theme, *rural practitioners growing up in a rural area.* According to Daniels et al. (2007), healthcare practitioners are more likely to work in a rural area if they grew up in or completed a practicum in a rural setting. Moreover, Gallego et al. (2015) found similar results with 71% of the rural practitioners indicating that they grew up in a rural area. In addition, Daniels et al. (2007) indicated that it is easier for practitioners to get job placements in their hometowns. Job placement in a hometown did increase the likelihood

of getting a job for one of the participants, as he was able to find a job in his hometown when many of his classmates were not able to secure a job. Furthermore, some of the rural practitioners came to rural practice as a result of a spouse's job, which was also consistent with the literature. According to Maseko et al. (2014), 53% of rural practitioners indicated that their spouses had an influence on their decision of where to work.

Furthermore, many of the participants who entered rural practice have remained in rural practice for their entire career. This is in conjunction with the second theme, *rural practitioners working their entire career in a rural area*. Many of the participants indicated that they worked in the rural setting for their entire career due to increased job satisfaction. As noted by Maseko et al. (2014), it is important that rural practitioners enjoy working in the rural setting. Gallego et al. (2015) found that 94% of rural practitioners find the rural setting enjoyable.

There are various factors regarding rural practice, that occupational therapy practitioners find enjoyable. Some of the factors that increase enjoyment of rural practice include the *enjoyment of the flexibility, variability, and people in rural practice*, which is the third theme. As mentioned by Waite et al. (2015), positive interpersonal relationships with clients can help to increase therapy outcomes. Furthermore, similar to the findings by Lloyd et al. (2014), the rural practitioners indicated the importance of having a passion for their jobs. Many of the participants indicated that they are passionate about what they do as rural practitioners.

As mentioned by both the participants and Waite (2015), the variety associated with rural practice requires occupational therapy practitioners to be creative and flexible.

This is consistent with the fourth theme, *the skills needed to succeed as a rural practitioner*. Both the participants and Roots et al. (2014) indicated that occupational therapy practitioners need to possess a wide variety of skills in order to be successful in rural practice. Waite (2015) noted the importance of being adaptable in rural settings because there may be limited resources and contexts available. As mentioned by Bath et al. (2015) rural practitioners often work with clients in a range of age groups. Five out of the six participants indicated that they work with a variety of populations, due to the rural context. Many of the participants mentioned being more of a generalist, since they do see so many different age groups in the rural setting. Like the study by Roots et al. (2014), many of the participants indicated that the rural settings helped them to expand their skills sets.

The fifth theme, *challenges related to working in a rural practice setting*, is also evident in the supporting literature. One challenge mentioned both in the literature and by the participants, included travel. Weinhold and Gurtner (2014) indicated that travel in rural areas can be difficult due to poor weather conditions and increased time on the road. Many of the participants indicated that that increased travel time was a challenge for them. Waite (2015) noted that some rural practitioners have to travel hundreds of miles in a single day. This is consistent with a report from one of the participants who traveled up to 140 miles per day. Furthermore, both the literature and the participants indicated that the increased travel time decreases their productivity (Lincoln et al., 2013; Weinhold & Gurtner, 2014; Waite, 2015). Similar to the findings of the current study, Weinhold and Gurtner (2014) found that rural settings often lack needed equipment and facilities. Another challenge indicated in both the literature and by the participants included a lack



of other practitioners to collaborate with, leading to professional isolation (Lloyd et al., 2014; Weinhold & Gurtner, 2014; Roots et al., 2014). Most of the participants indicated that they are the only occupational therapy practitioner in their rural setting. These results support the findings by Roots et al. (2014) who found that rural practitioners often feel isolated. Frankie indicated feeling isolated from other practitioners, due to being the only occupational therapy practitioner in her practice setting. As mentioned by Weinhold and Gurtner (2014), rural practitioners see a variety of clients in a number of different practice settings. Moreover, Lloyd et al. (2014) found that rural practitioners often experience a lack of supervision and mentorship. This supports the findings of the current study, as many of the participants indicated that they did not have mentors when they first came to the rural practice setting. Maintaining confidentiality was a challenge that the participants faced; however, confidentiality was not mentioned as a challenge faced by rural practitioners in the available research evidence. Rather, previous research indicated that paperwork was a challenge for rural practitioners (Lincoln et al., 2013; Weinhold & Gurtner, 2014). Paperwork was not mentioned as a challenge faced by the participants in the current study.

Moreover, *the impacts of entry-level education*, are present both in the existing literature and in the current study. Dissimilar to the existing literature, some of the participants in the current study felt that their entry-level education prepared them well for their rural practice setting (Roots et al., 2014). According to Roots et al. (2014), an entry level education is not always sufficient for rural practice. Similar to the findings by Roots et al. (2014), Dorothy indicated that she had to attend continuing education courses

and network with her instructors and other occupational therapy practitioners because she lacked experience. Analogous to the findings by Weinhold and Gurtner (2014), Erin and Dorothy did not feel they had the professional supports they needed when first coming to the rural setting.

In addition, the *use of models and occupation-based interventions* are reflected in both the literature and the findings from the current study. Only two out of the six participants indicated that they utilize occupation-based models. One model mentioned in both the literature and by one of the participants included the Model of Human Occupation (MOHO). Erin noted that she regularly utilizes MOHO. This is similar to the findings by Lee, Taylor, Kielhofner, and Fisher (2008) who indicated that MOHO is the most commonly used model. Similar to Erin, Lee et al. (2008) found that practitioners use MOHO to help motivate clients. Although other models were not mentioned by the participants, they did indicate that they utilize occupation-based interventions on a regular basis.

Practicing as an occupational therapy practitioner in a rural setting has a huge *impact on knowledge and skill sets*. Unlike the participants in the current study, Lloyd et al. (2014) indicated that rural setting can make workplace learning difficult due to limited resources and isolation. The participants in the current study felt that the rural practice setting helped to increase their knowledge and skill sets because they have had to learn many skills to meet the needs of the diverse populations they are working with. Similar to the findings by Lloyd et al. (2014), the participants indicated that they network with other professionals and attend continuing education courses to overcome to barriers to workplace learning.

As mentioned in the literature and the current study there are various *barriers to completing continuing education in a rural setting*. Similar to the findings by Solowiej et al. (2010), the participants mentioned that it can be challenging to complete continuing education due to a lack of professional development opportunities in rural settings. Both the participants and Devine (2006) indicated that it can be difficult for rural practitioners to complete continuing education due to increased travel time and time off work. Moreover, like Devine et al. (2006), Betty indicated that it can be costly for rural practitioners to attend continuing education courses because the courses are usually not available in the rural settings.

The tenth theme, *the lack of mentors in rural practice*, is also apparent in both the current study and the existing literature. As indicated by Lincoln et al. (2013), there are not always adequate opportunities for mentorship in rural settings due to the limited number of rural occupational therapy practitioners. Similar to Lincoln et al. (2013), most of the participants did not have mentors and they were the only ones in their position when they came to rural practice. Some of the participants mentioned that they were mentored by physical therapists, while others had no mentors at all. This finding supports the findings by Roots et al. (2014), who found that there is a lack of mentorship and supervision opportunities in rural settings.

### **Conclusion/Recommendations**

The main purpose of this study was to gain an understanding of the experiences of rural occupational therapy practitioners practicing in Minnesota and North Dakota. In addition, the study aimed to gain a better understanding of the experiences of rural occupational therapy practitioners through the lens of the Professional Identity Model

(Tornebohm, 1991). This is the first study of its kind to explore the experiences of rural occupational therapy practitioners in the midwestern United States. Previous studies on rural occupational therapy practice have taken place primarily in Australia and Canada. Different aspects of rural practice were identified through the lens of the Professional Identity Model (Tornebohm, 1991) to enhance understanding of the impact of rural practice on the professional identity of rural practitioners. The four components of the Professional Identity Model (Tornebohm, 1991) were used to understand the professional identities of the participants in the study.

One theme present throughout the study was that the overall experiences of rural occupational therapy practitioners is influenced by their interests, experiences, changing contexts, and professional networks. Many of the rural practitioners indicated that they were drawn to practice in a rural setting due to growing up in a rural area. Additionally, the researchers found that the rural context largely influenced the professional identity of the rural practitioners in the study. The changing contexts and variety was seen by most of the participants as a benefit to working in the rural setting. Many of the participants indicated that they enjoyed working with the different populations because it helped them to stay current and up to date on a variety of skill sets.

The impacts of the rural setting were both positive and negative. Some of the participants indicated that working in a rural practice setting helped to increase their skill sets and competency; however, many of the participants felt isolated and disconnected from other occupational therapy practitioners. Furthermore, the rural context provides practitioners with variety and a chance to connect with the community; however, many rural practitioners have extended travel time. In order to succeed in rural practice settings,

the participants indicated that occupational therapy practitioners need to be self-motivated and driven.

To increase the understanding of the experiences of rural occupational therapy practitioners, it is recommended that future research focus on the experiences of occupational therapy students in rural practice settings and the impact of the rural setting on their interest in rural practice. Furthermore, a quantitative study should be conducted to better understand the findings of the current study. It is also recommended that future research focus on the use of technology and telehealth in rural settings to better understand the impact of technology on a rural practitioner's ability to network with other practitioners. After all, the use of technology and telehealth is an emerging area in occupational therapy practice.

### **Limitations**

Various limitations were present in the current study. Future research should be completed on the topic of rural occupational therapy practice. The review of literature indicated that there is limited research on the experiences of rural occupational therapy practitioners in the United States. There is even less literature on the Professional Identity Model (Tornebohm, 1991) and its use in understanding the professional identities of rural practitioners. Another limitation was the small sample size. There were only six participants in the current study and all of the participants were either from Minnesota or North Dakota, due to convenience sampling. The small sample size and limited geographic area may limit the ability to transfer and generalize them to the larger population. Moreover, there is potential for researcher bias, as the researchers are both occupational therapy students and one of the students grew up in a rural area of North

Dakota. In addition, the semi-structured interviews could also impact the reliability, as the researcher biases could come through in some of the questions. The reliability of the study may also be influenced, as the codes, categories, and themes were predetermined by the Professional Identity Model (Tornebohm, 1991). In the future, it is recommended that researchers include a larger sample size within a wider geographical region of the United States. The sample should be determined with the use of randomized sampling to increase the validity and reliability of the study results. Also, the interviews should be completed by someone who does not have a background in occupational therapy and is not from a rural area.

## **APPENDICES**

## Appendix A

### Interview Protocol

Hi thank you for being here today. The purpose of this qualitative study is to gain an understanding of experiences of occupational therapists working in rural areas of Minnesota and North Dakota. We are interested in hearing about your personal experiences, and how practicing in a rural setting influences your professional identity as an occupational therapist. The structure of this interview is semi-structured, meaning that we have several questions we will be asking, but we might add in other questions to go further into your answers. Today we will be asking more general questions about your experiences as a rural therapist. We will be recording the interview so that we can transcribe the interview for analysis.

The interview should take approximately one hour to complete. Do you have any questions about the informed consent you were emailed? By participating in this interview, you are giving verbal consent to participate in this study. Are you in agreement to participate?

Before we begin, I want you to know that you are free to ask any questions you may have. Moreover, you can withdraw during any point of the interview.

#### **Prior to recording ask the following demographic questions:**

To start the interview, I will need to ask you a few questions regarding your history as an occupational therapist. This will not be recorded.

- How many years have you been practicing as an OT?
- How many years have you worked in a rural practice setting?
- Which state do you practice in?

#### **Now we will begin recording:**

##### **Interests**

1. Tell me about yourself?
2. What drew you to the field of occupational therapy?
3. What brought you to rural practice?
4. Did you practice in other settings, and if so what type and how long?
5. How have your interests impacted your decision to practice in a rural area?
6. What do you like/dislike about rural practice?
7. What area of occupational therapy interests you most?
  - a. How has that changed since coming to a rural setting?

##### **Field of action view**

**Professional Socialization:** I would like to talk with you about professional socialization in rural practice:

8. How do you engage with other OTs in this practice setting?
  - How do you engage with other disciplines in rural practice?



9. What professional networks do you have in place?

**Workplace Context:** Now, I'd like to talk a bit about your workplace context:

10. What factors in this rural setting influence your professional identity?

11. How has the social context influenced your practice?

12. What impact has the physical environment had on your practice?

13. What are some challenges you have faced working in a rural setting?

- What are some ways you overcome the difficulties you face in this setting?

14. What do you think are the skills needed to work in this type of setting?

15. What specifically happens in this setting that might not in a more urban area?

16. What are some of the benefits to working in a rural setting?

17. How have your perceptions of rural practice changed since you started working in this setting?

18. What is the number one take-away from your experience working as a rural OT?

### **World view**

**Entry Level Education:**

19. How did entry-level education prepare you for rural practice?

- a. What would have helped to better prepare you?

**Occupational Behavior Models:**

20. How does occupation and the application of occupation-based models influence your practice?

### **Competence**

**Professional Development:**

21. How have you developed skills for rural practice?

- a. Did you have mentors when coming into rural practice. If so, could you tell be about your experience?

**Continuing Education:**

22. How do you maintain competency?

23. Explain how you complete continuing education in rural practice?

**Metacognition:**

24. How do you deal with situations where you don't have competency?

25. How do you think your skills have changed as a result of working in this setting?

26. Which aspects of this job do you enjoy the most?

27. Which aspects of this job do you least enjoy?

28. What aspects do you like regarding rural practice?

29. What aspects are difficult regarding rural practice?

**Experience:**

30. How has experience impacted your competence?

“Are there any further questions or is there anything you would like to add? Thank you for coming to the interview today. I have really enjoyed talking with you. Today we discussed your experience of working as an occupational therapy practitioner in a rural area. Your participation has really helped contribute to my learning experience of how to conduct research. I enjoyed hearing your stories and getting to know more about your experience with working in a rural setting. The information you have provided will be very helpful for our project and I greatly appreciate your input.”

# Appendix B Consent Form

1

## THE UNIVERSITY OF NORTH DAKOTA

### CONSENT TO PARTICIPATE IN RESEARCH

**TITLE:** Experiences of Occupational Therapists Working in Rural Areas in Minnesota and North Dakota

**PROJECT DIRECTOR:** Sarah Hanson, OTS and Jessica Magee, OTS, Advisor Sarah Nielsen, PhD, OTR/L

**PHONE #:** 701-777-2209

**DEPARTMENT:** Occupational Therapy Department

#### STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate. If you have questions at any time, please ask.

#### WHAT IS THE PURPOSE OF THIS STUDY?

You are invited to be in a research study about the experiences of occupational therapists working in rural areas in Minnesota and North Dakota because you are an occupational therapist working in a rural area.

The purpose of this research study is to gain an understanding of the experiences of occupational therapists working in a rural area in Minnesota or North Dakota. We anticipate the findings to be helpful in understanding the role of a rural occupational therapy practitioner. More specifically, we aim to look at occupational therapists' perceptions related to practicing in a rural area.

#### HOW MANY PEOPLE WILL PARTICIPATE?

Six people will be interviewed in this study through the University of North Dakota. The study will be conducted via phone, Skype, FaceTime or face to face.

#### HOW LONG WILL I BE IN THIS STUDY?

Your total participation will be approximately 2 hours. The initial interview is anticipated to take 1 hour. We will ask you to review your transcribed interview and the analysis of the data each of which are anticipated to take 30 minutes.

#### WHAT WILL HAPPEN DURING THIS STUDY?

Your participation will include one interview via either FaceTime, Skype, phone or face to face at a location of your choice; further participation will occur via email to review the interview transcript for

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Expiration Date:	JUN 19 2018
University of North Dakota IRB	

accuracy. The interview will take approximately 60 minutes to complete, and review of the transcribed interview and analysis of the data will take an addition 30 minutes for each review. During the interview, you are free to skip any questions you prefer not to answer.

**WHAT ARE THE RISKS OF THE STUDY?**

There may be some risk from being in this study. You may experience frustration, fatigue, or vulnerability when completing this interview. Some items may trigger strong emotions related to past interests or events. However, such risks are not viewed as being in excess of the risk experienced on a day to day basis. At any point, you can end the interview if you are uncomfortable.

**WHAT ARE THE BENEFITS OF THIS STUDY?**

You may not benefit personally from being in this study. However, we hope that, in the future, other people might benefit from this study with the experiences of being an occupational therapist practicing in a rural setting.

**WILL IT COST ME ANYTHING TO BE IN THIS STUDY?**

You will not have any costs for being in this research study.

**WILL I BE PAID FOR PARTICIPATING?**

You will not be paid for being in this research study.

**WHO IS FUNDING THE STUDY?**

The University of North Dakota and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

**CONFIDENTIALITY**

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by Government agencies, the UND Research and Compliance office, and the UND Institutional Review Board.

Any information that is obtained in this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. You will be assigned a pseudonym in order to prevent any links between you and the information you share during the interview. Printed research records will be kept in a locked file and computer files will be kept on password protected computers. Only the researchers and their study advisors will have access to the records. If the researchers write a report or article about this study, we will describe the study results in a summarized manner so that you cannot be identified.

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Researchers will use audio recording during interviews to collect data. Following interviews, the researchers will transcribe the audio digital record of the interview verbatim. Only researchers and the advisor will have access to the audio recordings through a password protected computer. You will be provided with the transcribed data via email after initial interview to review accuracy. Audio recordings will be deleted following transcriptions.

If a request is made by the program director/administrator about the study results, the only data that will be shared is the data summary sheet that will have no direct identifying link to any specific participant.

#### **IS THIS STUDY VOLUNTARY?**

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without penalty. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota.

#### **CONTACTS AND QUESTIONS?**

The researchers conducting this study are Sarah Hanson and Jessica Magee under the supervision of Sarah Nielsen. You may ask any questions you have now. If you later have questions, concerns, or complaints about the research please contact Sarah Hanson at (218) 791-0708 or Jessica Magee at (701) 490-1442. Further questions, concerns, or complaints can also be directed at the students' advisor, Sarah Nielsen at (701) 777-2208.

If you have any questions regarding your rights as a research subject, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279 or [UND.irb@research.UND.edu](mailto:UND.irb@research.UND.edu).

- You may also call this number about any problems, complaints, or concerns you have about this research study.
- You may also call this number if you cannot reach research staff, or you wish to talk with someone who is independent of the research team.
- General information about being a research subject can be found by clicking "Information for Research Participants" on the web site: <http://und.edu/research/resources/human-subjects/research-participants.cfm>

**By participating in the interview you are consenting to participate in the study. Please keep a copy of this document for your records.**

Approval Date:	JUN 20 2017
Expiration Date:	JUN 19 2018
University of North Dakota IRB	

Appendix C  
Recruitment Letter

**Recipient's email:**

**Sender's Email:** [sarah.hanson.1@und.edu](mailto:sarah.hanson.1@und.edu); [jessica.magee@und.edu](mailto:jessica.magee@und.edu)

**Subject:** Occupational Therapists Working in Rural Areas of Minnesota or North Dakota Needed for Qualitative study

Hello,

Our names are Sarah Hanson and Jessica Magee and we are third year occupational therapy students at the University of North Dakota. Thank you for taking the time to read this email. We are completing an Independent Study for graduation. We have contacted you because you practice occupational therapy in a rural area of either Minnesota or North Dakota.

We are conducting a phenomenological qualitative study to examine the experiences of occupational therapists who work in rural areas, and more specifically who work in Minnesota or North Dakota. For this study, we are looking for occupational therapists who have been practicing in a rural setting for at least 1 year. To complete this study, we will conduct semi-structured interviews with the selected therapists. Participation will include one interview via either FaceTime, Skype, phone or face to face at a location of your choice. Further participation will occur via email for transcription review and member checking. The interview will focus on questions addressing Competence, Interests, World View, and Field of Action View of rural therapists. We anticipate the findings to be helpful in understanding the role of a rural occupational therapy practitioner. More specifically, we aim to look at occupational therapists' perceptions related to practicing in a rural area. The interview will take approximately 1 hour to complete. Additionally, you will be asked review the transcribed interview and the analysis of data, which will take about 30 minutes. The researchers will email you the transcribed interviews and the data analysis.

You have been selected as a potential participant in this study because you are listed as a therapist working in a rural area of either Minnesota or North Dakota. If you are willing to participate in this study or want more information, please reply to this email within 2 weeks. We have also attached the informed consent for this study for your review.

Thank you and we look forward to hearing back from you!

Sarah Hanson, MOTS and Jessica Magee, MOTS  
Sarah Nielsen, PhD., OTR/L, Faculty & Advisor

[sarah.hanson.1@und.edu](mailto:sarah.hanson.1@und.edu)  
(218) 791-0708

[jessica.magee@und.edu](mailto:jessica.magee@und.edu)  
(701) 490-1442

[sarah.k.nielsen@med.und.edu](mailto:sarah.k.nielsen@med.und.edu)  
(701) 777-2208

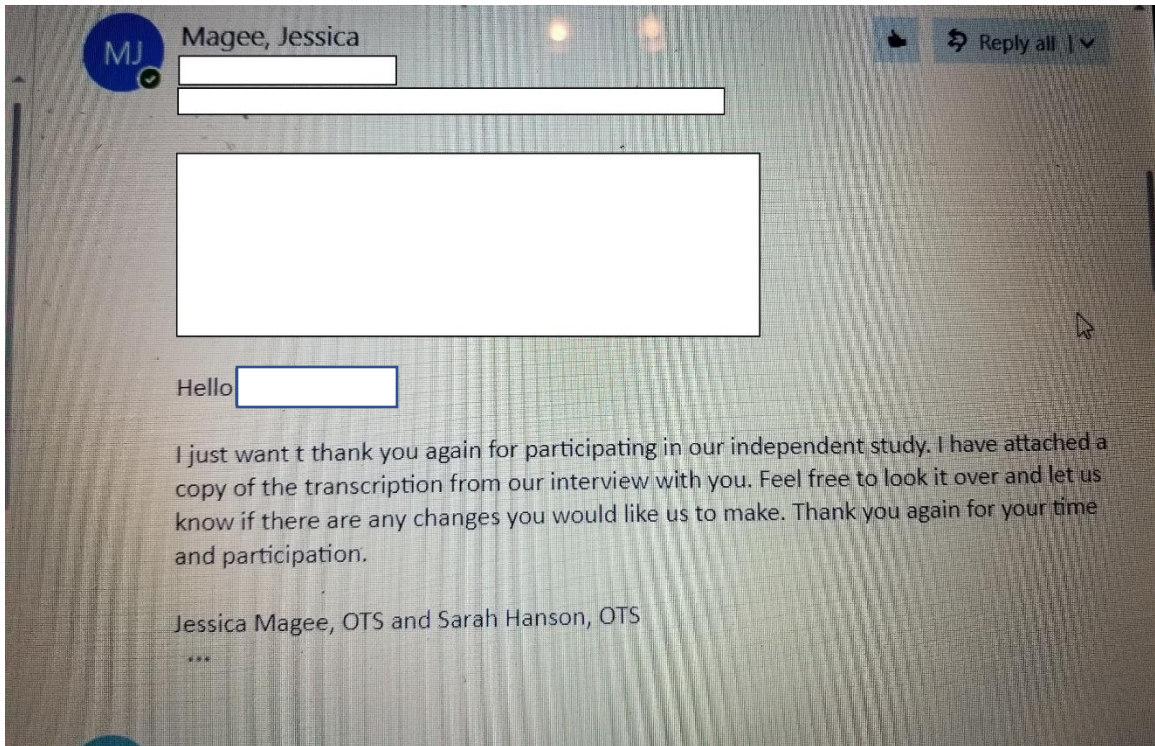
Appendix D  
Coding

Figure 2: Coding

<b>Codes</b>			
<ol style="list-style-type: none"> <li>1. Personal traits</li> <li>2. Life experiences</li> <li>3. Professional socialization</li> <li>4. Workplace context</li> <li>5. Entry level education</li> </ol>	<ol style="list-style-type: none"> <li>6. Occupational behavior models</li> <li>7. Meta-cognitive strategies</li> <li>8. Experience</li> <li>9. Professional development</li> <li>10. Continuing education</li> </ol>		
<b>Categories</b>			
Interests	Field of Action View	World View	Competency
<b>Themes</b>			
<b>Growing Up in a Rural Area</b> (Interests)		<b>Flexibility, Variety, and People</b> (Interests, Field of Action, Competency)	
<b>Entire Career in Rural Practice</b> (Interests, Field of Action)		<b>Skills Needed to Succeed in Rural Practice</b> (Field of Action, Competency)	
<b>Biggest Challenges in Rural Areas</b> (Field of Action)		<b>Educational Preparation for Rural Practice</b> (Field of Action, World View, Competency)	
<b>Use of Models and Occupation Based Interventions</b> (World View, Competency)		<b>Knowledge and Skill Sets</b> (Field of Action View, World View, Competency)	
<b>Barriers to Completing Continuing Education</b> (Field of Action, Competency)		<b>Mentors in Rural Practice</b> (Field of Action, Competency)	
<b>Final Assertion</b>			
<p>Overall, the qualitative findings support the different components of the Professional Identity Model (Tornebohn, 1991). Each element of the model was found to be important to understanding rural practitioners and can be applied when preparing and maintaining practitioners in these settings.</p>			



Appendix E  
Participant Emails





Magee, Jessica

👤 Reply all | ▼

[Redacted]

Sent Items

[Redacted]

Hello [Redacted]

We want to thank you again for your participation in our study on rural therapists. We have finished transcribing your interview and wanted to send it back to you to look over. Let us know if we need to make any changes. Thank you again for your time and participation.

Jessica Magee, OTS and Sarah Hanson, OTS

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