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Solutions for Recruitment and Retention of Rural Psychologists by Rural Psychologists

by

Beth Briggs

B.A., Cabrini College, 2010
M.S., Antioch University New England, 2013

DISSERTATION

Submitted in partial fulfillment for the degree of
Doctor of Psychology in the Department of Clinical Psychology
at Antioch University New England, 2015

Keene, New Hampshire



Department of Clinical Psychology

DISSERTATION COMMITTEE PAGE

The undersigned have examined the dissertation entitled:

**SOLUTIONS FOR RECRUITMENT AND RETENTION OF RURAL
PSYCHOLOGISTS BY RURAL PSYCHOLOGISTS**

presented on August 18, 2015

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Abstract

There are too few mental health providers to meet the needs of residents of rural communities. Rural inhabitants often present for treatment with severe symptoms, high risk for suicide, comorbid chronic health conditions, and socioeconomic stressors. It is difficult to recruit psychologists to rural communities due to limited training in rural psychology, financial barriers to sustaining a practice, frequent ethical dilemmas posed by small towns, and limited cultural amenities. While there is a significant amount of scholarly literature describing the needs of this population and the challenges of maintaining a practice in such geographic regions, there is scarce literature on solutions to these problems. This study addressed this gap in the literature by exploring possible solutions for recruitment and retention of rural doctoral-level psychologists. Forty-eight psychologists practicing in towns with a population of 5,000 or fewer across the United States responded to mailed surveys inquiring about their background information, the factors which contributed to their initiation of and maintenance of a career in rural psychology, and their recommendations for improving recruitment and retention. Most participants worked in private practice providing individual psychotherapy and/or evaluation with adults despite having minimal training in rural mental health during graduate school. The most frequently listed reasons participants had chosen and maintained a rural practice were: a preference for a rural lifestyle, a desire to be close to family and friends, and the population. The most frequently reported suggestions for increasing the number of rural psychologists included: improved financial incentives, highlight the benefits of rural practice (e.g., limited competition, meaningful work), highlight the appeal of a rural lifestyle, and create a professional network of rural providers. Professional incentives such as owning a private practice, meaningful experiences in rural areas including being raised in a rural town, and completing predoctoral internship and

postdoctoral fellowship in rural areas were salient factors for this study's participants and in literature on rural physicians. Recruitment and retention efforts would benefit from targeting psychologists with a preference for and personal connections with rural towns, marketing the low cost of living to offset challenges to competitive salaries, and encouraging activities protective against burnout.

Keywords: rural mental health, professional psychology, underserved populations,
survey research

Solutions for Recruitment and Retention of Rural Psychologists by Rural Psychologists

Chapter 1**Statement of the Problem**

There are too few mental health providers in rural regions to meet the needs of its residents (Fox, Blank, Rovnyak, & Barnett, 2001; Helbok, 2003; Human & Wasem, 1991; Pathman, Konrad, Dann, & Koch, 2004; Pepper, Sandefer, & Gray, 2010; Rainer, 2010). While some authors (Celluci & Vik, 2001) state that there are higher incidences of mental illness in rural areas relative to urban areas, other scholars (Hauenstein et al., 2007; Smalley et al., 2010) argue that rural inhabitants may be equally likely to develop a mental illness as their urban counterparts, yet less likely to receive mental health care. Consequently, individuals seeking mental health services are likely to present with higher acuity and chronicity than in urban areas, due to inability to receive treatment at an earlier point (Smalley et al., 2010). Although the complexities of the barriers to treatment are described in detail below, there exist three overarching contributors to this deficiency in rural mental health care: (a) availability, (b) accessibility, and (c) acceptability.

Availability is defined as the presence of mental health care providers (e.g., psychologists, psychiatrists, counselors, etc.; Human & Wasem, 1991). Overall, outpatient and inpatient mental health care providers and/or facilities are scarce in rural regions, serving as a barrier to treatment utilization (Campbell, Kearns, & Patchin, 2006; National Association of Rural Mental Health, n.d.). Accessibility is defined as an individual's ability to utilize available mental health care. Potential barriers to accessibility in rural areas include income, insurance status, and transportation (Human & Wasem, 1991; Ziller, Anderson, & Coburn, 2010). Finally, acceptability is defined as the likelihood that rural inhabitants will utilize mental health care

when it is both accessible and available. Rural inhabitants are more likely than metropolitan inhabitants to view mental health care as unacceptable due to stigma associated with mental illness and personal or religious beliefs against such treatment (Hargrove, 2000; Harowski, Turner, LeVine, Schank, & Leichter, 2006). Fox, et al. (2001) also found that a preference for turning towards family and friends for emotional support kept rural residents from seeking mental health care when referred after screening positively for a mental illness.

Purpose of the Study

The purpose of this study was to fill in a gap in the rural psychology literature regarding solutions for the barrier of low availability of psychologists in rural areas. This study surveyed psychologists practicing in rural areas in order to determine who they are, what contributed to their decision to chose to work in a rural community, and why they have decided to remain practicing in these rural communities. By answering the below research questions, this study offers recommendations for improving the recruitment and retention of psychologists in rural areas. Finally, this study was designed to directly ask those who have successfully endured the challenges of working in rural communities for suggestions to the problem of too few rural psychologists despite high need for services.

Research Questions

Informed by the literature review in Chapter 2 and the previously defined problem, this study is designed to answer the following research questions:

1. What are the demographic, training, and practice characteristics of currently practicing rural clinical and counseling psychologists?
2. What factors first attracted these psychologists to a rural practice?
3. What has contributed to these psychologists' decision to maintain a rural practice?

4. What suggestions do these psychologists have for improving the recruitment and retention of other rural psychologists?

Rationale of the Study

The focus on low availability of rural psychologists rather than accessibility and acceptability of mental health treatment were selected for multiple reasons. First, there appeared to be a gap in the rural psychology literature on best approaches for increasing the number of rural psychologists. The deficits in available care and its impact on the well being of rural inhabitants are well documented (Hauenstein et al., 2007; Smalley et al., 2010). However, few authors describe solutions to the insufficient number of rural psychologists (e.g., APA, n.d.c; Campbell et al., 2006; Cellucci & Vik, 2001; Kruse & Canning, 2002). Therefore, this study was motivated by a desire to move beyond a declaration of need to an elucidation of solutions.

Second and related, the current climate of health care reform via the Affordable Care Act suggests that there is and will continue to be a significant amount of focus on access to health care (APA, 2012). Third, it was hoped that examining availability of mental health care providers would result in concrete suggestions for those attempting to increase the number of psychologists in rural areas (e.g., individuals recruiting psychologists for settings in rural areas, graduate training programs). And finally, exploring options for improving availability using the methods described below were deemed more feasible than examining larger sociopolitical concepts of underinsurance, prevalence of low socioeconomic status, and culturally informed skepticism of mental health care in rural inhabitants (Hargrove, 2000; Harowski, et al., 2006).

Significance of the Study

Individuals involved in promoting careers in rural health care are most likely to benefit from the findings of this study. This group includes professionals recruiting psychologists for

positions in rural settings as well as educators of graduate level psychology students.

Professional organizations such as the American Psychological Association's Committee on Rural Health and the National Association of Rural Mental Health would also benefit from the findings in this study. In turn, if these individuals and organizations are able to improve their strategies for recruitment and retention, rural communities will benefit from the increased availability of mental health care providers.

Definition of Terms

Rural. There are various definitions of the term rural used throughout the literature. This is in part due to the existence of many rural communities throughout the country and thus an inability to explain a diverse population with one word. While some scholars define the term rural based on population size (i.e., a town of 5,000 or fewer inhabitants; Helbok, 2003), others define rural using sociological factors common in rural communities (e.g., towns with poverty, dispersion of young people to find work, large number of elderly, struggling public services, etc.; Curtin & Hargrove, 2010). Further, some authors have argued that the variance in the application of "rural" has contributed to low availability of mental health services (James & Blank, 2007; Smalley et al., 2010). However, for ease of translation to data collection, when the term "rural" is utilized in this study, it refers to communities with a population of 5,000 or fewer inhabitants (Helbok, 2003). As outlined in the methods section, participants were selected based on the population size of the town in which their practice was located.

Telehealth. The term telehealth is broadly used to refer to the incorporation of technology in medical and mental health care. For the purposes of this study, Jameson and Blank's (2010) definition is utilized: "...telehealth is used to describe the use of communications technology in the education, clinical, training, administrative, and technological aspects of health

care...” (p. 288). This encompasses video conferencing, telephone communication, email communication, and virtual reality programming.

Chapter 2

Literature Review

This literature review orients the reader to the characteristics of individuals residing in rural regions. This foundational understanding informs not only the provision of mental health care but also the training of its providers. Second, the three barriers to treatment previously mentioned are described in depth in order to describe the context of mental health care in rural environments. As previously described, the barrier of availability of psychologists is highlighted throughout this study. Therefore, this section addresses the factors known to impede recruitment and retention of psychologists to rural communities. This will inform the reviewed facilitators of practicing in rural areas.

Unique Characteristics of Rural Environments

Below, I attempted to offer insight into how rural communities may differ from their urban or suburban counterparts. These differences are categorized by cultural characteristics, health status, and demographic characteristics.

Culture. The first overarching characteristic of rural communities is a high prevalence of religiosity (Aten, Mangis, & Campbell, 2010; Helbok, 2003). As such, it is common for individuals to turn towards their religious communities and leaders for guidance during times of stress. Further, given that fundamentalism is common in rural churches (Aten et al., 2010), coincidental cultural beliefs include traditional gender roles as well as a mistrust of those living outside of these fundamentalist beliefs (Aten et al., 2010; Harowski et al., 2006; Hauenstein et al., 2007; Smith, Thorngren, & Christopher, et al., 2009).

The second, yet not unrelated characteristic of rural environments, is an emphasis on a supportive closeness within the community (Werth, Hastings, & Riding-Malon, 2010). This

closeness is likely promoted by the local church. It also manifests as the belief that problems are best solved within the confines of family members and close friends (Fox et al., 2001; Helbok, 2003).

Another characteristic of rural communities is the cultural belief in stoicism and self-reliance (Harowski et al., 2006; Hauenstein et al., 2007; Helbok, 2003; Human & Wasem, 1991). Rural inhabitants tend to believe that misfortune or unhappiness is best dealt with autonomously and without expression of dissatisfaction. Therefore, if a rural inhabitant turns towards social supports during times of emotional distress, it may be unlikely that he or she is encouraged to seek professional mental health care (Jameson & Blank, 2007).

A final cultural characteristic common among rural residents is fatalism (Helbok, 2003). Although not readily apparent, it is likely that this philosophy is connected to both religious beliefs and income that is dependent upon the natural environment (Werth et al., 2010). Some churches may preach the importance of accepting predetermined fate. In addition, for communities that have relied primarily on the natural environment for income, a belief in the inevitability of career hazards (e.g., dangers of coal mining, variability of rainfall affecting crop production, etc.) and poverty likely contributes to a fatalistic view of other aspects of life.

Health. Rural inhabitants are more likely to be chronically ill than metropolitan inhabitants (Hauenstein et al., 2007; Rainer, 2010). Specific chronic illnesses found at a higher rate in rural areas than in urban areas are: obesity, diabetes, heart disease, hypertension, and late stage cancer (APA, n.d.; Smalley et al., 2010). Additionally, there is some evidence to suggest that maternal health is worse in rural regions than in urban regions (APA, 1999).

There have been inconsistent findings on differences in prevalence of mental illness between metropolitan and rural areas. Some have reported higher rates of alcohol abuse or

dependence (APA, 1999; Helbok, 2003), depression, and anxiety (APA, 1999; Campbell et al., 2006) in rural areas compared to metropolitan areas. Studies utilizing a self-rating of overall mental health as poor, fair, good, or excellent, have reported that individuals in rural areas are more likely to describe their mental health as poor relative to individuals in urban areas (Hauenstein et al., 2007; Ziller et al., 2010).

Others have argued that there are no differences in the incidences of mental illness between rural and metropolitan communities, but instead, that the previously mentioned barriers to mental health treatment contribute to more severe presentations of mental illnesses in rural areas (Rost, Fortney, Fischer, & Smith, 2002; Smalley et al., 2010). As Smalley et al. stated, "...the *impact* of these disorders in rural areas is likely greater due to a three-part problem of accessibility, availability, and acceptability of mental health services..." (p. 480). This is supported by the findings of a meta-analysis conducted by Rost et al. demonstrating that there were comparable treatment outcomes for individuals with mildly to moderately severe mental illness in rural and metropolitan areas.

What is evident is that there is a higher rate of suicide completion among individuals residing in rural areas relative to individuals residing in metropolitan areas (APA, 1999; Fiske, Gatz, & Hanell, 2005; Helbok, 2003). Fiske et al. (2005) speculated that higher availability of firearms in rural areas compared to urban areas may contribute to this phenomena given "...that the use of guns rather than another means of suicide was more likely with decreasing urbanicity, after accounting for the effects of gender and ethnicity..." (p. 540).

Demography. As compared to urban areas, rural areas experience a disproportionate rate of poverty (Hauenstein et al., 2007; Helbok, 2003; Human & Wasem, 1991; Jameson & Blank, 2007; Smalley et al., 2010; Werth et al., 2010; Ziller et al., 2010). In fact, "an estimated 14% of

adult rural residents live below the federal poverty line, as compared to 11% of urban residents” (Economic Research Service [ERS], 2004, as cited by Smalley et al., 2010, p. 480). Relatedly, there are higher rates of unemployment (Cook & Hoas, 2007; Hauenstein et al., 2007; Helbok, 2003; Jameson & Blank, 2007; Lu, Samuels, Kletke, & Whitler, 2010; Werth et al., 2010), lower income (Cook & Hoas, 2007; Lu et al., 2010; Werth et al., 2010) and lower education levels (Hauenstein et al., 2007; Helbok, 2003). Helbok also found that as compared to urban individuals, there are higher rates of illiteracy, a factor that likely hinders rural individuals’ ability to obtain higher paying employment.

A study conducted by the American Psychological Association Rural Women’s Work Group and the Committee on Rural Health (1999) found that women are particularly affected by these socioeconomic disparities. For instance, when surveying rural residing women aged twenty-five and older, it was found that 76% had a high school diploma and only 12% had a college degree (compared to 22% of urban women). Further, female-headed households are approximately three times as likely to fall below the poverty line than male-headed households in rural areas. Women in rural areas are also more likely to become pregnant during adolescence than women in urban areas.

Other noteworthy demographic characteristics relate to age and ethnic minority status. In general, residents of rural towns are older than those living in urban areas (APA, 1999; Lu et al., 2010; Werth et al., 2010). There appears to be a higher rate of poverty in rural elderly women than in urban elderly women. This high number of elderly individuals with low economic resources, likely results in family members becoming caregivers. These caregivers may in have difficulties coping with stress associated with this change in role and financial strain. Finally, Werth et al. reported a lower number of ethnic minorities in rural areas than in urban areas.

Therefore, psychologists and clients from ethnic minorities may struggle to navigate building a social support system given the low numbers ethnic minorities in rural areas.

In sum, the above characteristics of rural environments place strain on the provision of mental health care as it is traditionally practiced in metropolitan areas. Psychologists in rural communities are challenged to be responsive to culturally informed stigma towards mental illness, incorporate natural supports into treatment planning, and adapt treatment based on economic and educational backgrounds of patients. Rural patients of mental health care are challenged by their socioeconomic status, cultural context, and health status to overcome the below-described barriers to treatment engagement.

Barriers to Treatment

Availability. Overall, there are an insufficient number of available medical and mental health care providers located in rural areas (Fox et al., 2001; Helbok, 2003; Human & Wasem, 1991; Pathman, et al., 2004; Pepper, et al., 2010; Rainer, 2010). This is particularly evident for individuals diagnosed with severe and persistent mental illnesses (Human & Wasem, 1991; Murray & Keller, 1991) and those in need of inpatient psychiatric care (Campbell et al., 2006; Cook & Hoas, 2007; Jameson & Blank, 2007). In fact, Campbell et al. reported that only one percent of nonmetropolitan counties in the United States have an inpatient psychiatric facility.

Outpatient care is also limited: 55% of the counties in the United States have no practicing psychologists, social workers, or psychiatrists (Campbell et al., 2006) and it is estimated that there are only "...sixteen psychologists per one hundred thousand residents in rural areas..." (The Center for Health Policy, Planning & Research for the American Psychological Association, as cited by APA, n.d.). Werth et al (2010) noted that Gamm, Stone, and Pittman (2003) found that "...twenty-percent of nonmetropolitan counties lack mental health

services...” (p. 538).

The availability of mental health services in rural areas is affected by the decline in popularity of psychiatry as a medical specialty across geographic regions. Cook and Hoas (2007) reported that this decline in popularity has resulted in an aging population of psychiatrists; at the time of this article, the average age of psychiatrists in the United States was over fifty-five, and there is an inadequate supply of new psychiatrists to replace them. The few new psychiatrists entering practice are much more likely to reside in urban areas than in rural areas (Johnson, Brems, Warner, Weiss Roberts, 2006; Nelson, Pomerantz, & Schwartz, 2007). For instance, one study estimated that rural areas in Alaska had one psychiatrist per over 31,000 residents compared to one psychiatrist per 4,800 residents in urban areas (Johnson et al., 2006).

Due to the shortage of rural psychiatrists, rural primary care physicians are more likely to treat mental illness than psychiatrists (Jameson & Blank, 2007). However, this is complicated by a lack of training in psychopharmacology and few instances of integrated medical and psychological care. Further, even though primary care physicians may provide treatment in the absence of an available psychiatrist, there is also a shortage of primary care physicians in rural areas (Nelson et al., 2007; Pathman et al., 2004). Specifically, only nine to eleven percent of the nation’s primary care physicians are practicing in rural settings.

Access. The barrier to treatment most closely associated with rural areas is healthcare access, and the largest impediment to access to care is its cost (Fox et al., 2001). As described above, rural inhabitants are likely to live in poverty (Hausenstein et al., 2007; Helbok, 2003; Human & Wasem, 1991; Jameson & Blank, 2007; Smalley et al., 2010; Werth et al., 2010; Ziller et al., 2010) and be uninsured (Harowski et al., 2006; Human & Wasem, 1991; Jameson & Blank, 2007; Lu et al., 2010; Rainer, 2010; Werth et al., 2010; Ziller et al., 2010). Even when

insured, rural individuals are often underinsured (Cook & Hoas, 2007; Harowski et al., 2006; Hauenstein et al., 2007; Helbok, 2003) and have difficulties affording insurance premiums (Lu et al., 2010). A closer look at the insurance coverage of rural individuals reveals that, compared to urban residents, rural residents are less likely to access insurance coverage through their employer (Lu et al., 2010), spend longer periods of time without health insurance (Smalley et al., 2010), and are more likely to be covered by Medicare (Werth et al., 2010). The higher rate of Medicare coverage in rural areas is likely driven in part by the fact that a larger portion of rural inhabitants are elderly (APA, 1999; Lu et al., 2010; Werth et al., 2010).

Demographic and geographic characteristics of rural areas also impede access to mental health care. Fox et al. (2001) found that typical operating hours of clinics were inconvenient for rural individuals due to their tendency to work long hours. Second, higher rates of illiteracy in rural areas may hinder residents from accessing traditional psychological treatment (Harowski et al., 2006; Helbok, 2003). Last, the geography of rural areas, combined with a lack of public transportation, may make access to the available providers extremely difficult (Hauenstein et al., 2007; Human & Wasem, 1991). Those in need of inpatient care are required to drive a median of forty-two miles to receive it (as opposed to a median of ten miles in urban areas; Campbell et al., 2006). The long distance to inpatient care is compounded by the aforementioned difficulties associated with high rates of poverty and lack of public transportation.

Acceptability. Stigma associated with seeking mental health care is the primary barrier to the acceptability of seeking treatment. While stigmatization of mental illness and mental health treatment affects communities across the nation, some have argued that it is particularly detrimental in rural areas, citing research suggesting that rural inhabitants perceive a greater degree of stigma associated with receiving mental health treatment than their urban counterparts

(Brems, Johnson, Warner, & Weiss Roberts, 2006; Hoyt, Conger, Valde, & Weihs, 1997; Jameson & Blank, 2007; Robinson et al., 2012; National Association of Rural Mental Health, 2006; Smalley et al., 2010; Smith et al., 2009; Stewart et al., 2015). This is further supported by findings that residents of rural areas are less likely to seek mental health treatment than residents of urban areas, even when socioeconomic, logistical, and need for services are controlled (Handley et al., 2014; Harowski et al., 2006). This was even true among individuals who had been referred for treatment by their medical providers (Jameson & Blank, 2007). For example, although Fox et al. (2001) did not compare results of rural and urban inhabitants, they did report that rural participants were provided with evidence that they may have depression, anxiety, or an alcohol use disorder, 81% of participants did not seek mental health services even when provided resources due to feeling that they did not need treatment.

As Human and Wasem (1991) stated, “acceptability of mental health service refers to whether services are offered in a manner congruent with local values, using a mode of delivery appropriate for the rural setting” (p. 234). Cultural values predominant in rural areas such as self-reliance, religion as a healing, strong family connections, and preference for stoicism over addressing conflict combined with a perceived lack of privacy, contribute to rural inhabitants’ hesitancy about seeking mental health care (Harowski et al., 2006; Hauenstein et al., 2007; Helbok, 2003; Jameson & Blank, 2007; Nelson et al., 2007). Even if individuals decide to consider mental health treatment, they may experience criticism, misunderstanding, or advice to discontinue treatment by family, friends, or church community (Hargrove, 2000; Harowski et al., 2006; Jameson & Blank, 2007; Robinson et al., 2012). For instance, Fox, Blank, Rovnyak, and Barnett (1999) found that participants informed that they likely met criteria for a psychiatric disorder were less likely to seek treatment when they were accompanied by a significant other.

The authors speculated that significant others might have reinforced stigmatization of mental health care. Yet, this finding could be interpreted alternatively given that most of these participants reported that they did not seek treatment because they felt that there was no need for help from a professional. Perhaps these individuals felt sufficiently supported by their social network. This alternative interpretation is further supported by the finding that individuals given similar information while alone but later discussed it with a loved one were also unlikely to seek treatment because they believed there was no need for professional help.

When rural inhabitants decide to seek help for mental health concerns, they are more likely to seek treatment from a primary care provider than a mental health provider (Fox et al., 2001; Jameson & Blank, 2007; Nelson et al., 2007). Primary care physicians have described multiple barriers to referring patients for mental health services, including: minimal time due to high patient volume, limited nearby referral sources or long waiting lists for initial appointments, patients declining a referral, and minimal communication from mental health providers following the referral (Harowski et al., 2006; Jameson & Blank, 2007).

Finally, mental health clinicians lacking cultural sensitivity to a rural population may also weaken the acceptability of seeking psychological treatment. Given the prominence of psychologists in metropolitan areas, graduate coursework may omit training in rural culture, such as religiosity, political views, and the influence of geography on lifestyle (Aten et al., 2010; Harowski et al., 2006; Helbok, 2003; Jameson & Blank, 2007; Murray & Keller, 1991). Psychologists providing an urban model of care in a rural setting may inadvertently deter rural patients from engaging in treatment. For instance, a rural patient will feel misunderstood if his or her therapist fails to address the barriers to treatment or underemphasizes the role of family and religion in healing.

The barriers to treatment engagement have implications for the challenges to recruiting and retaining rural psychologists. If the above described barriers result in a low patient volume, psychologists are likely to have difficulties supporting a viable practice. Even if a practice is financially viable, the risk for burnout is high due to a high number of severely mentally ill patients and few local resources for consultation or referral. Those attempting to recruit early career psychologists to rural clinics or psychologists initiating a private practice in a small town will view the challenges as outweighing the benefits.

Barriers to Recruitment and Retention of Rural Psychologists

Increasing the availability of psychologists in rural areas is a difficult task for multiple reasons. While the literature calls for an improvement in the recruitment and retention of rural psychologists, there are also significant challenges faced by those that attempt to initiate or maintain a practice in rural communities. Below, some of the primary training, professional, and personal difficulties faced by psychologists considering a rural practice are described.

Training. Some authors have argued that graduate training in psychology is biased towards urban practice and thus undermines interest and competence in rural practice (Helbok, 2003; Werth et al., 2010). As such, early career psychologists are likely to seek out positions similar to the metropolitan careers that they had been exposed to during graduate training. For those that do start a career in rural psychology, their willingness to remain in a rural community may be challenged by their limited preparation for the unique ethical and cultural factors of this population. For instance, more so than their peers in metropolitan communities, psychologists treating a rural population are forced to remain vigilant of multiple relationships while also recognizing the need within a community (Nelson et al., 2007; Smith et al., 2009). While graduate training may have prepared them in following the ethical code of conduct, it likely did

not prepare them for managing the balancing act of following the code while meeting the needs of a community. As described above, psychologists may feel ill equipped to maintain a culturally sensitive practice given the limited discussion of rural culture in graduate school.

The issue of inadequate training in rural practice and inadvertent bias towards urban practice is likely perpetuated by the limited demand placed on graduate programs for teaching coursework on rural mental health. Given that most Americans reside in urban or suburban areas, it is likely that few graduate students and faculty originate from rural areas. Thus, few with an interest in or experience with rural communities request didactic and clinical training in rural mental health. This low demand for training is exacerbated by few practicum experiences in rural clinics given the high likelihood that graduate programs are located in urban areas. Also, the low availability of psychologists in rural areas translates to a low number of clinical supervisors or faculty specializing in rural mental health.

Practice concerns. In addition to the training issues outlined above, scholars have also written extensively on the challenges of practicing in rural areas. When reviewing below the challenges of maintaining a practice in a rural town, it is easy to understand the low volume of psychologists considering or maintaining a career in rural psychology.

Common ethical dilemmas. Some have argued that certain ethical dilemmas are more likely to arise in a rural practice than in a metropolitan practice. The most frequently discussed is the high likelihood of psychologists engaging in multiple relationships (Campbell & Gordon 2003; Curtin & Hargrove, 2010; Helbok 2003; Schank, Helbok, Haldeman, & Gallardo, 2010; Smalley et al., 2010; Werth et al., 2010). As described in the professional code of conduct, this includes instances when a psychologist is treating an individual while simultaneously in a different relationship with them, treating someone who is associated with another individual the

psychologist is involved with, or agrees to begin a professional relationship with someone who is associated with a client (APA, 2002). It is speculated that multiple relationships are more likely in rural areas than in other settings because of the low population of towns in which psychologists both practice and live. Just as there are a small number of available psychologists in rural areas, there are also a small number of other professionals (e.g., auto mechanics, grocery store employees, primary care physicians, etc.) available for psychologists to utilize. Additionally, rural psychologists often live with the paradox that per the ethical code of conduct, multiple relationships should be minimized as much as possible, yet they need to remain visible within the community to gain trust from residents and referrals from medical providers. Therefore it is understandable that Smalley et al. (2010) argued that the psychologists most at risk for engaging in multiple relationships are those that choose to be active members of their community (e.g., church members, leaders of community organizations, members of the parent-teacher association, etc.). In sum, psychologists in rural areas are required to continuously assess whether all nontherapeutic relationships within their community have the potential to become therapeutic and if multiple relationships are unavoidable, how best to minimize potential for harm for the client (Helbok, 2003; Helbok, 2010; Werth et al., 2010).

In addition to multiple relationships, the ethical responsibility of a psychologist to maintain a client's information confidential and private may be difficult with a rural population (APA, 2002; Helbok, 2003; Werth et al., 2010). For instance, a client's participation in treatment may be disclosed as easily as having his or her car parked in a lot that is visible and known by the community as a psychologist's office. Further, given the culture of "...informal sharing of information..." in tight-knit small communities, individuals that refer patients for

services may not comprehend the psychologists' limits of confidentiality and thus expect him or her to disclose the content of therapy as it progresses (Helbok, 2003, p. 375).

Professional isolation. It has been widely accepted that rural psychologists must maintain a generalist practice (Brems et al. 2006; Curtin & Hargrove, 2010; Hargrove, 1982; Hargrove & Breazeale, 1993; Harowski et al., 2006). Clients from across the lifespan seek treatment from rural psychologists for a variety of disorders that range in severity (Hargrove, 1982). Unless explicitly trained in treating various mental illnesses across the lifespan, psychologists may feel the strain of practicing at the edge of their competence, particularly due to limited referral sources (Smalley et al., 2010; Werth et al., 2010). Furthermore, some rural psychologists have reported a sense of isolation from peers available for consultation regarding ethical dilemmas or treatment of presenting problems outside of one's competency. A sense of professional isolation places psychologists at risk for burnout, a phenomenon that challenges any clinician's ability to maintain stamina while practicing in a rural community (Jameson & Blank, 2007).

Effect on personal life. Another barrier to recruiting psychologists to practice in rural areas is the challenge of living in rural areas in which one practices. For a variety of reasons, psychologists may choose to live in the same community as their clients, increasing the likelihood of encounters outside of the clinical setting (Brems et al., 2006 Campbell & Gordon, 2003; Schank et al., 2010). Psychologists and their family members may feel limited in their ability to engage in otherwise appealing community activities such as the parent-teacher association, athletic leagues, local politics, etc. out of discomfort with extra-therapeutic encounters with current or potential clients.

Although not mentioned in the literature reviewed on recruiting psychologists to rural areas, it is worth considering that one barrier to increasing the number of psychologists in rural areas is that they may have a preference for a metropolitan lifestyle. The economic challenges of rural communities contribute to poorer educational opportunities for psychologists' children and few cultural amenities. Psychologists are also likely deterred from living in rural communities out of concern for social isolation given the challenges of building a social network while minimizing encounters with patients in the community.

Financial barriers. Even if the above barriers are overcome or minimally intrusive for a psychologist, all will face the significant barrier of financial feasibility of maintaining a rural practice. Clients seeking services from a psychologist are likely to be living below the poverty line and elderly (APA, 1999; Hausenstein et al., 2007; Helbok, 2003; Human & Wasem, 1991; Jameson & Blank, 2007; Smalley et al., 2010; Werth et al., 2010; Ziller et al., 2010). As a result, many individuals either rely upon state and federal benefits or out of pocket expenses for health care coverage (Lu et al., 2010; Smalley et al., 2010; Werth et al., 2010). Therefore, psychologists are likely to receive most of their reimbursement from Medicaid and Medicare. Medicaid notoriously reimburses psychological services at a significantly lower rate than private insurers (Mauch, Kautz, & Smith, 2008). Given the significant barriers to treatment engagement and small population of rural communities, psychologists will likely have a low patient volume relative to their metropolitan peers (Fox et al., 2001). This small caseload combined with low reimbursement rates make it difficult to support a financially viable mental health clinic or private practice.

Limited referrals for psychological assessment. A final barrier to recruiting and retaining psychologists in rural areas is the fewer number of opportunities to conduct

psychological assessment than in a metropolitan setting (Turchick, Karpenko, Hammers, & McNamara, 2007; Werth et al., 2010). This occurrence is likely to occur because of: (a) limited funds to purchase up-to-date test materials, (b) few opportunities for professional consultation, (c) minimal reimbursement by Medicaid and Medicare, and (d) fewer available clinicians to refer clients to for treatment following the assessment. Werth et al. further speculated that psychological assessment might be less common because of concerns regarding conducting assessment outside of one's competence as well as difficulty finding continuing education opportunities for training on updated materials. Regardless of the explanation, a low number of referrals for testing undoubtedly hinders the cost-effectiveness of an assessment practice. Psychologists interested in consistently conducting psychological assessment may be disappointed in the minimal opportunities available to do so.

In sum, it is hard to convince early career psychologists to move to and practice in an small town that is accompanied by so many challenges – lower income than peers in metropolitan areas, professional isolation, high demand for services that may stretch one's competence, and disconnection from personal supports and/or cultural amenities one became accustomed to while training in a metropolitan area. Even if a psychologist intends to return to a rural area in which they were raised, the minimal training and exposure to successful rural practice during graduate school combined with these challenges likely persuade them to consider a career in a metropolitan area. All psychologists considering rural practice must asks themselves if a desire to do good for an underserved population is a strong enough protective factor. Even if they overcome the initial barriers of considering a rural practice, the challenges presented by rural towns endure beyond the initiation of a rural practice. There is a significant

need to illuminate factors that allow psychologists to begin and maintain a successful career in rural communities. If it is so difficult to work in a rural town, how do rural psychologists do it?

Facilitators of Rural Practice

Recruiting graduate students and licensed psychologists. Although few authors of rural psychology literature offer concrete recommendations for recruiting graduate students and licensed psychologists to rural communities, literature addressing underserved populations may provide useful suggestions. Kruse and Canning (2002) suggested that graduate programs can contribute to the perceived viability of work with an underserved population if: (a) meaningful clinical training experiences are available, (b) students have contact with psychologists who are satisfied with working with underserved populations, and (c) emphasis is placed on relevant loan repayment opportunities. One popular loan repayment program is The National Health Service Corps, which offers licensed psychologists up to \$50,000 in loan repayment for two years of service in a designated Health Professional Shortage Area (HPSA; “Loan Repayment Program,” 2015). Many HPSAs are located in rural areas and thus are a good fit for psychologists interested in a rural practice but are concerned about the financial burden of loan repayment and low reimbursement rates. Another loan repayment program is the Public Service Loan Forgiveness (PSLF), a program that allows individuals to forgive their remaining federal loans after they have made 120 payments and have worked in either government or a tax-exempt not-for-profit agency full-time (Federal Student Aid, 2013). This may be accessible for individuals working in rural areas that do not qualify as HPSAs.

In addition to loan repayment opportunities, other agencies aid the barrier to recruitment of professional isolation. The National Rural Recruitment Retention Network and Indian Health Services serve as resources for graduate students and early career psychologists seeking job

opportunities with a rural population. These agencies provide databases of available positions in rural communities across the community as well as provide professional resources (“About Us,” 2015; “Career Opportunities,” n.d.). Finally, the National Association for Rural Mental Health is a professional organization that offers publications, conferences, and other resources to minimize psychologists’ sense of isolation (“Home,” n.d.).

Although not explicitly written as suggestions to amend low recruitment of rural psychologists, some authors’ descriptions of the benefits of a rural practice may assist recruiters in providing a balanced perspective of a career in rural psychology. The most prominent benefit of this career path is the breadth of professional options available to psychologists (Hargrove, 1982; Hargrove, 2000; Harowski et al., 2006). In addition to providing psychotherapy, psychologists are likely to be employed as a member of the human resources or management team of a clinic, program evaluator, or a researcher. Second, Schank et al. (2010) argued that, if multiple relationships are ethically conducted (i.e., no harm is done to the client), it has the possibility of benefiting both the community and the clinician. Specifically, if a psychologist is actively engaged in the community in which they practice, they are more likely to gain the trust of its members who may later become clients. Third, there is limited competition for business, particularly for neuropsychologists, who may find that their practice easily flourishes relative to their urban counterparts due to the low number of neuropsychologists and neurologists in small towns (Craig, 1997).

Finally, parallel literature on the recruitment of primary care physicians to rural areas may also serve as a fruitful resource. A study conducted by Pepper et al. (2010) surveyed physicians practicing in Wyoming about their personal and training backgrounds as well as their practices. The findings suggested that physicians were more likely to practice in a rural county if

they were raised in a rural area. While physicians that had attended medical school or residency in bordering states were more likely to remain in Wyoming, a state in which the majority of the counties are considered frontier, this was not predictive of their tendency to practice in very rural areas. Given the findings of this study and others cited, the authors suggested that recruiters target high school students residing in rural areas in hopes of fostering future physicians that value a rural lifestyle. Perhaps these suggestions could be extrapolated to efforts in recruiting psychologists to rural areas.

Improving Retention of Licensed Psychologists. Suggestions for improving retention of psychologists in rural areas are often intertwined with suggestions for improving barriers to treatment. For instance, multiple authors have recommended the use of telehealth technology to reach patients that reside in remote areas or who have unstable transportation, thus increasing the financial sustainability of a rural practice (Brems et al., 2006; Campbell et al., 2006; Cook & Hoas 2007; Jameson & Blank 2007; National Association of Rural Mental Health, 2006; Smalley et al., 2010). Additionally, the use of similar technology can allow psychologists in rural areas to overcome the barrier of professional isolation by connecting with peers for consultation or continuing education via teleconferencing. As such, Nelson et al. (2007) suggested that graduate students would benefit from exposure to the incorporation of technology into traditional mental health treatment in order to prepare them for future practice.

Similarly, multiple scholars have recommended the use of integrated primary care to address the barriers to both treatment and retention of psychologists. In regards to barriers to treatment, patients of primary care providers may experience treatment from a psychologist within the same clinic as their primary care provider as less stigmatizing or difficult to access (Brems et al., 2006; Campbell et al., 2006; National Association of Rural Mental Health, n.d.;

Smalley et al., 2010). In regards to supporting retention of rural psychologists, a collaborative relationship with primary care providers will likely ensure that a psychologist has a consistent and financially feasible caseload. Finally, an interdisciplinary environment may also minimize a sense of professional isolation engendered by a rural environment.

Again, turning towards parallel medical literature on rural providers can offer guidance on enhancing retention of rural psychologists. A study conducted by Pathman et al. (2004) compared the retention of rural primary care physicians in designated HPSAs to retention of primary care physicians in rural but non-HPSAs. The findings suggested that when demographic variables were controlled for, these groups of rural primary care physicians were comparable in regards to duration of retention. Yet, those in HPSAs were more likely to stay for longer periods of time if they owned their practice, had two or fewer nights a week of being on call, practiced in the state in which they were raised, and were raising a minor-aged child. Given the modifiable characteristics correlated with retention found in Pathman et al.'s study compared to the immutable demographic variables correlated with recruitment in other studies reviewed by their authors (e.g., Kim, 2000; Parker & Sorenson, 1978; and Singer, Davidson, Graham & Davidson, 1998), they recommended that efforts for recruitment and retention be treated as separate endeavors.

Implications and Future Directions

Psychologists are not immune to the challenges posed by rural towns. Economic depression and widespread underinsurance translates to a small and impoverished caseload that may not support a practice. Stigma associated with receiving mental health care means that individuals seeking help are acutely ill yet their psychologists have minimal resources for referral or consultation. Outside of work, psychologists may find that minimal cultural amenities

relative to those they had grown accustomed to accessing during graduate training in metropolitan areas combined with concerns about extra-therapeutic patient encounters exacerbates risks for burn out and a sense of isolation. Even if a psychologist is returning to practice in a rural area in which they were raised and have social supports, they may feel ill-prepared for such work due to minimal exposure during graduate school. Psychologists of rural origin may even find that graduate training may inadvertently deter them from intentions to return to rural communities. Didactic coursework biased towards urban practice, mentors practicing in metropolitan areas, as well as practica and internships in metropolitan areas highlight the appeal of establishing a career in a metropolitan area.

Despite the many factors contributing to low availability of rural psychologists, the demand for mental health care in rural areas persists. Fortunately some psychologists have chosen to attempt to meet this demand. And yet, as Campbell and Gordon (2003) wrote, “little is known about the characteristics of successful rural practitioners. ... These observations could serve as hypotheses for research on successful rural practitioners” (p. 432). Rural psychologists remain an untapped resource for filling the gap in literature on solutions to the problem of poor recruitment and retention of rural psychologists. Much has been written on the high need for rural psychologists and the challenges they face, yet possible solutions to these challenges too often need to be inferred from recommendations for barriers to treatment or sources outside of the psychological literature. This study addresses this gap in literature and gives voice to those psychologists that have overcome barriers to rural mental health care. The study conducted by Pepper et al. (2010), and discussed in detail in the methodology section, will serve as a conceptual model for this current study given its examination of the characteristics of primary care physicians that chose to practice in rural environments.

Chapter 3

Methodology

As described in detail in Chapter 1, the rationale for this study was to address the dearth of available solutions for the recruitment and retention of psychologists to rural settings.

Informed by the literature presented in Chapter 2, this study addresses the research questions below. A national survey of licensed psychologists practicing in rural areas of America sought to answer the following questions:

1. What are the demographic, training, and practice characteristics of currently practicing rural clinical and counseling psychologists?
2. What factors first attracted these psychologists to a rural setting?
3. What has contributed to these psychologists' decision to maintain a career in a rural setting?
4. What suggestions can currently practicing rural psychologists offer for improving the recruitment and retention of other rural psychologists?

Participants

The participants of this study consisted of actively licensed doctoral-level psychologists providing a variety of clinical, research, teaching, and administrative services in towns that meet the definition of rural. Given this study's objective of producing the most generalizable findings possible, participants were recruited from all fifty states of America. Although Washington, D.C. maintains an independent licensing board for psychological examiners, participants licensed in Washington, D.C. were not included given the metropolitan nature of the area. Participants were excluded if they reported that they were retired or spent most of their professional time in a town with a population size larger than 5,000.

Participants were selected from lists of licensed doctoral-level psychologists that are kept by state licensing boards. States vary in how such lists can be obtained. Some states make lists of licensed psychologists and their contact information publicly available. Others have databases that can be searched with varying amounts of information (e.g., license status, full mailing address, town only, phone number only, etc.). Yet others only have lists available upon request and payment. When a list of licensees including mailing addresses was not publicly available, licensing boards were contacted with a request for these lists and a brief description of the intent to recruit for research participation. If partial information was provided (e.g., name of licensee and town name only), an Internet search was conducted to obtain a mailing address.

The definition of rural provided in Chapter 1, a town with a population of 5,000 or fewer, served as a guide for determining whether the town listed by the participant met the criteria for rural. Town sizes were confirmed utilizing the United States Census Bureau's Incorporated Places and Minor Civil Division's Dataset, which reports population of towns by state between April 1, 2010 and July 1, 2012 (United States Census Bureau, 2012). A general Internet search of towns with 5,000 or fewer inhabitants was conducted to exclude neighborhoods of large metropolitan areas that are given separate town names.

Once a psychologists' mailing address was deemed rural, their information was added to a list that was arranged by state and in alphabetical order. Four participants per state were randomly selected using a random number table (Howell, 2008), in hopes of requesting participation from 200 psychologists. It was estimated that 100 surveys would be completed and returned. While this study is exploratory in nature and it is difficult to calculate the population number of rural psychologists, because psychologists can provide their personal rather than business mailing addresses to licensing boards, the goal of 100 completed surveys was selected

per the recommendation of Borg and Gall (1989, as cited by Mertens (2010) to contribute to the generalizability of the findings. Furthermore, a response rate of 50% is consistent with research suggesting that the mean response rate is 58% when psychologists and 48% when mental health practitioners are surveyed (Van Horn, Green, & Martinussen, 2009). Using a sample size of 100 and a 95% confidence interval, the estimated margin of error for the findings of this study was $\pm 9.8\%$ ("Research tools", n.d.). While this is not ideal for representing the population of rural psychologists, it was acceptable given the exploratory nature and financial limitations of this study.

Survey

The methods of this study are modeled after the survey study conducted by Pepper et al. (2010) regarding the recruitment and retention of physicians in Wyoming. This study was chosen as a model given its similar aim (i.e., exploring possible solutions to a deficit of physicians through evaluating characteristics of those that maintain a rural practice). Pepper et al. (2010) asked participants to report basic demographic information, "...the nature of the physician's practice, educational background, and plans for the future," the state in which they were raised, location of medical training, and factors contributing to their decision to either remain in or leave Wyoming in the future (p. 197). In addition, this study also asked participants to report the factors that contributed to their decision to both start and maintain a career in a rural setting. Participants were also asked to offer suggestions for improving recruitment and retention of psychologists to rural communities. Psychologists that have been successful in establishing and maintaining a career in rural communities are invaluable, yet largely untapped resources for those seeking to improve the availability of rural psychologists.

Procedure

Data was collected through a mailed survey. This survey aimed to address the research questions by asking participants to report information about their current professional activities, training, decision-making processes for choosing their practice location, and any suggestions they may offer for improving recruitment and retention. See Appendix A for the survey. Respondents were provided with stamped and addressed envelopes to use when returning the completed survey. Two optional incentives were offered for completing the survey. First, participants were offered an opportunity to enter into a drawing for one of two \$50 gift card for amazon.com. This incentive was chosen for its appeal to a wide variety of individuals, particularly doctoral-level psychologists who are assumed to be of middle to upper-middle socioeconomic status. Second, participants were offered the opportunity to receive the results of the study. These results may benefit participants who, in addition to clinical, research, or training activities, are tasked with recruiting psychologists and/or supporting the retention of psychologists in their organization. See Appendix B for the letter to prospective participants, which describes the nature of the study.

Data Analysis

The combination of forced choice and open-ended items of the survey warrants mixed methods of data analysis. First, given the exploratory nature of this study, the results of the forced choice items are reported using measures of frequency (i.e., total and percentage of the sample) and central tendency (i.e., mean, median, mode, and standard deviation). The results of this analysis are reported in tables when appropriate.

Second, each open-ended item of the survey was coded for themes by using inductive content analysis (Elo & Kyngas, 2007). This method was chosen for fit with the purpose of the

study in that it emphasizes exploring themes in data when “...there is not enough knowledge about the phenomenon...” prior to data collection (Elo & Kyngas, 2007, p. 109). Responses were separated by question and then recorded in tables that included columns for participant responses and codes. Each response was read multiple times, while codes were created based upon salient aspects of each response. These codes were narrowed down for parsimony by grouping related categories together. The narrowed list of codes and the responses to open-ended items were given to a second reviewer to evaluate the validity of the codes in describing the participants’ responses. This second reviewer’s suggestions were then incorporated to produce the final list of codes presented in the results section.

Additionally, the frequency of each code per survey item was calculated to further assist in reducing redundancy. The codes for each open-ended question are described in the narrative of the results section. In addition, excerpts are utilized as representations of the themes emerging from the participants’ responses. Finally, the frequency of these themes were calculated and summarized in a table of recruitment, retention, and other suggestions. This is intended to highlight suggestions that were most often mentioned.

Ethical Considerations

Prior to the solicitation of research participation, this study adhered to the ethics code 8.01, by seeking approval by the institutional review board of Antioch University New England (APA, 2002). Additionally, this study utilized an informed consent procedure that adheres to the guidelines of ethics code 8.02 (APA, 2002). See Appendix C for the informed consent protocol. These steps ensured that the rights of the participants were upheld during all phases of this study. For instance, the informed consent procedure explicitly stated the risks and benefits of participation, the voluntary nature of completing the survey, and the contact information for the

chair of this dissertation research. Finally, although an incentive was offered for completion of the survey, it was likely not excessive given the targeted population. It is expected that the respondents are of middle to upper-middle socioeconomic status and thus do not view a \$50 gift card to amazon.com as coercive.

Chapter 4

Results

Data was collected between the months of April and November in 2014. Surveys were mailed to 46 states, with Indiana, Maryland, Massachusetts, and New Mexico omitted due either to high cost of obtaining the list of licensees or a lack of response to requests for lists of licensees. Of these 46 states, a total of 3,617 licensed psychologists listed mailing addresses in towns with a population size of 5,000 or less. The original plan for data collection was to mail four surveys per state for a total of 200 possible respondents. However, due to the omission of four states, a total of 184 surveys were mailed during this time period to maintain the method of four surveys mailed per state. The response rate was 26% for a total of 49 returned surveys. One was omitted due to not meeting the inclusion criteria of actively practicing. A total of 48 participants were included in the data analysis. Eleven surveys were returned incomplete due to the intended participant no longer practicing at that mailing address. The reader is directed to Appendix A to review the complete questionnaire.

Given that the findings below are based upon 48 respondents as opposed to the originally intended sample size of 100, the quantitative results presented in this chapter should be interpreted with caution. When using a 95% confidence interval, the margin of error calculated with the sample size of 48 is +/- 14.1% ("Research tools", n.d.). This margin of error is less than ideal, thus the quantitative findings are likely not generalizable to the population of psychologists practicing in rural areas across United States.

Professional Practice

The majority (75%) of the respondents earned a Ph.D. Most respondents (84%) held a degree in the field of clinical psychology. Licensees from 30 states responded, with New York,

Oregon, Rhode Island, and Wyoming producing the largest number of respondents (three per state). Surveys sent to sixteen states had a response rate of zero. A small minority ($n=5$) of respondents held active licenses in two states. Respondents have practiced for an average of 14.4 years ($SD= 10.4$) in rural areas, with a range of 1.5 to 44 years of practice.

Most (73%) respondents practiced in one setting and in a private practice (56%). Those that practiced in two settings were most likely to report working in private practice and “other” (e.g., school, residential facility, prison, etc.). Further, the most frequently reported number of age groups seen by respondents was two. Most participants (83%) reported working with adults between the ages of 18 and 64. However, 67% of the participants reported working with adults older than 64 and adolescents between the ages of 13 and 18. Forty-eight percent of participants reported working with children between the ages of 6 and 12. Only 21% of the participants reported working with infants ages 0 to 5. Respondents varied not only in practice setting and patient population. There was significant breadth in professional activities, as evidenced by the mode of 5 different services provided. Most participants provided either individual therapy (67%) and/or evaluation (63%). See Table 3 in Appendix D for a depiction of the distribution of the participants’ practice settings and services provided.

Participants were given two separate but identical lists of items to choose from to describe what initially attracted them to and what has kept them in a rural practice. Preference for a rural lifestyle was the most frequently reported item for both initial attraction to (56%) and decision to remain in (58%) in a rural area. Closeness to friends and family was the second most frequently reported reason for initiating a rural practice (40%). Yet, a desire to work with a particular population was the second most frequently reported reason for maintaining a rural practice (48%). See Figure 1 for a visual depiction of the frequency of reasons for starting and

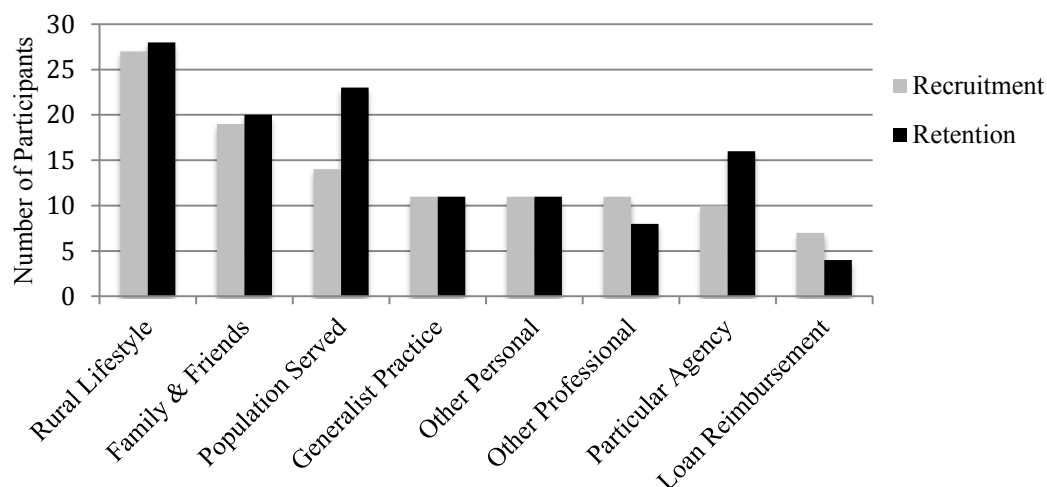


Figure 1. Distribution of reasons participants were recruited to and retained in a rural practice. This figure depicts how many participants indicated a factor contributed to their attraction to and decision to remain in a rural area.

eventually maintaining a practice in a rural region. Only eleven participants (23%) reported maintaining a practice in a metropolitan area in addition to their rural practice. Finally, only nine respondents (19%) participated in a loan reimbursement program.

Training Experiences

When asked to describe their doctoral training experiences, most participants reported minimal exposure to didactic or experiential training in rural psychology. Only six (13%) reported that their doctoral program was located in a rural area. Most (69%) reported that rural psychology was “never” included in their graduate curriculum or clinical training, but two participants reported that rural psychology was offered as a separate training track. The most frequently reported number of practica that were either in a rural area or served clients from a rural area was zero (56%). Additionally, five individuals (10%) reported that “all” practicum experiences were in rural areas or served clients from a rural area.

These findings changed significantly once the participants left graduate training. Twenty participants (42%) reported that their pre-doctoral internship was located in a rural area or served clients from rural areas. For those that participated in a post-doctoral fellowship (81%), half of the participants indicated that this training experience was either located in a rural area or served clients from rural areas.

Personal Experiences

Participants were given the option to select *frontier/rural*, *suburban*, *metropolitan/urban* or *unknown* to describe the geographic region in which they spent the majority of their childhood and adolescence. Most participants (44%) spent their childhoods in suburban areas. However, 31% of participants spent their childhoods in frontier/rural areas. Participants were asked to use the same options to indicate the geographical location of their undergraduate institution. Most participants (60%) completed their undergraduate training in metropolitan/urban areas. See Table 1 for a full distribution of geographic regions participants spent their early lives in.

Participants were also asked to report whether they had spent personally meaningful time in rural settings. The majority (71%) responded positively. For those that provided a brief description of these experiences, they tended to report that their childhood home was in a rural area. Other personally meaningful experiences included regularly visiting family members that resided in rural areas, vacations in natural settings, engagement in outdoor hobbies (e.g., camping, hiking, canoeing, etc.), “an appreciation for nature”, or work experiences in a rural area. See Figure 2 for a distribution of participants’ time spent in rural areas throughout their early life and education.

Table 1

Distribution of Geographic Region Resided in During Early Life

Location	Childhood and Adolescence	Undergraduate Institution
Frontier/Rural	15 (31%)	6 (13%)
Suburban	21 (44%)	12 (25%)
Metropolitan/Urban	10 (21%)	29 (60%)
Unknown	2 (4%)	1 (2%)

When asked what portion of their personal support system resided in a rural area, 35% of participants selected “less than half.” However, 50% of participants indicated that either “about half” or “more than half” of their support system resided in rural areas. This is consistent with the above-described finding that 40% of participants were originally drawn to a rural practice to be close to family and/or friends.

Suggestions

Finally, participants were asked to respond to three open-ended questions. The first question was: “what suggestions do you have for increasing the recruitment of psychologists to practicing in rural areas?” The majority (83%) of participants responded to this item. The second open-ended question asked, “What suggestions do you have for increasing the number of psychologists who maintain a long-term practice in rural areas?” The majority (73%) of participants responded to this item. The final item on the survey stated, “Please provide any other information you think would improve the recruitment and retention of psychologists in rural areas”. A minority (42%) of participants responded to this item.

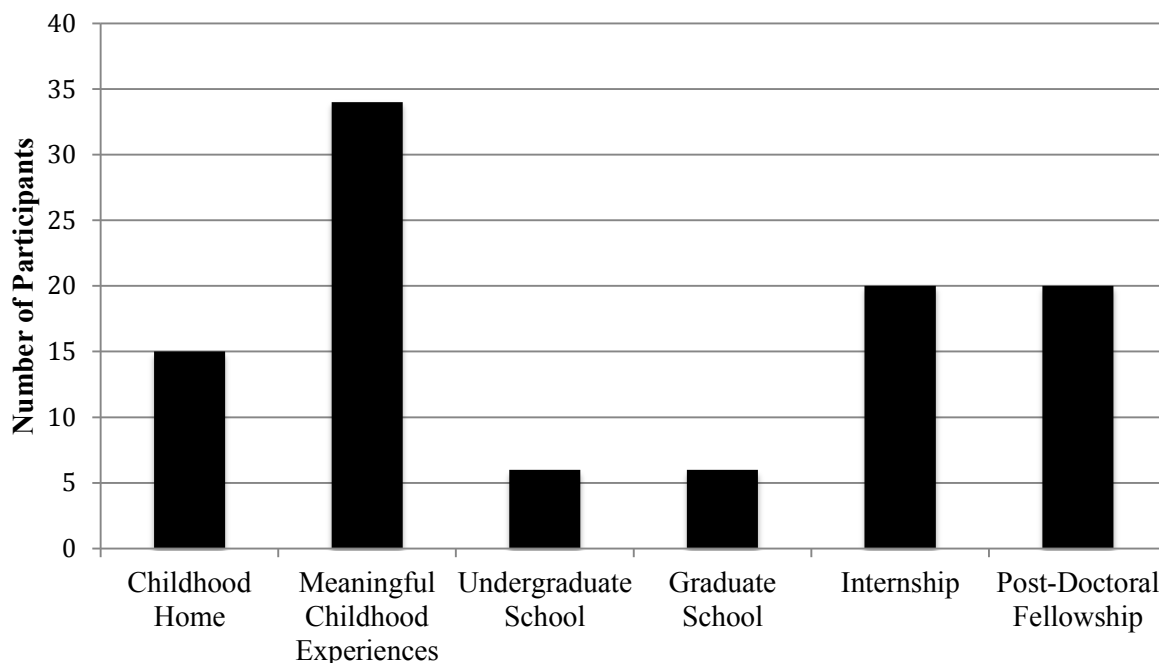


Figure 2. Frequency of participants spending time in rural areas by time period. This graph depicts the number of participants who spent the majority of their childhood, meaningful childhood experiences, and training experiences in rural areas.

As described above, participants' responses were analyzed using inductive content analysis. Those responses that were either unrelated to the question or excessively vague were omitted from the themes reported below. Themes are described below in order of frequency among responses. To assist in the interpretation of the frequency of these suggestions, they have been depicted in Table 3 at the end of this section.

Financial incentives. Responses falling in this theme included: competitive salaries, improving third-party reimbursement, funding travel expenses for trainees, and providing bonuses. Respondents wrote that disparities in income between metropolitan and rural psychologists were a significant factor in the ability to maintain a rural practice. Multiple participants speculated that insurance reimbursement unique to rural practitioners might assist in the financial feasibility of a rural practice. One participant offered an example of this insight:

“health insurance carriers could develop programs to assist rural practitioners to become established in communities where need exists.” Rather than resting the full responsibility on service providers, this approach would ask third party payers to assist in the availability of providers through improved reimbursement. Finally, one individual recommended that supplemental income might counteract the relatively lower reimbursement rate of Medicaid, a commonly billed insurance carrier in rural areas.

Highlight the appeal of a rural practice. Most responses across the three open-ended items related to the benefits of a rural practice noted the ease of building a caseload due to limited number of competing practitioners. The limited competition and high need for services support a thriving business. Further, respondents cited the meaningful nature of their work given the significant need within their community. As one participant wrote, “It’s rewarding to be a big frog in a small pond!!” Lastly, two responses described the appeal of a generalist practice required for work in rural communities. One response parsimoniously summarizes this suggestion, “letting them know: how much they are needed in those areas. Not much competition. Easier to work your own desired hours. Variety—need to be a generalist.”

Highlight the appeal of a rural lifestyle. This theme emerged across all three open-ended questions. Participants often described the beauty of rural areas and the accessibility to outdoor recreational activities when suggesting that a rural lifestyle would likely attract potential psychologists. For instance, one participant stated “The area I’m in now is in some ways isolated, but the art, music, writing, theater, cultural opportunities, are amazing, and you get it all in a natural setting that can’t be topped anywhere!” Similarly, participants cited the lower cost of living relative to metropolitan areas as well as the positive aspects of local culture. This theme is consistent with the above-described findings that most of the respondents had

personally meaningful experiences in rural areas prior to their rural practice.

However, it is worth noting that some participants offered opposing perspectives on the local culture as a possible deterrent rather than attraction to rural areas. One participant shared his/her frustrations with a rural lifestyle, “‘Imports’ are rarely trusted, and often try hard, burn out and leave—reinforcing mistrust and rationalizations for ‘locals’ to not invest in relationships with non-locals. This leaves many well-intentioned health care providers overly-used and under-supported.”

Create a professional network. Participants suggested that a strong professional network would improve the recruitment and retention of rural psychologists. As one participant described it:

Create a more connected community for those of us in rural areas. Online chatting, Facebook group, some way to connect and communicate with others in the field would likely increase recruitment to the larger ‘group’. Because of the disparities in rural America, providers become easily disconnected from the “outside world.”

While one participant suggested that such support groups be offered at professional conferences, it is otherwise unclear whether participants were suggesting that employers create this network, existing rural practitioners establish a network, or that prospective psychologists create this network prior to developing a rural practice.

Loan repayment programs. Utilization of and improved marketing for federal loan repayment programs were mentioned in all three open-ended items. Additionally, participants recommended that barriers be removed for companies to access to loan repayment programs. One respondent shared the influence of his/her engagement in the National Health Service Corps (NHSC), stating:

While started very part time, [I] was eventually hired full time—shortly after that, maybe three years in as a full timer, I qualified for NHSC loan repayment program—continue to participate in this program, has so far paid off \$110,000 of student loans and I'm eligible to continue until all loans are paid off.

Given the significant amount of student loan debt accrued by psychologists, loan repayment programs could offset early career expenses. As evidenced by this participant's benefit from NHSC, a large portion of debt can be paid in a brief period of time. It is therefore surprising that only nine respondents indicated engagement in a loan repayment programs. This may have informed the recommendations that loan repayment programs should improve their marketing approaches to enhance awareness among graduate students and early career psychologists.

Offer on-site training. Several respondents suggested that those seeking rural psychologists should offer training opportunities for practicum students, predoctoral interns, and/or postdoctoral fellows. This was described as an opportunity to eventually hire these trainees for long-term employment. One respondent suggested that in-house continuing education opportunities would offset the cost of travel to often-distant locations. Specifically, he or she wrote, “[A]ffiliation with a psychology training program that offers externs and continuing education can be attractive.”

Training in rural psychology. Seven responses across all open-ended items suggested that psychologists receive didactic training on the topic of rural psychology during graduate school. This included suggestions for didactic training in either the cultural competencies or the logistics of maintaining a practice in rural areas. For example, one respondent offered the suggestion of “teaching the code of a rural community—learning to be cautious... in smaller, rural communities people are either related to each other or ‘know them well.’” Some responses also

recommended rotations in rural clinics during internship. This theme suggests that a psychologist academically prepared for rural practice may be able to withstand its unique challenges.

Increase the use of professional collaboration. Six participants suggested that the ease of collaborating with health care providers within the community is an appealing aspect of a rural practice. Some also recommended utilizing integrated care practices as well as developing “a consultative relationship” with primary care providers in order to support care coordination. These participants did not elaborate on the factors contributing to the ease of collaboration. However, one possible explanation would be similarly limited number of medical providers within rural communities. Additionally, one individual argued that an improvement in the reimbursement rate for integrated primary care would improve recruitment.

Recruit from a rural population. This theme appeared among responses to all three open-ended items. Participants recommended that psychologists should be recruited from those who originate from rural regions. This included individuals from early adolescence to master’s level therapists practicing in rural areas. One individual stated “start from the bottom–up by increasing awareness of psychology in rural communities and interest in psychology in local high schools. Encourage those that pursue psychology to return and help their communities.” These responses suggested that individuals would be more likely to consider practicing in a rural area despite the difficult circumstances if they had personal connections to a rural community. This suggestion is consistent with literature on retaining primary care physicians in rural areas (Pepper et al., 2010). Those that were raised in rural areas in rural areas were most likely to maintain a rural practice.

Ongoing education and self-monitoring. Consistent with the literature, the topic of managing multiple relationships when practicing in a small community arose several times among responses to the open-ended item pertaining to retention. Five participants stated that psychologists who are proactive in preparing for and managing these ethical dilemmas would be more likely to maintain a rural practice. Included in this recommendation was remaining abreast in literature on ethics and improving access to continuing education.

Improved practice guidelines. Four participants argued for adjustment in guidelines from the American Psychological Association (APA) on aspects of rural mental health care. More specifically, one participant requested that APA “relax dual role guidelines,” likely referencing the difficulty of avoiding multiple relationships when working and living in small towns. Yet, another individual stated, “increase the APA advisement on how to run an integrated practice and business end of the issue.” Given that suggestions were made for rural psychologists to collaborate with primary care providers, it is not surprising that it is also suggested that these psychologists gain support in maintaining an integrated care practice. Finally, some responses represented frustrations with perceptions that rural psychologists are stigmatized by their metropolitan counterparts. For instance, one respondent recommended that “in the psychotherapy community showcase rural providers more to bring up the status a bit.”

Multiple roles within the community. Three respondents suggested that participation in community affairs or maintaining a second career would contribute to retention of rural psychologists. For instance, one participant wrote, “split careers, like part time farming or local politics.” This suggestion was often paired with the advice to monitor risk for multiple relationships while engaging in community affairs.

Increased use of telehealth. Two respondents suggested that increasing utilization of telehealth alongside efforts to recruit psychologists would improve access to care. As one of these individuals stated, “trainings for cyber therapy could actually benefit many individuals, couples, families in rural areas.” These suggestions are a reminder of the equally significant barrier to treatment for rural inhabitants of access to mental health services.

Improve referral options for specialty care. Consistent with the cited barriers to quality rural mental health care, one individual stated, “improve community mental health services and addiction treatment centers so we have support and somewhere to send clients who need more help.” In addition to personal practices mentioned above, this statement addresses the distribution of specialty care as a factor in psychologists’ willingness to remain in rural areas.

Improved opportunities for family members. The challenges of rural psychology go beyond the clinician’s practice. In fact, the family members and significant others of these psychologists are equally affected by the difficulties associated with a rural lifestyle. One participant spoke of the difficulties faced when recruiting for a psychologist for a mental health clinic on a Native American reservation:

I have had a hard time recruiting psychologists to the reservation because many have children and the rural schools are not high quality. Perhaps improve online primary and secondary education options so these parents can accept a rural placement.... Another issue that seems blaring in my rural community is the community discrimination against ethnic minority and/or GLBT professionals. Again, this most impacts psychologists with children who don't want to subject their kids to this.

Table 2

Consolidated Themes of Suggestions and Their Frequency by Question

Theme	Recruitment	Retention	Other
Financial incentives	13	10	5
Highlight the appeal of a rural practice	19	6	1
Highlight the appeal of a rural lifestyle	19	3	2
Create a professional network	5	11	2
Loan Repayment Programs	7	4	3
Offer on-site training	8	0	0
Training in rural psychology	4	1	2
Increase the use of professional collaboration	2	3	1
Recruit from a rural population	3	1	1
Ongoing education and self-monitoring	0	5	0
Improved practice guidelines and support	0	2	2
Multiple roles within the community	0	3	0
Increased use of telehealth	0	0	2
Improve referral options for specialty care	0	1	0
Improved opportunities for family members	0	0	1

Salient Quantitative and Qualitative Results

The lifestyle of rural communities is an essential component in attracting psychologists that develop a sustainable career in rural practice. A preference for a rural lifestyle was the most often cited reason for considering and remaining in a rural practice and was mentioned in 24

participant suggestions. This is not surprising given that most participants reported having meaningful experiences in rural areas and nearly one-third were raised in a rural or frontier town. Relatedly, half of the participants have social supports in rural towns, many reported that a desire to be close to these social supports was a contributor to their decision to have a career in a rural area, and five suggested that individuals of rural origin be targeted for recruitment efforts.

A second salient finding is that the unique components of rural practice need to be incorporated in recruitment and retention efforts. Most of the participants are clinicians providing individual psychotherapy and evaluation in private practice. As such, twenty-six (54%) of participants recommended that the appeal of rural practice be highlighted when recruiting psychologists. Participants cited the population of rural communities and a generalist practice as factors in their decision to seek out and maintain a rural career. Yet, the draw of the opportunities for broad clinical work is not enough to offset the financial barriers as evidenced by the frequent mention of improving insurance reimbursement, salaries, and marketing of loan repayment programs. This is particularly important given that most participants work in private practice.

The need for training and professional support emerged throughout the quantitative and qualitative results. Most participants had no to minimal training in rural psychology during graduate school, originate from suburban towns, and provide clinical services in private practice. This finding may relate to the suggestions that graduate students obtain training in rural mental health and rural psychologists be proactive in engaging in continuing education and self-monitoring regarding rural practice. Also, the sense of poor preparation for rural practice exacerbates the challenges of professional isolation. Specifically, many participants recommended that rural psychologists utilize a professional network of rural clinicians, seek

collaboration with medical providers, and advocate for improved practice guidelines from APA.

Chapter 5

Discussion

This chapter discusses the meaning of the findings in relation to the research questions and literature review. This discussion informs the implications for practice described below. This chapter will also address limitations of this study and recommendations for future research.

Demographic, Training, and Practice Characteristics of Rural Psychologists

If a profile of a rural psychologist could be created from the most frequent responses to this survey, it would indicate that this person was raised in a suburban area, but had personally meaningful experiences in rural environments. About half or more than half of his or her personal support system resides in a rural location. This person attended an undergraduate institution in a metropolitan or urban area and when in graduate training he or she was never exposed to curriculum or practicum experiences in rural mental health. Further, his or her pre-doctoral internship was not located in a rural community. However, this psychologist completed a post-doctoral fellowship located in a rural area. He or she holds a PhD in clinical psychology and has been practicing as a licensed psychologist in a rural town for eleven years. This psychologist works only in a private practice, where he or she provides individual psychotherapy or evaluation for either, adults and older adults, or adults and adolescents.

Rural physicians surveyed by Pathman et al. (2004) were more likely to remain in HPSA rural communities if they owned their own practice. While the current study did not ask participants to specify whether they owned their own practice, the majority indicated that they worked in a private practice. Perhaps working in a private setting serves as a buffer from the challenges associated with practicing in a rural community. Specifically, literature examining burnout prevention has consistently identified a sense of control over one's work as significantly

and inversely correlated to rates of burnout in psychologists (Rupert, Miller, Dorociak, 2015). Presumably, psychologists working in a private practice have a greater sense of control over their schedule, caseload, paperwork, etc. relative to their peers working for larger agencies. A sense of control at work is particularly pertinent given that rural psychologists are expected to maintain a generalist practice in which they treat individuals with diagnoses associated with burnout risk (i.e., personality disorders, psychosis, etc.) if seen in high numbers (Rupert et al., 2015). This increased sense of agency may also be a protective factor against professional isolation, a factor often cited as a barrier to retention of rural psychologists (Jameson & Blank, 2007; Smalley et al., 2010; Werth et al., 2010).

The distribution of participants' geographic origin is comparable to the primary care physicians surveyed by Pathman et al. (2004). Thirty percent of the physicians surveyed by Pathman et al. (2004) and 31% of the psychologists in this current study were raised in rural areas. This is noteworthy given that only nineteen percent of Americans reside in rural areas (U.S. Census Bureau: Frequently Asked Questions, n.d.). Unfortunately, there are no known studies examining the rate of admission of individuals from rural backgrounds to doctoral programs in psychology to compare to this study's sample. Regardless, the high percentage of psychologists and physicians from rural backgrounds relative to the general population is important given that Pathman et al. found that primary care physicians raised in rural areas were more likely to maintain a practice in a Healthcare Professional Shortage Area (HPSA) for longer periods of times than primary care physicians raised in non-rural areas. These physicians practicing in a rural HPSA were also more likely to be practicing in the same state that they were raised than in another state.

Finally, it is worth noting that location of predoctoral internship and postdoctoral fellowship may play a significant role in recruitment and retention of rural psychologists. Forty-two percent of participants completed a predoctoral internship in a rural area. Of the 40 respondents that completed a postdoctoral fellowship, 20 reported that it was located in a rural area. This may also explain participants' suggestion that offering clinical training opportunities in rural areas may assist recruitment and retention.

Factors that Attract Psychologists to Rural Communities

Respondents most frequently reported that they initially chose their career due to a personal preference for a rural lifestyle. This finding is interesting given that most participants were not raised in rural communities. However, the personally meaningful experiences in rural environments throughout their life often carried over in other aspects of their survey responses. Participants often cited closeness to outdoor activities such as hiking and watersports as well as a desire to raise their children near natural environments as factors contributing to their decision to locate to rural areas.

The second most frequently reported attraction to work in a rural setting was closeness to family and/or friends. This may be related to a preference for a rural lifestyle as well as the often-described childhood experiences of spending time on family farms. Specifically, of the participants who reported closeness to family and/or friends as a reason for initiating a rural career, nine (52%) also endorsed a preference for a rural lifestyle as contributing to their initial attraction to a rural practice. Further, 11 (65%) of these participants reported having personally meaningful experiences in rural areas during their lifetime. Perhaps these individuals spent time with family members residing in rural areas, which fostered not only an appreciation for such a lifestyle, but also a desire to return to these locations to be near family members in later life.

This interpretation is supported by findings that of the individuals that listed closeness to family and/or friends as a reason for seeking a career in a rural town and reported having meaningful experiences in rural areas, most (91%) indicated that half or more of their support system resided in a rural area. The importance of returning to rural areas to be near social supports may also be related to a desire to raise children in the rural areas where their family members reside.

Pathman et al. found that rural physicians were more likely to remain in HPSA for longer periods of time if they were raising a minor-aged child. Although not directly measured in this study, perhaps a portion of the participants were similar to the physicians surveyed by Pathman et al. in that the decision to practice in a rural town was influenced by whether they were raising children.

The third most common reason for initiating a career in a rural community was the population served. It seems that participants were drawn to agencies serving in rural areas not only for personal connections to these areas but also due to the individuals they anticipated treating. It is noteworthy that of the 14 participants that listed population as a reason they considered a rural practice, 12 reported providing direct clinical service such as psychotherapy, psychological assessment, or behavioral medicine. It is likely that psychologists with a particular interest in clinical practice as opposed to administration and academia are more likely to cite factors related to the patient population as opposed to a desire to work for a particular agency. This hypothesis is difficult to evaluate given the overall small sample size as well as the even smaller number of participants reporting that they did not provide direct clinical services (n=10).

Finally, one unexpected finding was that loan reimbursement was the least frequently mentioned attraction to a rural practice. This finding may relate to when the National Health

Service Corps (NHSC) began offering loan repayment to psychologists as well as the eligibility requirements for this program. For instance, NHSC began offering loan reimbursement in the 1990s, thus likely not attracting psychologists who were well into their career such as the nine participants in this study who have been licensed for 25 or more years (“Mission and History”, n.d.). Additionally, the NHSC requires that psychologists participating in loan repayment hold a degree in either clinical or counseling psychology. Therefore, the eight participants who earned degrees in either school psychology or community psychology are excluded from NHSC (National Health Service Corps, 2015).

Additionally, whether a participant earned a PhD or a PsyD may be a factor as well. Of the participants who have been licensed for less than 25 years and earned a degree in either clinical or counseling psychology but did not participate in loan reimbursement, 20 earned a PhD and three earned a PsyD. This is likely due to the psychologists earning a PhD accrue much lower amounts of student loan debt during graduate training compared to psychologists earning a PsyD. Additionally, there may be fewer psychologists with PsyDs than with PhDs given that PsyD programs have gained popularity only in recent years relative to PhD programs. In sum, there are a multitude of factors that could be affecting participants’ low use of loan reimbursement, including eligibility criteria, knowledge of NHSC, and applicability given amount of loans as well as years of practice relative to years of NHSC availability.

Reasons that Psychologists Remain in Rural Communities

Preference for a rural lifestyle and a desire to be near family and friends were again cited as two of the most common reasons that participants maintained their career in a rural area. These findings suggest that the personal benefits of residing and practicing in small communities endure beyond the initial attraction.

It is notable that participants indicated professional factors for remaining in a rural area more often than when asked to identify reasons for initial attraction to a rural practice. For instance, the population served and a desire to work for a particular agency were listed among 48 and 33% of participants, respectively. Perhaps participants develop an affinity for their rural clients and the agencies committed to rural health care over time just as they had developed an affinity for living in small communities. Further, enjoyment of one's caseload and "...some level of involvement with clients..." (Rupert et al., 2015, p. 170) have been inversely correlated with components of professional burnout. Participants' enjoyment of their patient population and place of employment may contribute to the sustainability of working in a rural town.

Although methodology differences between this study and the studies conducted by Pathman et al. (2004) and Pepper et al. (2010) prevent direct comparison of findings, professional incentives were also highlighted as important facilitators of retention of rural physicians. For instance, cost of malpractice insurance and the number of nights on call per week were identified as positively correlated to duration of practice in an underserved rural community (Pathman et al., 2004; Pepper et al., 2010). Therefore, benefits such as malpractice insurance coverage and appreciation for work-life balance in addition to salary could be important variables to consider when working to retain psychologists in rural clinics.

Rural Psychologists' Suggestions for Improved Recruitment and Retention

There was significant overlap among participants' recommendations for recruitment and retention of rural psychologists. While there were some similarities to previously reviewed literature, this study uncovered new and potentially valuable perspectives on recruitment and retention practices.

Emphasize the benefits of a life and career in a rural town. Most participants

speculated that psychologists would be more likely to consider working in a rural setting if they were aware of the benefits of a rural lifestyle and career. Further, many went on to state that these benefits were significant factors in their decision to remain, despite the challenges. These benefits often included access to outdoor activities, natural beauty, a slow pace of life, and a low cost of living. Professionally, several described the sense of meaning they derive from providing a much-needed service to an underserved population, a variable that has been positively correlated to a psychologists' likelihood of working with various underserved populations (Kruse & Canning, 2002). Working with an underserved population also translated into practical benefits of minimal competition and the ease of maintaining a flourishing practice. In sum, recruitment efforts should target psychologists with interests consistent with a rural environment in order to capture individuals most likely to view the unique characteristics of rural communities as protective against its coexistent difficulties.

Improve salary and reimbursement. Many respondents suggested that agencies would be more successful in recruiting and retaining psychologists if they offered competitive salaries. Yet salaries are likely dictated by the rate of reimbursement from third-party payers and the ability of their clients to pay. As detailed in the literature review, low reimbursement rate is influenced by the higher probability of rural inhabitants to receive Medicaid or no insurance relative to metropolitan inhabitants (Lu et al., 2010; Smalley et al., 2010; Werth et al, 2010). Multiple participants referenced high billing but low reimbursement rate of Medicaid, with one participant stating “in the rural setting, my income is 90% Medicaid. In the metro area, it was 50% Medicaid. Many psychologists in the metro never accept Medicaid clients because it is less income.” Some participants went on to suggest that Medicaid adjust reimbursement rates based on the rurality of a community. Therefore, it is recommended that state and/or national advocacy

efforts by psychological associations seek improved rates of reimbursement for Medicaid.

Respondents provided conflicting reports of the financial feasibility of providing psychological services in a rural area. A closer look at the practice settings of individuals emphasizing the financial benefits of remaining in a rural area reveals that they practice across a variety of settings including private practice, community mental health centers, Veteran's Affairs Medical Centers, and 'other' settings. Yet, participants were more likely to discuss financial barriers to rather than facilitators of retention if they were working in private practice. Perhaps those relying upon insurance reimbursement for income suffer more acutely from the high rates of low socioeconomic status among rural inhabitants relative to their peers receiving a salary from an agency.

In sum, it is recommended that those responsible for recruitment and retention of psychologists to a particular agency both market the relatively low cost of living as well as advocate for public policy changes to increase the rate of insurance reimbursement of psychological services. While a rural psychologists' salary may not be equal to a metropolitan psychologists' salary, the low cost of living in rural areas allows psychologists and their families to live comfortably. Yet, as indicated by the participants of this study, an increase in salary would likely make a rural career more appealing to those comparing it with a metropolitan career.

Increased use of loan repayment programs. Participants suggested that improved access to loan repayment programs would increase the number of psychologists willing to consider a career in a rural community. Improved access included better marketing strategies as well as expanded criteria for participation. Early career psychologists may be more apt to consider a position in a rural area if they were aware of loan repayment programs such as the

NHSC and PSLF. Perhaps representatives of NHSC and PSLF could offer information sessions at graduate programs or provide marketing materials to distribute at financial aid offices.

Further, NHSC could outreach agencies in HPSAs about the benefits of applying for NHSC eligibility. Finally, settings that qualify for NHSC loan repayment or PSLF loan forgiveness would benefit from recruiting early career psychologists from nearby graduate programs or pre-doctoral internships.

Connect with a network of rural psychologists. Many participants recommended that professional support would improve the rate of retention of rural psychologists. For instance, some suggested that early career psychologists or graduate students develop mentorships with established rural psychologists. Additionally, the use of technology and work groups at American Psychological Association conferences were mentioned as possible factors in moderate the barriers to retention. Given that underserved small towns are inherently professionally isolating, psychologists must actively seek support from colleagues or mentors in order to avoid pitfalls associated with such isolation. Psychologists seeking such support would likely benefit from joining the National Association of Rural Mental Health, a network of clinicians and consumers of rural mental health services. Similarly, the National Rural Health Association is a network of health care professionals in various disciplines. This may be an additional support for psychologists practicing in rural medical settings.

Implications for Increasing Psychologist Availability

Based on the literature reviewed in the field of rural psychology and rural medicine as well as the findings of this study, the following suggestions are offered for those working to increase the number of psychologists available in rural regions:

- Recruit graduate students and psychologists with an interest in the lifestyle benefits of rural towns.
- Emphasize the personally meaningful nature of meeting the needs of an underserved population.
- Incorporate cost of living into discussion of salary and benefits.
- Consider applying for NHSC loan repayment eligibility and/or market current NHSC loan repayment or PSLF loan forgiveness eligibility.
- Provide psychologists with a sense of agency in their rural work environment.
- Offer mentorship for early career rural psychologists.
- Encourage involvement with associations of rural health care providers.
- Lobby state and national government for increased Medicaid reimbursement rates.

Limitations of the Study

The primary limitation of this study is the small sample size. First, only 46 of the possible 50 states were sampled. In addition to the states not surveyed, 16 states are not included in the analysis due to a lack of response from recruited participants. Additionally, of the 3,617 psychologists identified as listing a rural mailing address, only 48 or 1.3% were used in the data analysis. Of the 100 expected participants, only 48 were used in the data analysis. Therefore the quantitative results should be read with the understanding that this is not a representative sample of all rural psychologists practicing in the United States.

On the other hand, the qualitative results, (e.g., participants' recommendations), do not suffer from the same sample size-related problems because the method of inquiry and data analysis implemented to obtain the results are consistent with the recommendations for useful qualitative analysis (Guba, 1981). This study drew suggestions directly from those intended to

benefit from them, thus providing transferrable and credible information. Given that the utility of qualitative research is dependent upon its truth value, applicability, consistency, and neutrality rather than sample size, the qualitative results of this study should be interpreted as valuable insight into solving the problem of limited availability of rural psychologists.

A second limitation of this study is that participants were asked to list rather than rank the reasons they initially chose and then maintained a rural practice. While meaningful results were derived from the current data, it would have been useful to evaluate the weight of each item in addition to frequency of its endorsement. Such information may allow readers to prioritize strategies for recruitment and retention.

Future Directions

Future studies addressing the availability of psychologists in rural areas would benefit from focusing on the role of interprofessional collaboration through integrated primary care, co-located medical and mental health providers, or care coordination between rural psychologists and primary care providers. Not only was this mentioned by authors of literature in rural psychology (Brems et al., 2006; Campbell et al., 2006; National Association of Rural Mental Health, n.d.; Smalley et al., 2010), it was also offered as a recommendation for improving recruitment and retention among five participants of this study. The full components and benefits of integrated primary care are beyond the scope of this study. However, it is important to note that a psychologist working in a rural primary care setting may find that it is more financially feasible and less isolating than an independent private practice. As mentioned in previous sections, this offers a steady patient caseload as well as opportunities for professional collaboration. Yet, as some participants wrote, the salary of a primary care psychologist is only feasible when third-party payers adequately reimburse primary care behavioral health care. Even

if not working within a primary care clinic, it would behoove rural psychologists to coordinate with primary care providers also treating their patients. Such collaboration likely assists in the treatment of rural inhabitants, who are highly likely to suffer from chronic medical conditions (Hauenstein et al., 2007; Rainer, 2010), but also fosters a source of referrals given the tendency for rural inhabitants to seek mental health care from their primary care providers (i.e., Fox et al., 2001; Jameson & Blank, 2007; Nelson et al., 2007).

Conclusion

There are too few rural psychologists to meet the need for mental health care because rural practice is infrequently discussed in graduate school and it is difficult to practice in rural areas. Out of 46 states, 3,617 psychologists listed addresses that met the criteria for rural yet there are an estimated 106,500 licensed psychologists in the United States (American Psychological Association, 2014). The approximate 3% of licensed psychologists in rural areas have unique qualities that support their ability to overcome the odds against rural practice. If this study's participants are any indication of these unique qualities, it seems that rural psychologists are likely to be clinicians in private practice, treating adults with minimal graduate training in rural mental health but meaningful personal connections to rural communities. It would behoove graduate programs to offer didactic and clinical experiences in providing psychological services in rural areas in order to better prepare anyone with an inclination towards rural practice as well as offer an objective view of the benefits and challenges of a career in rural psychology. On a broader level, graduate programs could develop marketing strategies for undergraduate programs that historically admit large portions of students of rural origin. APA might also consider examining the penetration rate of high school psychology coursework in rural areas in hopes of capturing any potential rural mental health clinicians.

Given that a significant portion of this study's participants completed predoctoral internships and postdoctoral fellowships in rural areas before establishing a rural career, this is likely a fruitful source for recruitment of early career psychologists. These training opportunities could market the benefits of rural life, access to NHSC loan repayment and/or PSLF, the value of providing care to an underserved population, and any in-house facilitators of professional networking as a tool to augment the isolation inherent in rural practice.

Finally, the high rate of low socioeconomic status and the uninsured in rural areas impedes rural providers from offering salaries competitive with metropolitan psychologists. Clinics in rural areas seeking psychologists would benefit from emphasizing the low cost of living that allows for relatively low salary feasibility. Participants also recommended that APA lobby for improved Medicaid reimbursement rates and/or reimbursement adjustments for providers in rural areas. However, while the field of rural psychology awaits reimbursement changes, it is important to consider what will improve the availability of mental health care in rural communities. Overall, it seems that recruiting psychologists that will remain in a rural area is dependent upon their ability to view the benefits of living near outdoor activities and working as a generalist with an underserved population as outweighing the challenges of lower income and limited sources for consultation or referral. It is likely that the psychologists most able to view rural practice with this lens are those that have personal ties to rural life.

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Appendix A: Survey

The following questions are about your educational background, clinical practice, and decision to practice in a rural area. There are also opportunities to offer suggestions for improving the field of rural psychology. Please check or write in the answers that best describe you.

Professional Practice

Please check your degree:

- ☐ PhD ☐ PsyD ☐ EdD

Please check your area of training:

- ☐ Clinical Psychology ☐ Counseling Psychology ☐ Community Psychology
☐ School Psychology ☐ Other (please specify):

What state are you licensed in?

How many years have you been practicing as a licensed psychologist in a rural area?

What setting are you currently practicing in? (check all that apply)

- ☐ Private Practice ☐ Community Mental Health Center ☐ General Medical Hospital
☐ Psychiatric Hospital ☐ College Counseling ☐ Veteran's Affairs Medical Center
☐ Outpatient Medical Practice (e.g., primary care clinic, etc.)
☐ Other (please specify):

What population are you currently working with? (check all that apply)

- ☐ Adults (18-64) ☐ Older Adults (65+) ☐ Adolescents (13-18)
☐ Children (6-12) ☐ Infants (0-5)

What services are you currently providing? (check all that apply)

- ☐ Individual Psychotherapy ☐ Group Psychotherapy ☐ Couples Psychotherapy
☐ Family Psychotherapy ☐ Psychological/Neuropsychological Assessment
☐ Behavioral Medicine ☐ Supervision ☐ Consultation
☐ Teaching ☐ Management ☐ Evaluation
☐ Other (please specify)

What first attracted you to a rural practice? (check all that apply)

- ☐ Closeness to family and/or friends ☐ Population served
☐ Preference for rural lifestyle ☐ Loan reimbursement
☐ Desire to work for a particular agency ☐ Desire for a generalist practice
☐ Other professional reasons (please specify):
☐ Other personal reasons (please specify):

What has contributed to your decision to remain practicing in a rural area? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Closeness to family and/or friends | <input type="checkbox"/> Population served |
| <input type="checkbox"/> Preference for rural lifestyle | <input type="checkbox"/> Loan reimbursement |
| <input type="checkbox"/> Desire to work for a particular agency | <input type="checkbox"/> Desire for a generalist practice |
| <input type="checkbox"/> Other <u>professional</u> reasons (please specify): | |

☐ Other personal reasons (please specify):

Do you also maintain a practice in a metropolitan or urban location?

☐ Yes | ☐ No

Have you participated in any loan reimbursement programs for working with underserved populations?

☐ Yes | ☐ No

Training Experiences

Was your doctoral program located in a rural area?

☐ Yes | ☐ No

How often was rural psychology included in your graduate curriculum or clinical training?

- | | | |
|---|--|--|
| <input type="checkbox"/> Never | <input type="checkbox"/> Infrequently in various courses | <input type="checkbox"/> Frequently in various courses |
| <input type="checkbox"/> Offered as a separate course | <input type="checkbox"/> Offered as a training track | |

How many of your practicum experiences were located in rural areas or served clients from rural areas?

Was your pre-doctoral internship located in a rural area or served clients from rural areas?

☐ Yes | ☐ No

Was your post-doctoral fellowship located in a rural area or served clients from rural areas?

☐ Yes | ☐ No

Personal Experiences

What type of geographic region did you spend the majority of your childhood and adolescence?

- | | | | |
|---|-----------------------------------|---|----------------------------------|
| <input type="checkbox"/> Frontier/Rural | <input type="checkbox"/> Suburban | <input type="checkbox"/> Metropolitan/Urban | <input type="checkbox"/> Unknown |
|---|-----------------------------------|---|----------------------------------|

What type of geographic region was your undergraduate institution located in?

☐ Frontier/Rural ☐ Suburban ☐ Metropolitan/Urban ☐ Unknown

What portion of your personal support system resides in a rural area?

☐ None ☐ Less than half ☐ About half ☐ More than half

In your personal history, did you spend time in a rural setting or settings that had significant meaning for you?

☐ Yes | ☐ No

If yes, please describe briefly that/those experience(s).

Suggestions

What suggestions do you have for increasing the recruitment of psychologist to practicing in rural areas?

What suggestions do you have for increasing the number of psychologists who maintain a long-term practice in rural areas?

Please provide any other information you think would improve the recruitment and retention of psychologists in rural areas.

Thank you for taking the time to fill out this survey. Your contribution to the field of rural psychology is greatly appreciated. If you would like to be included in a raffle for one of two \$50 gift cards to amazon.com, please provide your information below.

First Name	Last Name		
Address	City	State	ZIP Code
Email	Phone		

Would you like to be contacted with the results of this study?

☐ Yes | ☐ No

Appendix B: Letter to Prospective Participants

Dear Dr. _____ ,

My name is Beth Briggs and I am a doctoral candidate in the department of clinical psychology at Antioch University New England. I am writing to you to invite your participation in my dissertation research. I am gathering information on the background and current practices of actively licensed doctoral-level psychologists practicing in rural areas. By gathering this information, I hope to produce solutions for the limited availability of rural psychologists, particularly as it relates to recruitment and retention.

If you choose to participate in this study, you will be asked to complete the attached survey. This survey asks you to report information about your current practice, training background, personal experiences in rural regions, as well as any suggestions you may offer for increasing the number of psychologists in rural areas. This survey should take approximately 10 to 15 minutes to complete.

In order to participate in this study you must be an actively licensed doctoral-level psychologist practicing in a rural area. For the purposes of this study, a town is considered rural if there are 5,000 or fewer inhabitants. I have pre-screened the recipients of this letter to meet these inclusion criteria. However, if for some reason you do not meet these criteria, please do not complete this survey.

There are several potential benefits of this study. You have the option of entering a raffle to win one of two \$50 gift card to www.amazon.com. Additionally, you have the opportunity to be informed of the results of this study upon completion. Finally, your completion of this survey will benefit the field of rural psychology, which is greatly lacking suggestions for recruitment and retention.

This study has been approved by the Institutional Review Board at Antioch University New England and is under the supervision of my dissertation chair, Susan Hawes, Ph.D., who can be contacted at shawes@antioch.edu or 603-283-2183. If you have any questions or concerns, you can contact me at ebriggs1@antioch.edu or xxx-xxx-xxxx.

Thank you for your time and consideration.

Sincerely,

Beth Briggs, M.S.
Doctoral Candidate in Clinical Psychology
Antioch University New England
40 Avon Street, Keene, NH 03431

Appendix C: Text of Informed Consent

Informed Consent

Purpose of the Study. The purpose of this dissertation study is to explore the demographic, training, and practice characteristics of licensed doctoral-level rural psychologists in order to develop solutions for the limited number of available psychologists practicing in rural areas. Participation in this study requires you to complete the attached survey and return it in the addressed envelope provided. Questions will address your training, current practices, and personal experiences in rural regions. There will also be opportunities for you to provide suggestions for improving the recruitment and retention of rural psychologists.

Confidentiality. Your identifying information will not be attached to any written results of this study. If you choose to provide your contact information, it will be separated from your responses in order to protect your privacy. Only those involved in the research study will have access to your responses on the survey. All survey responses will be kept in a locked location and entered into a password-protected electronic database.

Benefits of Participation. There are two ways that you may benefit directly from this study. First, you can enter your name into a raffle for one of two \$50 gift card to www.amazon.com. Second, you may gain useful information by requesting to receive the findings of the study. Your participation will benefit the field of professional psychology, particularly for those practicing or considering a practice in rural areas. In turn, this may also benefit the mental health care of rural inhabitants.

Risks of the Study. Completion of the survey will take approximately 10-15 minutes of your time. There are no other known risks of participating in this study.

Voluntary Nature of the Study. Your participation in this study is voluntary. You are in no way obligated to complete the survey. If you choose to complete the survey, you are free to skip questions that you do not wish to answer.

Contact Information. If you have any questions or concerns, you may contact the primary researcher, Beth Briggs, M.S. by email (xxxxxxxx@antioch.edu) or phone (xxx-xxx-xxxx). You can also contact the chair of this dissertation project Susan Hawes, Ph.D. by email (shawes@antioch.edu), phone (603-283-2183), or mail (40 Avon Street, Keene, New Hampshire, 03431).

If at any point you have concerns about your rights as a research participant, you may contact:

Katherine Clarke, Ph.D., M.B.A.
Chair of Institutional Review Board
Antioch University New England
40 Avon Street Keene, NH 03431
kclarke@antioch.edu

Melinda Treadwell, Ph.D.
Vice President of Academic Affairs
Antioch University New England
40 Avon Street Keene, NH 03431
mtreadwell@antioch.edu

If you complete the attached survey, it means that you have read the information contained in this letter, and would like to be a volunteer in this research study.

Appendix D: Table 3. Distribution of Practice Characteristics

Table 3

<i>Distribution of Practice Characteristics</i>		
Practice Characteristic	Number of Respondents	Percentage of Respondents
Practice Setting		
Private Practice	27	56% ^a
Other	19	40%
Community Mental Health Center	5	10%
Outpatient Medical Practice	3	6%
Psychiatric Hospital	2	4%
College Counseling Center	2	4%
Veteran's Affairs Medical Center	2	4%
General Medical Hospital	0	0
Services Provided		
Individual Psychotherapy	32	67%
Evaluation	30	63%
Consultation	28	58%
Supervision	22	46%
Assessment	19	40%
Family Psychotherapy	17	35%
Couples Psychotherapy	16	33%
Teaching	10	21%
Behavioral Medicine	8	17%

Group Psychotherapy	7	15%
Management	7	15%
Other	7	15%

^a Many participants reported practicing in multiple settings, with multiple populations, and providing multiple services. Therefore, the summation of percentages for each category of characteristics will not equal 100.