Exploring Mindfulness as a Culturally Sensitive Intervention for the Deaf Community

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Exploring mindfulness as a culturally sensitive intervention for the Deaf community

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Abstract

Mental health issues are as prevalent in the deaf community as the hearing community, if not more. Yet, Deaf individuals are often treated by mental health professionals less frequently and less effectively. Many systemic barriers exist that influence the lack of services provided to the Deaf community, primarily related to a lack of cultural understanding rooted in perceptions of Deaf individuals. However, the Deaf community may be best understood as a cultural minority, a unique community sharing a distinct culture, history, and language. This paper investigates the effects of systematic barriers and cultural misunderstanding among mental health professions regarding the Deaf community, explores the historical and current mental health problems Deaf individuals most commonly struggle with, and proposes a potential culturally sensitive intervention for the Deaf community based on these factors. To examine these issues, the author conducted a thorough review of Deaf cultural history and values, as well as a review of peer-reviewed articles regarding both Deaf mental health and mindfulness outcome studies. Based on this review, mindfulness may be an effective, culturally sensitive intervention that addresses both cultural and psychological components while working with the Deaf population.
EXPLORING MINDFULNESS FOR THE DEAF COMMUNITY

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The World Health Organization (2014) estimates that approximately 360 million people worldwide have “disabling hearing loss.” Currently, statistics in the United States estimate more than 34 million people have some degree of hearing loss (Kochkin, 2009). Of those individuals, between 500,000 to 2,000,000 rely on American Sign Language (ASL), estimated to be the sixth-most-used language in the United States.\(^1\) (Lane, Bahan & Hoffmeister, 1996). Although more extensive and thorough research is warranted, researchers suggested that the Deaf population has at least the same rate, and arguably higher rates of mental health problems, compared to the non-Deaf population. (Davidson, Cave, Reedman, Briffa & Dark, 2012; Fellinger, Holzinger, & Pollard, 2012; Hindley, Hill, McGuigan, & Kitson, 1994; Van Gent, Goedhart, Hindley, & Treffers, 2007; Vernon & Daigle-King, 1999). Consequently, the focus of the current paper is to examine mental health treatment in the Deaf population to determine its availability, efficacy, and unique challenges.

Based on a thorough understanding of these issues, as well as of Deaf culture, I propose intervention strategies that are most likely to be effective with the Deaf population. The primary intervention proposed, mindfulness, appears to address the psychological problems Deaf individuals encounter, as well as cultural factors that are often overlooked or misunderstood. Before discussing prevalence, specific intervention strategies, and typical outcomes in this population, it is important to obtain an understanding of the cultural factors relevant to psychotherapy with the Deaf population.

\(^1\) The prevalence of ASL use in the United States is greatly debated. In fact, some estimate ASL users to be as high as the third most used language in the United States. Mitchell and colleagues (2006) discussed this issue in depth. However, there is a common understanding that there are at least 500,000 ASL users in the United States.


**Definition of Terms**

Working with the Deaf community requires culturally sensitive interventions that use the appropriate terminology (Glickman & Harvey, 1996). Although the term “hearing impaired” is used frequently when describing deaf people, especially in the medical field, those who identify as deaf may find that term offensive because it implies pathology. The term *deaf* is more generally accepted among the community, although different contexts can alter its use. When referring to the deaf community as a distinct culture, one that shares a common language, tradition, and values, it is common to use an uppercase D for the term “Deaf.” In contrast, when referring to people who have the condition of hearing loss, but do not identify with a culture, a lowercase d “deaf,” is used (Glickman & Harvey, 1996; Landsberger, Sajid, Schmelkin, Diaz, & Weiler, 2013). Therefore, in this paper, when discussing the Deaf community or culture, a capital D will be used.

**History of Deaf Culture**

In the aforementioned statistics, deafness is equated with hearing loss, which is often associated with a deficit model of disability. Although it is true Deaf people have hearing loss, and this characteristic may make it easier to identify the Deaf population, it originates from a culturally privileged hearing perspective. In the United States, legally and medically, this is the societal perspective. Even in much of the historical research about the Deaf population, researchers assumed that deafness itself creates these problems. Glickman and Harvey (1996) expanded upon this issue. They noted that deafness itself is not pathological; rather, “the inept and oppressive responses of hearing people to Deaf people either create various forms of maladjustment or impose a pathological viewpoint on psychologically healthy Deaf people” (p. 135). This
perspective may contribute to many of the problems facing the Deaf community today, including mental health issues.

Therefore deafness, when labeled as a disability, can be best understood as a social construct. It may be useful to look at deafness through a perspective that considers the social and cultural aspects of deafness. Olkin (2001) discussed three different social constructions of disability—moral, medical, and minority—that may be useful to relate to the Deaf community. Olkin noted that the oldest model of disability, the moral model, views the problem as a “defect caused by moral lapse or sins” (2001, p. 25) that lies in the person. The medical model, which reflects the most common perception of the Deaf population, identifies disability as a “medical problem that resides in the individual” and is seen as “inherently pathological” (2001, p. 26). This is a problematic interpretation of a Deaf individual, yet one that continues to be pervasive, especially in medical fields. The last and most useful way to view the Deaf community is through the social model of disability (Oliver, 1983), also known as the Minority Model of Disability, studied in depth by Olkin (2001). This model considers the sentiments that Glickman and Harvey (1996) discussed, indicating that deafness itself is not pathological, but that society’s treatment towards deafness is the problem. Olkin (2001) notes that:

…disability is a social construction, that the problems lie not within the persons with disabilities but in the environment that fails to accommodate persons with disabilities and in the negative attitudes of people without disabilities. Person’s with disabilities are seen as a minority group…that has been denied its civil rights, equal access, and protection. (p. 26)
Regarding persons with a disability as a minority group implies they will share certain commonalities with other minority groups; specifically, an experience of “prejudice, discrimination, and stigma” (Olkin, 2001, p. 28). Other similarities associated with minority-group status include inferior status, pressure to assimilate to the majority group, questions about intermarriage and procreation, underrepresentation in multiple professions (e.g., politics, medical, and mental health), and being underserved in mental health (Olkin, 2001). When perceiving the Deaf community through this lens, they are a distinct cultural minority, struggling with a long history of discrimination and oppression. Glickman (1996) echoed this sentiment, noting deafness is a cultural difference and best understood as a minority group, rather than a disability. Therefore, to fully understand and begin to conceptualize providing mental health services to the Deaf community, one must first briefly discuss Deaf culture, including its cultural history.

The Deaf community has an extensive history of being misunderstood, oppressed, and dismissed. As early as the sixteenth century, Deaf people were “sequestered” to ensure their chastity and were kept “out of sight” (Glickman & Harvey, 1996, p. 60). Regulations in Europe and the United States in the eighteenth, nineteenth, and even twentieth centuries called for the sterilization of Deaf people and discouragement or prohibition of intermarriage. For example, Alexander Graham Bell, a leader of the American Eugenics Section (of the American Breeders Association) in the late 1800’s created to improve human breeding, specifically targeted Deaf individuals and recommended sterilization, prohibition of intermarriage, and even keeping Deaf people separate from each other as much as possible (Glickman & Harvey, 1996; Lane, 2005). This was also addressed by a German sterilization law (Law for the prevention of...
hereditary diseases) that went into effect in 1934, calling for the sterilization and execution of the Jewish Deaf (Glickman & Harvey, 1996). Deafness was generally seen as an affliction and a defect, and thus, Deaf individuals were viewed as less than human (Glickman & Harvey, 1996).

Generally speaking, people viewed Deaf individuals as inferior and in need of help (Glickman & Harvey, 1996). Sign language was also perceived as illegitimate, even “primitive.” When ASL was developed, hearing people often dismissed it as an inferior form of communication, and educators frequently prohibited sign language as it was perceived to undermine the acquisition of the English Language (Lane, 1999). In fact, in the late 1800’s Alexander Graham Bell, who was worried about the rising deaf population, targeted sign language as the main problem for this, and pushed heavily for oral education of Deaf individuals (Glickman & Harvey, 1996). This included creating “day schools” for Deaf children, which required using only oral methods of teaching in an effort to discourage sign language and separate Deaf people as much as possible from each other. The broader goal in taking these steps was discouragement of Deaf marriage and reproduction. This sentiment of deafness equating to “less than” continues, as being Deaf is generally perceived by the hearing population as a negative characteristic. (Glickman & Harvey, 1996; Williams & Abeles, 2004).

Although this is not an exhaustive history of Deaf culture, it does reflect many of the problems faced by a minority disability group. Most notably, a history of being oppressed, viewed as inferior, and being discouraged from marriage or reproduction (Glickman & Harvey, 1996). When working with the Deaf population, the significance of knowing this cultural history cannot be overstated. A human services professional
without proper knowledge of Deaf oppression may inadvertently reinforce the idea of Deaf people as inferior or impaired, thereby influencing the Deaf individual to accept the dominant or majority view of themselves, rather than developing their own voice (Glickman & Harvey, 1996). At the same time, in adhering to standards of cultural sensitivity, professionals working with Deaf individuals should also be sensitive to and aware of likely individual differences within Deaf culture, rather than making major assumptions based on broad cultural differences.

Central Characteristics of Deaf Culture

In addition to the cultural history, prominent characteristics of Deaf culture include language, styles of communication, values, and customs. Arguably the most important aspect of Deaf culture is the sharing of a language - sign language. It is speculated that sign language has existed since before the fifth century B.C., was observed as a form of communication between Native North Americans, and was developed specifically for Deaf individuals in the 1600s by Juan Pablo de Bonet, a Spanish priest (Butterworth & Flodin, 1995). For a member of the Deaf community, sign language is not just a form of communication, but also provides a powerful sense of identity that represents what it means to be culturally Deaf (Glickman & Harvey, 1996; Lane, 1999). Historically, sign language gave Deaf people a voice, one that the Eugenics Section of the American Breeders Association attempted to silence through an emphasis on Oralist teaching methods for the Deaf community (Glickman & Harvey, 1996; Lane, 1999).

In sign language, many cultural differences exist that contrast with language in the hearing culture. Sign language is primarily visual in nature, and emphasizes the use of
eyes, facial expressions, and gestures. For example, to indicate finishing one’s sentence, signers might establish eye contact, decrease signing speed, and drop their hands (Glickman & Harvey, 1996). However, to indicate continuing a sentence, a signer’s rate may accelerate and their gaze is typically averted. This differs dramatically from hearing rules for turn taking, which rely on voice inflection. Not knowing these cultural differences may result in a hearing person appearing rude or inattentive (Glickman & Harvey, 1996).

Eye contact, in particular, is of paramount importance in the Deaf culture and communication (Glickman & Harvey, 1996; Williams & Abeles, 2004). Baker (1977) noted that effective communication in signing involves consistent eye gaze upon the speaker, as well as periods of mutual eye contact that frequently lasts five seconds. When hearing people do not return such a gaze, or shift their gaze prematurely, it may be interpreted as disinterest or rudeness. These are important non-verbal cues that must be recognized by professionals working with the Deaf community. Other significant aspects of sign language include facial expressions, body language, and the concept of personal space (Williams & Abeles, 2004). For example, Deaf people are very sensitive to non-verbal messages sent through facial expression and body language. Additionally, the Deaf community frequently uses storytelling and metaphors as important means of communicating (Glickman & Harvey, 1996; Phillips, 1996; Williams & Abeles, 2004).

Cultural differences also exist regarding appropriate ways of getting others’ attention in the Deaf community. Whether starting a conversation or contacting someone via the front door of a house, physical touch is generally more appropriate when interacting with Deaf individuals than with hearing people. While the hearing community
relies on auditory cues for getting the attention and physical touch is sometimes not appropriate in a given context, Deaf individuals often lightly tap or touch another to get someone’s attention, or use visual signals. For example, rather than rely on hearing a phone or doorbell ring, Deaf individuals often use devices with flashing lights to signal their attention (Mindess, 1999).

Additionally, Deaf culture takes a more collectivist approach to community than is seen in the general hearing culture (Mindess, 1999). There is high value placed on community and gathering together face-to-face, especially in the form of Deaf clubs, theater, and organizations, which speaks to both the collectivist nature of Deaf culture and the value of visual communication. Membership in Deaf culture generally requires meeting certain criteria, most notably a proficiency in sign language, and there is a common expectation of reciprocity, creating a very supportive and tight-knit sense of community (Glickman & Harvey, 1996; Humphries & Padden, 2005; Mindess, 1999).

Other important cultural differences include the contrasting perspectives Deaf people and hearing people have about deafness, as well as the value placed on deafness. To Deaf individuals, they are complete and whole. In other words, “Deafness is not in itself a significant issue in the lives of culturally Deaf people” (Glickman & Harvey, 1996, p. 59). As noted earlier, being Deaf means being part of a community that shares a common culture, history, and language, and is a source of pride. The usual hearing response to deafness is that it is a tragic condition or affliction (Humphries & Padden, 2005). If employing that belief while working with a member of the Deaf community, one runs the risk of missing a key part of his or her identity.
Although strides have been taken toward cultural sensitivity with Deaf people, living in a majority-hearing-world, Deafness continues to be perceived primarily as pathological by some. Acting from that viewpoint, healthcare professionals will attempt to “fix” or alleviate the “affliction” of deafness rather than seek to understand Deaf individuals (Glickman & Harvey, 1996; Humphries & Padden, 2005). Generally speaking, providers who attempt to “fix the problem” of deafness do so with good, albeit misguided intentions. However, when Deaf people are urged to go to hearing schools, get cochlear implants, and learn to speak and lip read, it sends an unmistakable message that they are deficient in some way. Although these recommendations, and important technological advances, may have been created with the intent to help Deaf individuals, these very interventions often end up in conflict with Deaf cultural identity. This is not to say that all members of the Deaf community do not wish to hear, or that Deaf individuals have not benefited from such attempts to improve the Deaf experience; there are clearly individual differences within the Deaf community. Rather, that more often than not, the hearing community seeks first to “fix” Deaf individuals, which usually involves encouraging changes to be more like hearing culture, instead of seeking to understand and appreciate a Deaf individual’s cultural experience. Again, the attempts to “fix” deafness often miss the importance and adaptive nature of cultivating and respecting Deaf culture.

One research study suggested that Deaf people who embrace their own cultural identity more adequately adjust to living in a hearing world than those who do not (Cornell & Lyness, 2004). Glickman and Harvey (1996) argued the importance of the development of a *bicultural identity* as most adaptive for Deaf individuals. In this model,
a bicultural identity is achieved when a Deaf individual exhibits deaf cultural pride, appreciates and respects both cultural identities (including languages of Deaf culture and hearing culture), while also maintaining awareness and opposition to intentional or unintentional Deaf oppression. Acceptance of Deaf culture and integrating it into a Deaf person’s identity may lead to more flexible behaviors and positive self-concept (Cornell & Lyness 2004). Despite this research, Deaf individuals are often encouraged by professionals, including mental health professionals, to be more like hearing people. As Olkin (2001) described in the minority model of disability, “minority persons are encouraged and coerced to look, behave, and think like the majority” (p. 31). Regardless of whether members of the hearing culture are aware of their role in perpetuating a message of assimilation, the impact is the same; members of Deaf culture get the message that they are inadequate in some way.

A synthesis of the preceding literature review can be described as follows. The attitude that professionals know best is present in the medical and mental health fields. These fields of study are also areas in which Deaf people are often underserved. Understanding the cultural history of Deaf people gives important insight into the general systemic problems the community must address. This understanding also provides insight into the barriers to extending services to the Deaf as this history helped create and reinforce the problems that exist today. When services are provided, they are frequently unethical, unhelpful, and culturally insensitive, decreasing the likelihood those Deaf individuals will seek help from health providers in the future. Given the ideal that medical and mental health professions are “helping” fields, the question becomes: Why are the services provided to the Deaf community so ineffective? The answer starts with
an examination of the lack of cultural understanding. Specifically, significant cultural differences between the Deaf community and hearing majority, primarily pertaining to language, communication, and values, and the failure of the medical/mental health field to address these factors, often create and maintain barriers to services for Deaf individuals.

**Barriers to Services**

An extremely problematic barrier to services is the lack of communication, which affects the Deaf community on multiple levels. First, communication barriers make it very difficult for Deaf people to access mental health services (Cabral, Muhr, & Savageau, 2013). Specifically, a small minority of clinicians are fluent in ASL to provide adequate therapy to Deaf clients, and among those clinicians, many do not understand the Deaf culture (Williams & Abeles, 2004). Additionally, although there is the option to use an interpreter, this is not perceived by Deaf individuals as culturally sensitive. Once again, the interpreter often knows little about the culture (Williams & Abeles, 2004). In both instances, many times the interpreter or therapist continues to provide services despite their incompetence, which can exacerbate the problems (Glickman & Harvey, 1996; Williams & Abeles, 2004).

This lack of ability to communicate creates other problems as well. For example, Deaf clients in mental health settings are often misdiagnosed and conceptualized inaccurately (Williams & Abeles, 2004). These inadequacies are a likely result of a lack of culturally sensitive screening tools (Landsberger et al., 2013), as well as diagnostic instruments that are not normed for Deaf individuals (National Association of State Mental Health Program Directors, 2002). In addition, communication problems can
impede the development of a therapeutic relationship, arguably one of the most important aspects of therapy and a facilitator of change (Bachelor & Horvath, 2008; Lambert & Barley, 2001; Norcross & Wiley, 2011; Rogers, 1957). Connected with this is the idea that in almost all therapeutic modalities, validating clients and understanding their experience is an essential component of the therapeutic relationship (Sue & Sue, 2007). Difficulties with communication, often due to clinicians with inadequate knowledge of Deaf culture or a lack of proficiency in sign language, creates a clinical situation where Deaf clients are often misunderstood, or worse, blamed for their problems. In effect, when this occurs, it “perpetuates long established patterns of misunderstanding, isolation and oppression in the client’s life” (Williams & Abeles, 2004, p. 644). These maladaptive practices among clinicians reinforce the client’s fears and reluctance in seeking services.

The hearing community’s bias and tendency to pity deaf people by viewing hearing loss as a tragedy is another problem in providing services to the Deaf community. Specifically, the hearing community’s perspective conflicts with the Deaf perspective. This creates an uncomfortable tension, and when combined with a lack of healthy communication, creates a mistrust of mental health professionals (Williams & Abeles, 2004). In fact, historically, mental health professionals often harbored negative attitudes towards Deaf individuals’ ability to engage in therapy, including a belief that deaf people were not feasible candidates for in-depth or insight oriented therapies because of their “deficiencies” and communication difficulties (Leigh 2010). It is no wonder that Deaf patients report mistrust and fear in health care settings, frustration about communication barriers, and limitations in accessing health information. As a result, Deaf people tend to
drop out of treatment early, and many will not seek services in the first place (Williams & Abeles, 2004).

Last, there is a lack of education about Deaf culture in educational and training settings. In an examination of multicultural textbooks in classrooms, information about Deaf culture was limited to less than 1% of the total pages of text, and often the information presented was inaccurate (Johnson & Nieto, 2007). Additionally, researchers found that for teachers, parents, or therapists, a lack of cultural knowledge will be problematic in working multiculturally, such as with the Deaf community (Glickman & Harvey, 1996; Johnson & McIntosh, 2009; Sue & Sue, 2007). These systemic problems create barriers between Deaf people and hearing people, and importantly, between Deaf people and the mental health community, which is almost exclusively a hearing community. In 1990, there were approximately only 20 Deaf psychologists in the entire United States (Pollard, 1996).

These barriers, influenced by the oppression of Deaf individuals as well as the lack of Deaf mental health professionals, often begin in their own families. In fact, Glickman & Harvey (1996) suggested that most Deaf children can be thought of as “culturally marginal within their own families” (p. 129). This has major implications for development. The vast majority, approximately 90%, of Deaf children are born to hearing parents (Schein, 1989), and recent estimates indicate that this number may actually be closer to 92% or higher (Mitchell & Karchmer, 2002), producing a variety of issues, and again, communication is one that has marked impact. For example, hearing parents of Deaf children are less patient, spend less time communicating with their child, and are less sensitive to their deaf children during interactions (Schlesinger & Meadow, 1972).
Mothers are also more intrusive and directive with Deaf children, giving them less freedom to explore and learn from mistakes (Rieffe, 2011). Many do not take the time to learn ASL (Sinnott, Looney, & Martin, 2012) creating an atmosphere in which Deaf children cannot communicate effectively with their families, which may negatively impact their social and emotional growth (Denman, 2007; Sinnott et al., 2012; Van Gent, 2011).

Early researchers estimated that 81% of hearing parents of Deaf children do not communicate effectively with their children (Phoenix, 1988). For those Deaf people who grow up in families that do not speak ASL, they also have less exposure to emotional material (words) and struggle to express their own feelings (Corker, 1996). Another contribution to the issues that Deaf people encounter is the everyday experience of Deaf children, such as when Deaf children are left out of family conversations. This is also known as “sustained conversational isolation,” and is considered to be a form of trauma (Glickman & Harvey, 1996). This problem has major implications for psychopathology; given that the vast majority of Deaf children grow up in hearing families.

**Mental Health Problems in the Deaf Community**

As a result of the variety of psycho-socio-emotional factors growing up in a home and a world that is hearing, it is important to explore the mental health problems that may exist in the Deaf community. In the 1970s, early researchers on Deaf psychopathology indicated higher levels of serious mental illness in Deaf people than in the hearing population. One study examining more than 500 Deaf youth found that 11.6% were severely emotionally disturbed, more than double the rate for hearing children (Schlesinger & Meadow, 1972). Another body of research based on teacher reports found
that nearly 20% of Deaf youth had emotional and behavioral problems, much higher than that of their hearing counterparts (Gentile & McCarthy, 1973). Other research at that time pointed toward the higher levels of psychiatric disorders in the Deaf. These statistics highlight the historical presence of mental health issues in the Deaf community (Willis & McCay, 2002).

One of the major problems in research about psychopathology in the Deaf community, which continues to exist today, is the lack of consistency in sampling and methodology; thus, validity is called into question. Nevertheless, while reviewing the research on Deafness and psychopathology, Vernon and Andrews (1990) estimated Deaf people have higher rates of emotional disturbance than the hearing population. Additionally, researchers Vernon and Daigle-King (1999) reviewed all of the studies conducted on deaf inpatients from 1929 to 1994 and concluded that Deaf people have higher rates of mental illness than hearing people.

More recently, over the past two decades an increasing number of studies examined Deafness and psychopathology. Despite the emergence of such research, there are insufficient reliable estimates of the exact prevalence of Deaf psychopathology (Landsburger & Diaz, 2010; Ohre, Von Tezchner, & Falkum, 2011). Part of the reason for this problem is rooted in the same issues that researchers found in the 1970s and 1980s: methodology, sampling issues, and inaccurate diagnoses. In fact, in a recent review of 11 of the only studies published in peer-reviewed journals on the prevalence of psychopathology of Deaf people from 1995 to 2011, researchers drew unclear conclusions due primarily to methodology issues (Ohre et al., 2011). These issues included most notably, a lack of representative samples and valid assessment instruments.
Clearly, more valid and properly controlled studies are needed to understand the psychological issues that face Deaf individuals over the life-span.

Nevertheless, some consistencies in the research may illuminate the prominent mental health issues that affect the Deaf community. First, there is a general trend in research that suggests a high prevalence of psychopathology, or at least distress, in the Deaf population (Fellinger et al., 2012; Hamerdinger & Hill, 2005; Hindley et al., 1994; Kvam, Loeb, & Tambs, 2006; Van Gent et al., 2007; Vernon & Daigle-King, 1999). The following research studies outline the primary mental health problems of the Deaf community, including significant stressors, trauma related issues, anxiety, and depression.

Several studies found that Deaf children experience more social problems, lower self-esteem, and more emotional and behavioral problems (Cornes, Rohan, Napier, & Rey, 2006; Van Gent et al., 2007; Williams & Abeles, 2004). Deaf adolescents also appear to experience more loneliness, isolation, difficulty forming a sense of self, trouble sustaining friendships, and bullying (Remine & Brown, 2010). These issues, although not quantifiable by grouping them in a specific mental health disorder, indicate that Deaf people appear to face significantly more stressors than hearing people. When looking deeply into the stressors Deaf children face, reliable research suggested certain stressors may lead to mental health problems. For example, social alienation and communication problems during early development, which often are experienced by Deaf children, are associated with mental health problems, especially pertaining to socio-emotional development (Sinnott et al., 2012; Van Gent, 2011; Denman, 2007). Consequently, it is
important to delve into the existing research to parse which specific mental health problems may be most significant in the Deaf community.

Deaf people may experience more abuse and trauma than hearing people. In general, Deaf people appear to have more vulnerability to trauma, especially interpersonal trauma (Schild & Dalenberg, 2012). Sullivan and colleagues (1987) estimated that as many as 50% of Deaf individuals have experienced sexual abuse, more than twice as many as in the hearing population. In a recent study on Deaf female college students, results indicated they experienced significantly higher numbers of physical assault, as well as psychological and sexual victimization, than their hearing counterparts (Anderson & Leigh, 2011). Schild and Dalenberg (2012) also found significantly high rates of physical abuse and trauma in Deaf individuals. Moreover, exposure to trauma in children is associated with high rates of mental health problems, such as emotional and behavioral issues, as well as Post-Traumatic Stress Disorder (PTSD) (Sullivan & Knudson, 1998; Stirling Jr & Amaya-Jackson, 2008).

When exploring the current research, Deaf people appear to have higher rates of PTSD than hearing people. One body of research explored Deaf psychopathology and found that mood disorders and post-traumatic syndrome were the most frequently diagnosed disorders in the Deaf community (Cole & Zdanowicz, 2010). In another research study of Deaf inpatients, Black and Glickman (2006) discovered PTSD was the most frequent diagnosis in Deaf patients.

Emotional problems, such as mood and anxiety issues, are prominent in Deaf people who seek mental health services (Landsberger & Diaz, 2010; Cornes et al., 2006; Hamerdinger & Hill, 2005). One study of psychopathology in Deaf adolescents found
that 46% of them could be classified as having a diagnosis listed in the *Diagnostic and Statistical Manual of Mental Disorder*, and the majority of those were classified as emotional disorders (Van Gent et al., 2007). In an Australian study of the Deaf community, researchers Cornes et al. (2006) found that Deaf people experienced more clinically significant emotional and behavioral problems than did members of the hearing community. Another study showed that of those Deaf people who do seek mental health treatment, many have deficits in emotional regulation and coping skills (Leigh, 2010).

Ohre et al. (2011) reviewed 11 studies on Deaf psychopathology and found five had participants from the general Deaf population, while six of them were from clinical samples. Of those sampling the general Deaf population, which is a more representative sample of prevalence, results indicated “heightened vulnerability for developing depression and anxiety in the prelingually Deaf population” (Ohre et al., 2011, p. 11), and also point toward a higher level of distress in the Deaf population. The results of those five studies follow.

De Graaf and Bijl (2002) examined mental distress among over 300 Deaf adults aged 18 years and older, in the Netherlands. They conducted all interviews in the preferred language of the participants. Results indicated that 27.1% of Deaf men and 32.4% of Deaf women endorsed symptoms of mental distress, compared to 22.0% of men and 26.6% of the general Dutch population. In 2005, Fellinger and colleagues conducted research on 233 Austrian members of Deaf clubs, finding even more compelling results. They used two assessment measures adapted for use in sign language to study mental distress, anxiety, and depression among Deaf people, compared to members of the hearing population. Results indicated that 70.3% of Deaf males and 84% of females had
significantly high levels of mental distress. In contrast, only 15% of hearing men and 17.5% of hearing women reached significant levels of mental distress. This study further partitioned mental distress into anxiety and depressive symptoms, both of which were significantly higher for the Deaf participants.

A year later, Kvam et al. (2006) conducted a Norwegian study on symptoms of depression and anxiety among 431 Deaf adults, comparing their scores with a hearing sample. They found that Deaf people experience more than twice the rate of mental distress, as well as significantly more anxiety and depressive symptoms than the hearing group. Kvam also took into account the possible methodological uncertainties (e.g., higher response rate among hearing people and possible misinterpretation of questions) and determined that the differences were still significant enough to make a methodological-issue explanation for the results unlikely.

Two studies provided a more comprehensive focus on depression. Leigh and Tolbert (2001) conducted a study of 53 Deaf undergraduates in the United States and found 26% of participants reported having been seriously depressed. Despite having no specific comparison group, the 26% was about double the general prevalence rate among hearing undergraduate students, at 13.8%. In 2003, Werngren-Elgstrom and associates found similar results in a much older population of Deaf individuals. In this study of elderly Swedish Deaf individuals, 31% had mild depressive symptoms compared to only 9–19% of hearing individuals.

These five studies provide important evidence for high anxiety, depression, and distress among members of the Deaf community. However, when considering the six clinical sample studies in the meta-analysis, the results are mixed, making clear
conclusions difficult to determine (Ohre, 2011). Although these six studies provided more evidence that the Deaf population appears to experience higher prevalence of mental health problems than their hearing counterparts, some of these studies had significant methodological limitations. Ohre and colleagues (2011) discussed some of those major deficits, including the lack of representative samples, and culturally insensitive assessment and diagnostic instruments. Across these six studies, Ohre (2011) determined that deaf and hearing samples were not comparable in rates of depression, anxiety, and somatoform disorders, as well as delusional, psychotic and personality disorders.

It is clear that the Deaf community struggles with a variety of mental health issues and stressors, including depression, anxiety, isolation, social alienation, and traumatic experiences. However, it is estimated that as few as 2% of Deaf individuals needing support for mental health issues received services (Pollard, 1996). This number is unacceptable, and gives a powerful illustration of the impact of the barriers to services for the Deaf, as well as the growing need for creating culturally sensitive services at this time.

**Need for culturally sensitive therapy**

Given the systemic barriers to treatment, while also considering the dire need for services, providing services that are culturally sensitive and specific to the Deaf population is imperative. As Glickman (1996) wrote:

One must be culturally aware as a hearing or deaf person; one must have extensive knowledge of Deaf community and of the history of Deaf-hearing
relations; and one must have a broad array of skills in particular competence in the different forms of signed communication. (p. 51)

Glickman’s words align with Sue and Sue’s (2007) guidelines for multicultural competence, including having sufficient knowledge, skills, and awareness. Social workers and other mental health professionals who have been engaged in treating Deaf people with psychiatric issues share this perspective (Glickman & Gulati 2003; Landsberger et al., 2013; Sinnott et al., 2012; Williams & Abeles 2004). For example, Sinnott and colleagues (2012) recommended that social workers or teachers convey information in culturally sensitive ways, such as using concrete instructions, visual strategies, stories, and maintaining eye contact. Williams & Abeles (2004) provided similar recommendations, while also outlining the harm of not being culturally sensitive. Likewise, Landsberger and colleagues (2013) highlighted the necessity of being sensitive to language, differences in social norms, and differences in cultural values in the treatment and assessment of Deaf individuals. Therapy grounded in cultural understanding may combat the distrust the Deaf population has for the hearing, and ideally lead to improved communication and outcomes.

Another aspect of cultural understanding needed to provide treatment to Deaf individuals includes knowledge and skills in sign language, while also being sensitive to potential individual differences. In particular, not only being able to physically sign proficiently, but also knowing the cultural differences in that form of communication, such as eye contact, turn taking in conversations, personal space, and body language, all of which differ from traditional hearing rules for conversation. For example, it is generally recommended that clinicians working with Deaf individuals maintain eye gaze
for appropriate levels of time (around 5 seconds), know which gesture means continuing the conversation versus stopping it, and how much personal space is culturally appropriate. However, being sensitive to individual differences, such as matching the preferred communication mode of the individual (ASL vs. Signed English), is also a major component of culturally appropriate interventions. These styles of communication are especially important to know in the mental health field due to the necessity of shared communication. If these recommendations are not considered, the psychologist may appear rude or disinterested (Williams & Abeles, 2004).

Treatment should also address multiple levels: cultural and psychological (Glickman & Harvey, 1996). Additionally, therapy works best if the modality matches the culture. For example, treatment interventions with the Deaf that include role plays and psychodrama, or metaphors, align with the nature of ASL (which is inherently overtly expressive) and would be beneficial. Freedman (1994), as cited in Glickman and Harvey (1996), offered alternative interventions, that may be specifically suited to a visual or gestural method of communication. Freedman discussed externalizing the problem, which through signing allows abstract concepts such as anxiety to be located in space. Freedman also noted the use of storytelling as a culturally sensitive intervention. In addition, the Deaf community values subjective experience and emotional expression, and interventions that evoke and reflect on this may be particularly useful (Miller, 2004; Mindess, 2009). Lastly, Deaf cultural values of collectivism may be addressed by using a treatment intervention that emphasizes group processes. Engaging in treatment with these guidelines creates a space that promotes a safe, connected, and understanding atmosphere where differences are appreciated rather than devalued.
The Deaf population needs culturally sensitive services, specifically aimed at treating problems such as general mental distress, anxiety, trauma, and mood disorders. Additionally, an intervention that may be available in a group format, may align more effectively with the collectivist nature of Deaf culture, as well as reach more people, could be helpful given the lack of services for the Deaf community. One such intervention, which emphasizes non-verbal processes and has been shown to be particularly effective in treating mental health problems like anxiety and mood disorders (Miller, Fletcher, & Kabat-Zinn, 1995; Vollestad, Nielsen, & Nielsen, 2012), is mindfulness.

**Mindfulness**

Mindfulness is rooted in Buddhist spirituality. Although many different definitions of mindfulness exist, there does appear to be a general consensus about its emphasis on awareness. Kabat-Zinn (1994), one of the pioneers of mindfulness in the West, defines it as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (p. 4). Kabat-Zinn noted mindfulness does not necessarily pertain to controlling emotions, or even relaxation, but rather paying attention and opening up to them. This openness allows for awareness and acceptance of experience and emotion, ideally creating greater psychological flexibility and psychological well-being. However, Buddhist mindfulness does not emphasize striving for such outcomes; rather, it stresses choiceless practice aimed at deferential accommodation for any and all experiences. Improved well-being may be an outcome, but it is not the goal. Unfortunately, much of the existing research regarding mindfulness uses it as an intervention for symptom control, such as for relaxation or as a coping skill.
for stress management. Although the research still emphasizes psychological acceptance of aversive thoughts and feelings, the focus on outcome based symptom reduction is more prominent. Because of this, the current paper will explore mindfulness as a means of symptom control, while addressing it as purely a process of openness to and acceptance of experience, in the future research section.

As mindfulness gained popularity in the West, research regarding its usefulness in the field of psychology emerged. Speaking broadly, mindfulness has been shown to improve psychological, physiological, and physical problems, and is commonly taught in a group format (Keng, Smoski, & Robins, 2011). Mindfulness has been effective in treating depression and anxiety (Hoffman, Sawyer, Witt, & Oh, 2010; Miller et al., 1995; Teleki, 2010; Vollestad et al., 2012), chronic pain (Kabat-Zinn , Lipworth, Burney, & Sellers, 1986), eating disorders (Safer, Telch, & Agras, 2001), attention deficit hyperactivity disorder (Zylowska et al., 2008), substance abuse (Bowen et al., 2006), self-esteem (Brown & Ryan, 2003), coping with stress (Grossman, Niemann, Schmidt, & Walach, 2004; Teleki, 2010), and physical and mental well-being (Brown & Ryan, 2003; Grossman et al., 2004; Williams, Kolar, Reger, & Pearson, 2001). It has also proven to be beneficial physiologically (Burg, Wolf, & Michalak, 2012), such as by lowering blood pressure (Hughes et al., 2013). A variety of therapeutic interventions have been developed with mindfulness as one of the core components, including Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 1990), Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and Dialectal Behavior Therapy (DBT; Linehan, 1993).
Researchers have increasingly studied mindfulness and acceptance-based interventions for anxiety and depression over the past decade, and the results are compelling for the usefulness of mindfulness in mental health. Kabat-Zinn, one of the most influential proponents of mindfulness, developed an MBSR program and conducted extensive research on it. Kabat-Zinn found reductions in anxiety and depression (as cited in Miller et al., 1995). Vollestad, Nielsen, and Nielsen (2012) conducted a comprehensive meta-analysis of 19 studies focusing on using mindfulness interventions for anxiety; results indicated significant reductions in symptoms of anxiety. That same meta-analysis also analyzed levels of depression, finding similar results. In another broad research analysis covering the effectiveness of MBSR, a meta-analysis of 17 randomized clinical trials revealed that MBSR was effective in treating depression, anxiety, and distress, and was most effective with stress (Teleki, 2010).

Little direct empirical research explored the outcomes of mindfulness as a treatment for trauma. However, emerging research (Follette, Palm, & Pearson, 2006; Vujanovic, Youngwirth, Johnson, & Zvolensky, 2009) suggested mindfulness, when combined with other treatment, could be a potentially effective treatment for trauma-related disorders, such as PTSD. One reason for this hypothesis, according to Thompson, Arnkoff, & Glass (2011), is the emphasis mindfulness places on psychological acceptance, rather than on avoidance of negative thoughts or feelings. When analyzing the costs of such avoidance, researchers indicated that active avoidance actually increases the amount of intrusive thoughts and can increase negative emotional experiences (Karekla, Forsyth & Kelly, 2004; Wegner & Smart, 1997). Additionally, in studies of PTSD symptoms, higher levels of awareness and acceptance correlated with reduced
PTSD symptoms (Vujanovic et al., 2009). Other signals that pointed to the potential effectiveness of mindfulness with trauma are its benefits in reducing physiological arousal (Burg et al., 2012).

Recently, King and colleagues (2013) compared MBCT with brief treatment-as-usual (TAU) in treating combat veterans suffering from PTSD. The procedure for MBCT involved an eight week program. The results indicated the patients who engaged in MBCT had lower levels of PTSD symptoms, in particular the avoidant/numbing symptoms, as well as self-blame. In the TAU group, there were no significant improvements noted. Additionally, both ACT and DBT, two approaches of which mindfulness is a core component, show effectiveness in treating trauma (Follette et al., 2006).

One additional area of research that may apply to the Deaf community is the application of mindfulness with experiences to which the majority of Deaf individuals can relate, such as isolation and loneliness. In one study, Degi and Szlagy (2013) examined the effectiveness of mindfulness on symptoms of anxiety, depression and quality of life in Romanian breast cancer inpatients, and found significant reductions in one specific symptom, isolation. Creswell and colleagues (2012) examined the effectiveness of an MBSR program for older adults struggling with loneliness compared with a control group. Results indicated that the mindfulness program reduced loneliness, whereas the control group showed slight increases. Additional research exploring MSBR applied to individuals with social anxiety also found significant improvements in loneliness as assessed by the *UCLA-8 Loneliness Scale* (Jazieria, Goldin, Werner, Ziv, & Gross, 2012).
Furthermore, taking a theoretical approach may provide insight into the potential effects of mindfulness on isolation. Generally, when people judge themselves harshly, feelings of isolation increase (Brown, 1999). Given the emphasis mindfulness places on non-judgment, one can imply an inverse relationship between non-judgment and isolation, although research is needed to support this hypothesis.

**Mindfulness Application to the Deaf Population.**

After reviewing the literature on mindfulness, it becomes clear that it can be an effective treatment for a variety of mental health issues, and also provides physiological benefits. Here I discuss whether mindfulness would also be an appropriate treatment modality for Deaf people. A variety of factors suggest that it could. Specifically, mindfulness would address the primary mental health problems the Deaf community encounters: depression, anxiety, and mental distress. Recent research suggests that mindfulness may benefit individuals who struggle with trauma and loneliness, both of which are prevalent in the Deaf community.

Second, mindfulness may be an intervention that effectively meets the need for culturally sensitive services. Mindfulness practice emphasizes attending to one’s inner world of experience, which aligns with Deaf cultural values. The process of teaching mindfulness can be adapted by using sign language, while also incorporating relevant metaphors and stories, all of which are important in Deaf culture. Additionally, it can be easily adapted to visual methods, such as videotape or visual mindfulness meditation practices, such as imagery. Adapting mindfulness in this manner respects Deaf culture in that it is visual and uses sign language. Rather than having the Deaf client meet the needs of the mental health provider, as is often the case currently, teaching mindfulness
appropriately would be tailored to the Deaf client. Additionally, mindfulness, which can be taught in a group format, may also meet the collectivist nature of the Deaf community, which emphasizes group discussion and interconnectedness.

Last, it is necessary to develop services that may reach a wider range of people, which is important due to the current underserved nature of Deaf mental health care. Mindfulness alone will not effectively eradicate all of the problems of the Deaf community. However, using mindfulness aligned with other forms of treatment, such as individual therapy, could prove to be quite useful.

There is a lack of research that describes applying mindfulness to the Deaf community. This absence speaks to the immediate need to conduct such research. One of the only areas mindfulness has been studied with Deaf individuals is as part of DBT, in which mindfulness is one piece of the intervention.

In 2012, Davidson and colleagues conducted a study of the Australian Deaf Community, specifically following three Deaf people fluent in Australian Sign Language for nine months. While using DBT-informed treatment, they observed positive outcomes at the end of the study; specifically, the ability to identify and use relevant skills learned from the program such as mindfulness (Davidson et al., 2012). However, it is not yet clear how the mindfulness aspect specifically correlated with the effectiveness of their intervention. O’Hearn and Pollard (2008) discussed the challenges and the potential of DBT with the Deaf population. They suggested that the aspect of mindfulness that emphasizes validation of emotions may be particularly useful.

Regarding conducting culturally sensitive therapy with members of the Deaf community, Glickman (2009) discussed using mindfulness in the context of DBT.
Glickman has not been able to teach mindfulness sufficiently for Deaf clients to use it as a major coping skill. However, Glickman indicated the potential of mindfulness practice in improving the mental health of the Deaf community, and listed possibilities of how to teach mindfulness without the use of auditory information. First, Glickman found teaching Deaf client’s diaphragmatic breathing could be useful. Another promising practice involved using an experiential mindful eating exercise in which Deaf clients are asked to notice their reactions to food on their tongue. The author noted the potential implications of an exercise like this to address impulse-control problems, which are prevalent in the Deaf community (Landsberger & Diaz, 2010). In describing mindfulness practice to Deaf individuals, Glickman used a visual model of a traffic light to symbolize the slowing process that comes with mindfulness. In this example, the red light represented “stop and notice.” However, these interventions were limited to parts of DBT work, rather than using mindfulness by itself (Glickman, 2009).

In Glickman’s (2009) work, many of the mindfulness exercises evidenced mindfulness as a culturally sensitive tool. Using diaphragmatic breathing, as well as the process of turning awareness inward are inherently nonverbal activities. Additionally, the use of a traffic light to represent these processes provides a metaphor that is understandable and visual. The mindful eating exercise taps into an everyday activity that all people, hearing and Deaf, experience. These simple examples of teaching mindfulness address Deaf cultural experiences/values of non-verbal experience, and the appreciation for stories and metaphors.

Furthermore, on a broader scale, the process of mindfulness can involve observing and acknowledging aversive emotions like depression and anxiety through
visualization or imagery of those thoughts/feelings. This practice aligns with Freedman’s (1994, as cited in Glickman & Harvey, 1996) recommendation for such interventions emphasizing visual/spatial processes with the Deaf community. Additionally, mindfulness involves opening up to one’s own inner world, and accepting whatever is there: positive, negative, or neutral. It is not an intervention that is more suited to the majority, nor is it an intervention that requires the Deaf community to be more like their hearing counterparts. Because of this, mindfulness may be well suited for Deaf individuals in that it creates a space to understand and validate one’s own experience, instead of pushing it away or altering it.

Moreover, as noted earlier, the effectiveness of mindfulness in general with major mental health problems in the Deaf population, such as anxiety, depression, and emerging research with trauma and isolation/loneliness, points to an intervention that may be useful both culturally and psychologically. Additionally, mindfulness is often taught in a group format, which may partially address the need for services to reach a greater number of people, while also respecting the value of groups in Deaf culture. Nevertheless, challenges are clear in creating such a mindfulness intervention, as the treatment would need to be Deaf-specific and culturally sensitive. This paper proposes a number of considerations to begin this process.

**Recommendations for Culturally Specific Mindfulness Treatment**

In developing a culturally specific mindfulness intervention program for the Deaf community, there are many aspects to consider. Instead of proposing a specific intervention program, this paper provides an outline of recommendations, including practices, techniques, and strategies, when adapting mindfulness to the Deaf community,
while also addressing the possible challenges that may be encountered. It is important to note that while this paper discusses the common aspects of Deaf cultural experience, a culturally competent clinician is aware of and sensitive to individual differences within culture.

First, the most important aspect to consider is culture. A culturally Deaf clinician would be the best option for this type of intervention. Or, if that is not feasible, at the very least a culturally competent clinician is recommended. This means clinicians need to have the necessary knowledge, skills, and self-awareness (Sue & Sue, 2007) when working with the Deaf community. These skills include being sensitive to a variety of Deaf cultural factors, such as understanding the Deaf community’s cultural history and values, having proficiency in sign language, having an understanding of Deaf modes of communication, and being aware of one’s own cultural background and biases. Without these abilities and characteristics, the intervention automatically loses credibility and usefulness, and reinforces a model of Deaf inferiority. Additionally, the clinician must have adequate experience teaching mindfulness, as well as experience in working with mental health disorders.

The teaching of mindfulness creates a unique challenge. Traditionally, mindfulness is taught and practiced using auditory methods, with a teacher explaining or guiding the client. Often, the eyes are closed or drawn down. Teaching mindfulness to the Deaf community would require a visual/gestural model of training. One way to establish this model, at least initially, would be using an introductory video adapted to sign language. This is recommended because it will respect the visual way Deaf people take in information and the language of the Deaf community (Glickman & Harvey, 1996). The
video would explain the history and definition of mindfulness and briefly introduce diaphragmatic breathing through visual examples. Although a video could be used throughout the whole mindfulness program, it may be more useful just as an introductory method, and then the instructor continue to teach experientially while using sign language.

The next recommendation for a culturally specific mindfulness intervention involves having the instructor take Deaf individuals through a story about an experience of being mindful or not mindful. This is an important component as storytelling is an important Deaf cultural value (Glickman & Harvey, 1996; Phillips, 1996). Next, providing an experiential exercise of mindfulness, starting with the practice of mindful breathing, will be necessary. The instructor, using sign language, would show the Deaf individuals how to mindfully breathe by taking part in the exercise with them, placing their own hands on their diaphragms to practice mindful, diaphragmatic breathing. Throughout teaching, space should be created for group discussion and asking questions using the preferred mode of sign language, which would allow members to process their experiences together, which connects with the collectivist aspect of Deaf culture.

In teaching mindfulness, visual metaphors and visual practices are recommended, as they are culturally valued. For example, as Glickman (2009) described, using a traffic light as a technique to teach and use mindfulness, emphasizing the colors of red, yellow and green, is one option. In fact, not only does this possibility connect with cultural values of the visual nature of sign language, it also provides a metaphor that emphasizes time and sequence, important features of Deaf communication (Williams & Abeles, 2004). Connected with the visual idea of a stoplight is using the popular acronym of
STOP to help remember the mindfulness process. STOP stands for - stop, take a breath, observe, and proceed (Stahl & Goldstein, 2010). Use of this acronym could provide an active complement to the visual metaphor of a traffic light, as the instructor could fingerspell S-T-O-P, while explaining what each letter represents. One potentially robust visual mindfulness-meditation practice that may be particularly helpful with Deaf individuals is a loving-kindness meditation, also called metta (Pāli derivation). In fact, this type of mindful meditation may have positive effects on low self-esteem and feelings of alienation (Nilsson, 2014), issues with which Deaf individuals often struggle.

Other recommendations that would be beneficial in teaching mindfulness include alternative mindfulness practices, such as mindful eating, mindful walking, and yoga. These exercises may help Deaf clients gain more experience with mindfulness using different senses, including taste and touch. The key here would be to teach these practices using sign language, and incorporate videotape and stories as needed.

These components are all important pieces in applying mindfulness as a culturally specific tool to use with the Deaf community. However, the challenge remains of how to structure this practice into an individual or group program. One step in that direction may be in exploring the creation of a program similar to Kabat Zinn’s 8-week MBSR program, but adapted specifically for the Deaf community. This would entail incorporating culturally specific models of teaching mindfulness with the Deaf, such as using visual metaphors and stories, while also translating all teaching materials into sign language or videotapes with sign language. Given MBSR’s effectiveness with mental health problems, loneliness, and stress, it may be particularly useful in helping the Deaf community with notable mental health problems.
The MBSR program typically includes nine 2-3 hour sessions over the course of 8 weeks, as well as one all-day session. Group size is typically 15-30 people. Each week includes different types of mindful practice, including mindful breathing, sitting mindfulness meditation, mindful body scan, and yoga. The program also includes intergroup discussions and homework, such as listening to audiotapes of mindfulness exercises. Following a similar structure, a culturally sensitive mindfulness intervention for the Deaf may include these aspects, but would need to be taught in an entirely different manner. The key challenge would be adapting all teaching material to culturally sensitive ones. For example, instead of using audio CDs for mindfulness-meditation exercises, adapting the material to videotapes in sign language would be necessary.

**Limitations**

Although mindfulness may have the potential to be a culturally sensitive tool to use with the Deaf community, there are certain limitations. Most notably, mindfulness will not be able to address the realities that Deaf people face every day, in their families and in society. From the standpoint of the minority model of disability, this inability points to a more important issue – that Deafness continues to be interpreted as inferiority or a deficit. As such, although mindfulness may help with aversive emotions/feelings that arise due to issues Deaf people experience, it will not eradicate the problems that contribute to such mental health issues in the first place. Moreover, even if a culturally sensitive mindfulness program is created, there may be hesitancy and mistrust due to historical oppression that the Deaf community has faced historically.

Another limitation of such an application is that mindfulness alone may not be enough to treat the mental health problems of Deaf individuals. In other words,
mindfulness is not a universal or comprehensive intervention. Mindfulness would ideally be used as an aspect or helpful technique in individual therapy, or in a group setting.

Additionally, there is no substitute for culturally sensitive professionals when working with Deaf individuals. If such a program were implemented or used, and the professional did not have a working understanding of Deaf culture, the same problems this paper has attempted to address would be perpetuated. This aspect is quite relevant because currently, few mental health professionals are both competent in mindfulness and competent in providing therapy to Deaf individuals.

Finally, an important limitation is the paucity of research in applying mindfulness with the Deaf community. Currently, apart from mindfulness as an aspect of a particular therapy approach (e.g., DBT), it is not known whether mindfulness correlates with positive mental health outcomes within the Deaf community. However, before combining mindfulness and mental health outcomes, it is important to better understand the prevalence of Deaf psychopathology to know which problems mindfulness would need to address most. The dearth of research extends to the effectiveness of mindfulness in areas of Deaf mental health issues. For example, although mindfulness shows promise in working with trauma related mental health issues, there is insufficient research to make it empirically supported.

**Future Research**

To more accurately conceptualize the mental health needs of the Deaf community, as well as potential treatment modalities, researchers need to start on a broad scale. Currently, research studies on Deaf psychopathology continue to be very limited. Increased research on the prevalence of mental health problems in the Deaf community,
using proper sampling and culturally sensitive methodology, will be important. Doing so would help eliminate the ambiguity regarding the psychopathology Deaf people struggle with most, while also bolstering additional research pertaining to those issues.

Next, the most pressing need for future research revolves around developing empirical studies that delve into the effectiveness of using mindfulness as an intervention with the Deaf community. Additionally, studying mindfulness in different treatment modalities, such as group and individual, as well as when applied to different mental health problems, would yield a more accurate understanding of where it could be most effective. Special care should be taken in these prospective studies to use culturally sensitive assessment and screening instruments, to ensure reliability and validity.

Another possible avenue to explore may be in searching for alternative treatment interventions that identify with Deaf cultural values. Given the promising research regarding using mindfulness within a broader therapeutic modality, such as DBT with Deaf people, exploring other therapeutic modalities that use mindfulness may be useful. For example, ACT, developed by Hayes, could be an intriguing option. ACT is a behavioral therapeutic modality that involves learning to commit to a meaningful life, while accepting the pain that automatically comes with it. Specifically, ACT addresses the importance of receptive, accommodating, flexible awareness aimed at movement toward rather than away from psychological distress. The ACT approach therefore emphasizes psychological acceptance when doing so honors and validates one’s life and circumstances, and where doing so advances values-inspired living. As acceptance-based practice begins to take hold, so does the urge to control one’s private world ease, thereby
reducing suffering while opening life up to other possibilities lived (Hayes, Strosahl, & Wilson, 1999).

Some preliminary evidence suggests that ACT may be effective with the Deaf community for the following reasons. First, ACT is an empirically supported treatment for a variety of mental health problems, such as depression and anxiety (Forman, Herbert, Moitra, Yeomans, & Geller, 2007), as well as traumatic experiences, such as child abuse (Wilson, Follette, Hayes, & Batten, 1996). Second, ACT not only employs mindfulness as a major aspect, but also emphasizes metaphors and experiential exercises, both of which are valued in Deaf culture. Third, ACT is rooted in Relational Frame Theory, a contemporary research program focused on language and cognition (Hayes, Barnes-Holmes, & Roche, 2001). Using a modality that stresses the significance of language may align with Deaf cultural values of sign language. In addition, an important focus of ACT intervention centers on cognitive defusion work aimed at deliteralizing conceptualized content. This intervention fits nicely with Freedman’s (1994, as cited in Glickman & Harvery, 1996) proposition of externalizing experiences, or observing and noticing abstract notions in a visual/spatial manner, when working with the Deaf community. Once again, sound and reliable research should be established before considering use of ACT with the deaf community.

**Conclusion**

Future research will ideally help clarify many of the mental health problems of the Deaf community, while also suggesting potentially effective, culturally sensitive treatments. Mindfulness, as one prospective treatment, offers a unique possibility that appears to meet the needs of the Deaf community culturally and psychologically.
Developing a mindfulness based intervention for the Deaf community may begin to remedy the lack of effective services for Deaf individuals. However, without adequate cultural understanding and competence when teaching mindfulness, the potential benefits will be lost. The most pertinent need may be in educating the hearing community. No substitute exists for increased education, both in general schools and in training for professional service, about Deaf culture. By stressing education on Deaf culture and history, ideally, medical and mental health service providers will begin to destroy the barriers that have so long marginalized the Deaf community. This education would, in effect, create a society that appreciates and values the cultural differences and similarities of the Deaf community, wherein mental health professionals focus on understanding Deaf individuals as a prerequisite for providing effective treatment.
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