

The Psychosocial Effects of Hearing Loss on Intimate Relationships

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Abstract

Hearing loss (HL) disrupts a person's ability to hear and thus communicate effectively with those around them. It creates a sort of invisible barrier between affected individuals and the people they interact with; namely their friends, families, and spouses. When failed to be accepted as a new norm or when left untreated, hearing loss upsets the balance in relationships, specifically intimate relationships, which rely on clear and constant verbal interaction.

I will review existing literature on the effects of HL on social and intimate relationships that attempt to clarify why some adults thrive after being diagnosed with hearing loss and others don't. I will then propose an original study which will seek to find a relationship between two variables as a potential influence of the success and hindrance factors for couples with HL. I will follow the less common line of research which focuses on the experience of the unaffected spouse, rather than that of the individual with hearing loss.

The goal of the proposed research will be to discover a link between two factors, previously unaddressed in relation to one another: timing of hearing loss onset in a marital relationship and the psychosocial experience of the unaffected spouse. Researchers will analyze hearing members' attitudes toward their spouses' HL through the lens of Erik Erikson's Stages of Psychosocial Development (Erikson, 1950). Psychosocial development will be looked at in terms of its significance on the response of unaffected spouses toward their partners' hearing loss. Conversely, the response of hearing spouses toward their partners' hearing loss will be studied to see how it influences their progression through psychosocial development. With this newfound knowledge of how hearing loss affects spousal relationships at different life stages, providers will be more equipped to provide adequate treatment to couples with HL.

Introduction

Hearing, or auditory perception, is perhaps the most powerful sense possessed by man. When asked if she could choose the ability to hear or see, Helen Keller replied, “The problems of deafness are deeper and more complex, if not more important, than those of blindness” (Roberts and Chartrand). As a woman who was both blind and deaf, Helen Keller clarified the distinction between lacking sight and lacking sound: “Blindness cuts us off from *things*; deafness cuts us off from *people*...to be cut off from hearing [people] is to be isolated indeed” (Roberts and Chartrand). Hearing is the key to effective interactions and meaningful relationships. From infancy, our ability to perceive sound facilitates our eventual spoken language development. Through her experiences, Helen Keller revealed insight on the far-reaching psychosocial effects of HL on human beings.

Background

Hearing Loss

Hearing loss (HL) is the partial or total inability to hear sound in one or both ears (Bahmad, 2015). An estimate of 30.0 million or 12.7% of Americans 12 years and older have bilateral hearing loss and this estimate increases to 48.1 million or 20.3% when including individuals with unilateral hearing loss (Lin, Niparko, and Ferrucci, 2011). According to the World Health Organization (WHO), over 900 million people are expected to have disabling hearing loss by 2050 (Lebrun Visgilio, 2020). Overall, the prevalence of hearing loss increases with every age decade (Lin, Niparko, and Ferrucci, 2011).

Hearing loss can either be congenital or acquired sometime later in life. If acquired, it can occur either prelingually or postlingually. HL can progress over time or occur suddenly. Its level of severity can fluctuate over time or it can remain the same. Hearing loss can exist in one ear

(unilateral) or in both ears (bilateral). If HL is bilateral, its severity can be the same in both ears (symmetrical) or different in each ear (asymmetrical) (Centers for Disease Control and Prevention, n.d.). There are many different causes of hearing loss, only some of which are known. Known causes include exposure to loud noise, earwax or fluid buildup, health conditions, side effects from medications, and heredity (National Institute on Aging, 2018).

Types of Hearing Loss

In normal hearing, sound vibrations travel smoothly from the outer ear, through the middle ear, and to the inner ear (Bahmad, 2015). Hearing loss occurs when sound vibrations cannot move fluidly through the ear canal. There are three general types of HL: conductive, sensorineural, and mixed. In conductive hearing loss (CHL), sound vibrations cannot pass from the outer to the inner ear. Sensorineural hearing loss (SNHL) is when hearing loss occurs as a result of damage in the cochlea or beyond. Even if the outer and middle ear are normal, SNHL can cause complete loss of hearing. Mixed hearing loss includes a combination of conductive and sensorineural components (Bahmad, 2015).

Degrees of Hearing Loss

Hearing loss can be classified according to severity and is usually measured in terms of the quietest sounds a person can hear using a decibel scale and a pure tones test, otherwise known as audiometric testing (Bahmad, 2015). In audiometric testing, the subject listens to different pure tone signals through headphones to record air conduction. An audiometer examines the person's hearing ability by assessing the threshold of hearing a sound signal at different frequencies (pitch, in cycles per second or Hz). Hearing threshold may be defined as how soft a sound may get before it becomes inaudible. (Bahmad, 2015). Morgan-Jones (2001)

cites the parameters for degrees of deafness as outlined by the American Committee on Conservation of Hearing:

26-40 dB: mild-Difficulty only with faint speech

41-55 dB: moderate-Frequent difficulty with normal speech

56-70 dB: moderate-Frequent difficulty with loud speech

71-90 dB: severe-Understand only shouted or amplified speech over 90 dB

>90 dB: profound-Usually cannot understand even amplified speech

Once the type and degree of hearing loss is established, appropriate intervention can be given.

This may include hearing aids, aural rehabilitation, cochlear implants, medical intervention, or surgery (Bahmad, 2015).

Social Identification: Deaf vs Deaf

‘Deaf’ with a capital D is used to describe those who are prelingually deaf and use sign language as their primary form of communication. For these people, English is considered to be a second language and thus understanding nuances of the language can be difficult (Deaf Health Charity). People who identify with the Deaf community often view themselves as a minority group that is separate from the hearing world (Morgan-Jones, 2001). Deaf with a lowercase d refers to people with acquired hearing loss who understand spoken language and continue to associate themselves with the hearing community (Morgan-Jones, 2001). In summary, lowercase ‘deaf’ refers to the audiological condition of not hearing and uppercase ‘Deaf’ refers to a specific group of people who share a language (such as American Sign Language) and a culture (Padden and Humphries, 2006).

Literature Review

Findings from journals of psychology, psychiatry and audiology contribute to our understanding of the effects of HL on both affected and unaffected individuals. Previous studies (Smith and Kampfe, 1997) reveal the significant effects of HL on older individuals and their relationships in an attempt to inform rehabilitation workers of the difficulties experienced by older couples when hearing loss is present in one member. Older people with HL face challenges such as a decrease in energy and recreational outlets, isolation, anxiety/fear/distrust, the conception of others that they are experiencing cognitive deterioration, changes in family dynamics, personal roles, and independent functioning, and limitations in living environment options (Smith and Kampfe, 1997). In reference to the broader task of identifying factors that promote or prevent intimate relationship sustainability, Smith and Kampfe (1997) claim that older spouses with HL are more likely to experience difficulties in their relationships.

Older people with late onset HL, or hearing loss that emerges later in life, often experience identity crises as they struggle to adapt to their new circumstances (Smith and Kampfe, 1997). As people who have associated themselves with the hearing population up until the point of their hearing loss, these individuals do not know if and how they should continue identifying with this group. While they have developed a comfortable relationship to the hearing world and may wish to continue participating in that sphere, it will no longer be possible for them to do so with ease. A societal 'stigma' often emerges, which is characterized by destructive and negative attitudes toward people with hearing loss or late onset deafness (Morgan-Jones, 2001). Because people with HL are afraid of facing stigma in their social life, they often choose to be lost in the hearing world rather than to identify with the Deaf community by learning to lip-read, Sign, or wear a hearing aid (Morgan-Jones, 2001). Despite their increased effort to

follow patterns and streams of conversation, they will miss out significantly. On the other hand, if individuals with late onset hearing loss do wish to join the Deaf community, their limited knowledge of sign language and Deaf culture will make it difficult for them to transition smoothly. Additionally, older adults with hearing difficulties often have other physical limitations such as visual or energy deficits, arthritis, other neuro-muscular conditions, or emotional responses that would prevent them from mastering sign language (Smith and Kampfe, 1997). These people are either unable, uninterested, or unwelcome by the Deaf community. The lack of belonging that late-deafened individuals experience in terms of social identification can destabilize their sense of personal identity. It is disorienting for an older person, who is at a mature stage of development, to have their social and intimate roles be suddenly compromised. This upheaval is experienced as a psychological and emotional trauma (Smith and Kampfe, 1997).

Smith and Kampfe (1997) aim to provide rehabilitation workers with a greater understanding of the effects of HL on older people and their relationships. The hope is that traits such as empathy, validation, and willingness to find creative solutions will stem from a heightened sensitivity to the challenges faced by older people with hearing loss. It is suggested that older people with hearing loss along with their family members and caretakers will benefit from an education on the potential ramifications of hearing loss. Kübler-Ross (1969), introduces the concept of there being five developmental stages of grief that individuals experience: denial, anger, guilt, depression, and adaptation. Smith and Kampfe (1997) emphasize that knowledge of psychosocial aspects of disability, such as stigma and Ross's stages of grief, along with experiences in helping individuals with assertive expression, energy conservation, environmental adaptations, mobilization of support and compensation strategies, can enhance the ability of

rehabilitation workers to introduce coping strategies to the older person with hearing loss (Smith and Kampfe, 1997). Ultimately, Smith and Kampfe (1997) claim that a heightened awareness of the consequences of hearing loss in the older population will enable service providers to develop more effective treatment strategies.

The systems perspective views the family as a unified whole where no problem is limited to one individual (Morgan-Jones, 2001). According to this perspective, if one member experiences hearing loss, it will affect not just that individual, but everyone who interacts with that person. Many studies have found this to be an accurate description of the broader effects of HL on the family sphere. The systems perspective additionally posits that when a person has a physical disability, no bodily system is affected in isolation. In accordance with this tenet, if a person experiences hearing loss, his audiological abilities are not the only thing that will be compromised. This notion of every internal system being linked to another contributes to the implications that hearing loss affects mental health and provides support for assessing mental health in people with HL (Morgan-Jones, 2001).

Smith and Kampfe (1997) align themselves with the systems perspective in their belief that hearing loss impacts more than just the affected individual. It changes how the person with HL interacts with others, thereby altering social and intimate relationships. Although they acknowledge that relationships as a whole are challenged, which implies that hearing individuals too, are impacted, Smith and Kampfe (1997) do not address the experience of unaffected individuals to their partner's hearing loss.

In her master's thesis on the impacts of hearing loss on social-emotional health, Lebrun Visgilio (2020) recognized that while ample research has been conducted on people over the age of 60 with hearing loss, few studies have been carried out on hearing loss in the younger

population. To address this, Lebrun Visgilio used data from the 2011 wave of the National Health Interview Survey (NHIS) obtained via the Inter-University Consortium for Political and Social Research in order to assess the relationship between social-emotional health and hearing loss in young and middle aged adults. A newly created social-emotional health scale was created by using individual variables regarding depression, anxiety, exhaustion, and a person's ability to participate in leisure activities. Results of Lebrun Visgilio's research showed that hearing loss is associated with poorer social-emotional health in this age group (Lebrun Visgilio, 2020). This data further supports the systems perspective, which indicates that a person with hearing loss lacks more than just the ability to hear. The results suggest that mental health professionals should be educated about the unique challenges that people with hearing loss face. More important, however, is the discovery that the younger people with HL are just as prone to relationship difficulties as the older population. This brings researchers back to their original quandary in understanding why some relationships where HL is present are sustained while others break down.

Hetu, Jones, and Getty (2009) clarify the significant effects of hearing loss on intimate relationships, regardless of age. A person with HL may have difficulty in answering the phone, answering the door, or shutting off an alarm, and this can cause his or her spouse to become frustrated. In cases such as answering the phone and participating in larger social gatherings, the hearing spouse must assume the role of interpreter for his or her partner. Ask, Hjertager Krog, & Tambs (2010) explain how through this, the spouses become important communication aids and possible caregivers to the individual with HL. They infer that communication difficulties, along with the hearing spouse's role as social facilitator, could be a stress factor for the hearing spouse

and may affect his or her mental health and subjective well-being (Ask, Hjertager Krog, & Tambs, 2010).

Pearlin, Mullan, Semple, & Skaff (1990) use the caregiver stress model to explain the negative experiences of hearing spouses in regard to their partner's hearing loss. They define caregiver stress as a consequence of a process which comprises multiple interrelated conditions such as socioeconomic characteristics, resources of caregivers, and the primary and secondary stressors to which they are exposed (Pearlin, Mullan, Semple, & Skaff, 1990). Specific primary stressors include difficulties and problems directly related to caregiving and secondary stressors include the strains experienced in roles and activities outside of caregiving (Pearlin, Mullan, Semple, & Skaff, 1990). Pearlin, Mullan, Semple, & Skaff (1990) identify caregiver stress as a hindrance factor to successful intimate relationships and claim that it is therefore important for people who experience these stressors to develop coping skills and seek social support.

Hearing spouses have reported their frustration at increased TV and radio volume levels (Ask, Hjertager Krog, & Tambs, 2010). While these things may create tension in a relationship, what's most upsetting to the hearing spouse is when his or her questions, jokes, or remarks go unanswered. The hearing spouse often has to repeat his or her thoughts for them to eventually be heard and there is a general decrease in intimate talk (Ask, Hjertager Krog, & Tambs, 2010). Effective and reciprocal communication is essential to a healthy, functioning relationship, and hearing loss minimizes this instinctive dynamic. Therefore, even hearing loss that is classified as mild has been shown to negatively impact relationships (Ask, Hjertager Krog, & Tambs, 2010). Here, Ask, Hjertager Krog, & Tambs (2010) claim that untreated HL in a relationship is what will cause it to deteriorate.

Piercy and Piercy (2007) acknowledge the increased difficulty of communication in couples when HL is present in one spouse. They seek to identify tangible factors and causes of this stress through applying the knowledge of the attribution theory. Attribution can refer either to the explanations of behavior or the inferences of traits from behavior (Malle and Korman, 2013). According to either definition, applying this theory can help clarify points of tension in a relationship which may be causing a decline in effective communication. Piercy and Piercy (2007) utilize their findings to propose intervention methods aimed at increasing the quality of communication between couples who experience hearing loss.

Donaldson, Worall, and Hickson (2004) addressed the lack of research on unaffected spouses (Smith and Kampfe, 1997) by conducting a study which sought to gain insight on the response of hearing individuals to their spouses' hearing loss. They found that individuals with HL who seek aural rehabilitation are most commonly those who have been urged to do so by their spouses, especially in the older population (Donaldson, Worall, and Hickson, 2004). From these results, Donaldson, Worall, and Hickson (2004) inferred that the role of the unaffected spouse as treatment facilitator is due to the fact that he or she is frustrated with the partner's hearing loss.

Donaldson, Worall, and Hickson (2004) recognized that most studies on the impact of hearing impairment on family life have focused on the individual with hearing loss, rather than their spouses or family members. Studies which have looked at the unaffected spouses have done so mainly to better frame the experience of the affected individuals, who remain the focal point. These researchers aimed to reconcile this by shifting the common focus from the individual with hearing loss to the unaffected spouse. They attempted to develop a greater understanding of the needs of older hearing spouses, such as the effects of retirement and the increase in time that the

couple spends together. Donaldson, Worall, and Hickson (2004) hypothesized that the cumulative effect of experiencing many years of hearing difficulties with a partner may be a factor that influences the extent to which older people are affected by their spouse's hearing impairment.

Hetu, Jones, and Getty (2009) use the symbolic interaction theory of social sciences to assess the coping mechanisms employed by couples with HL. According to this theory, people experience their lives both in the natural and symbolic environments (Aksan, Kisac, Aydin, Demirbuken, 2009). This indicates that the meaning granted to objects and experiences is determined by social actors, rather than the objects themselves. The symbolic interaction theory helps clarify the motivations for human behaviors and is useful in understanding a couple's choice of coping mechanisms. Hetu, Jones, and Getty (2009) used this theory to gain insight on the condition of couples with HL and improve audiological rehabilitation for individuals with hearing loss.

Hallberg and Berrenas (1993) attempted to learn more about the perspective of females to their partners who suffer from severely noise-induced hearing loss as well as create a theory as to how the unaffected female spouses shifted and managed their daily life. They recruited ten females, all who differed from each other in age, educational status, number of children, and years of marital relationship, and conducted in-depth interviews with each participant (Hallberg and Berrenas, 1993). The wife's response and method of coping was found to be influenced by the husband's level of denial to his reduced hearing abilities along with the general impact of his hearing loss on the intimate relationship (Hallberg and Berrenas, 1993). The participants demonstrated use of four coping strategies: co-acting, minimizing, mediating, and distancing (Hallberg and Berrenas, 1993). When utilized by the unaffected spouse, these coping strategies

were found to be a determinant of the rehabilitation success level for the person with hearing loss. Hallberg and Berrenas (1993) then identified the outcome of audiological rehabilitation as a factor that influences the stability or decline of an intimate relationship.

Wallhagen, Strawbridge, Shema, & Kaplan (2004) acknowledged the theme thus far of there being insufficient research on the impact of HL on spouses. To address this deficit, they constructed a longitudinal study that analyzed the relationship between a spouse's self-assessed hearing loss and his or her partner's physical, psychological, and social well-being five years later. Results depicted a positive correlation between a person's hearing loss and the physical, psychological, and social well being of their hearing partners. Wallhagen, Strawbridge, Shema, & Kaplan (2004) noted that health care providers for older citizens generally do not prioritize hearing loss treatment. They inferred that this is because hearing loss in older people is viewed as 'normal,' age related, and not life-threatening. However, Wallhagen, Strawbridge, Shema, & Kaplan (2004) demonstrate that within the context of its effects on relationships, the consequences of HL are severe. Hearing loss reduces the quality and quantity of couple communication (Piercy & Piercy, 2007) and shapes the emotional health of affected individuals (Lebrun Visgilio, 2020). Following the logic of the systems perspective (Morgan-Jones, 2001), the well-being of the person with hearing loss will influence the well-being of his or her partner. Thus, when hearing loss is present, both the affected individuals and their spouses suffer (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). The case here is made here for prioritizing HL treatment to sustain the physical and emotional health of affected individuals and their partners.

In older couples who have well established marriages, the manifestation of HL in one partner creates a need to change long standing patterns of relating and can create unmet needs

and affect quality of life (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). For instance, if the affected spouse has always served as the confidant, he or she may no longer be able to carry out this role. Additionally, activities that had previously been enjoyed by both spouses, such as going to concerts and plays, may no longer be enjoyed by the spouse with HL (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). Although Wallhagen, Strawbridge, Shema, & Kaplan (2004) note the shift in roles and expectations in long-standing relationships, they do not pursue further research in this area. They acknowledge that more research is needed in order to understand more clearly how older couples negotiate changing roles in their relationships in the context of HL (Wallhagen, Strawbridge, Shema, & Kaplan, 2004).

Wallhagen, Strawbridge, Shema, & Kaplan (2004) suggest that a contributing factor of positive well-being in both members in a relationship with HL is early diagnosis and intervention. However, limitations of this inference include the fact that the participants' level of hearing in the study was not measured by official testing standards, but was based on their subjective perception of their hearing abilities. This method of self-report data is helpful in measuring an individual's personal sense of hearing loss, but it does not provide the level of accurate data and validation that audiometric testing would. Another limitation was that of the wide variety of ages among the participants. To address this discrepancy, a larger data set would have allowed researchers to analyze the differences in findings among the wide age range of participants (Wallhagen, Strawbridge, Shema, & Kaplan, 2004).

Wallhagen, Strawbridge, Shema, & Kaplan (2004) articulate the need for more research to be done using theoretical perspectives from the communication theory and qualitative methodology to further enhance our understanding of the impacts of hearing loss on older couples. The researchers express that studying HL in couples through the lens of theoretical

perspectives from communication theory would contribute to a greater understanding of changing relationships with age, specifically in the context of HL, and using qualitative methods would clarify the meaning of hearing loss in older couples, strategies used to deal with hearing loss, and how they negotiate changes in long established communication patterns (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). This additional information would enable professionals to design more effective treatment plans and interventions to promote and sustain quality of life in couples with HL.

While the longitudinal study (Wallhagen, Strawbridge, Shema, & Kaplan, 2004) utilized self-reported measures of hearing loss in seeking a correlation to spousal mental health, the Nord-Trøndelag Health Study (Ask, Hjertager Krog, & Tambs, 2010) used audiometric measures as well as self-reports to assess the extent to which unaffected spouses experience reduced subjective well-being and poorer mental health in comparison to the general population. In the Nord-Trøndelag Health Study, Ask, Hjertager Krog, & Tambs (2010) recognized that there had been no prior population-based investigations to analyze these associations using validated measures of mental health and pure tone audiometry. Previous studies had looked at these factors, but only through individual self-reports (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). Ask, Hjertager Krog, & Tambs (2010) therefore aimed to discover whether the data obtained through these subjective measures was inflated by self-report bias. They did this by comparing the results based on measured hearing to those obtained through self-reported hearing (Ask, Hjertager Krog, & Tambs, 2010).

Results based on self-reported hearing loss, like prior studies (Wallhagen, Strawbridge, Shema, & Kaplan, 2004), showed a positive correlation to a spouse's decline in mental health (Ask, Hjertager Krog, & Tambs, 2010). However, results based on audiometry did not indicate

severe loss of mental health among spouses of individuals with hearing loss (Ask, Hjertager Krog, & Tambs, 2010). Contrary to most studies on couples with HL, the results of this study showed no significant associations of acquired hearing loss to spousal symptoms of anxiety, depression, and subjective well-being (Ask, Hjertager Krog, & Tambs, 2010). Researchers here claim that this is not the first time evidence based on clinical research has failed to be proven in larger quantitative studies in the literature of hearing loss (Ask, Hjertager Krog, & Tambs, 2010). Hetu, Jones, & Getty (2009) found that studies based on validated questionnaires did not show associations that were reported by other clinical studies regarding negative implications of hearing loss on couple relationships.

The seemingly contrary results of the Nord-Trøndelag Health Study (Ask, Hjertager Krog, & Tambs, 2010) highlight the importance of recognizing the influence of external variables on the accuracy of data collection. For example, studies that show HL to have a negative effect on spouses are mostly based not on random population samples, but on small samples from clients at audiology rehabilitation centers (Ask, Hjertager Krog, & Tambs, 2010). It is likely that people who seek treatment from these clinics are highly aware of their problems which may lead to their inflated perception of the difficulties surrounding HL in their relationships. According to this conception, the pool of participants in these studies is not based on an accurate representation of the general HL population (Ask, Hjertager Krog, & Tambs, 2010). Other confounding variables may include the presence of other medical or psychological problems in a relationship or the fact that participants in clinical interviews are highly conscious that their hearing loss and its consequences are of primary focus, which can cause over-reporting of adverse effects (Ask, Hjertager Krog, & Tambs, 2010).

Although Ask, Hjertager Krog, & Tambs (2010) revealed a discrepancy between results based on self-reported HL and those based on measured HL, it is not clear that the discrepancy was due to self-report bias. It is likely that the disparity between the two experimental measures implies that the conventional audiometric criteria for disabling hearing impairment that was used here was stricter than what most people actually perceive as hearing impairment (Ask, Hjertager Krog, & Tambs, 2010). This would mean that the difference in results was not due to self-report bias, but a difference in defining the parameters of hearing loss. However, this is only an inference and it is noted that more research is needed to explore the extent to which hearing loss affects spousal mental health (Ask, Hjertager Krog, & Tambs, 2010). For instance, the previous study that used only self-reported hearing loss was longitudinal, while this one cross-sectional. Ask, Hjertager Krog, & Tambs (2010) acknowledge that a longitudinal analysis would be a good next step to further examine whether such a design gives systematically different results. Additionally, more research should be done to examine the factors that make hearing loss hard to handle in a relationship.

While previous research has shown HL to have negative consequences on intimate relationships (Wallhagen, Strawbridge, Shema, & Kaplan, 2004), Yorgason, Piercy & Piercy (2007) presented opposing results when studying the influence of couple resilience processes that are present in older couples with acquired hearing impairment. They conducted interviews with couples where one spouse had acquired hearing loss (Yorgason, Piercy & Piercy, 2007). Most couples admitted to having gradually accepted and learned to find meaning in their experiences together and also expressed meaningful beliefs and values that they shared with their spouse, such as optimism, gratitude, and humor (Yorgason, Piercy & Piercy, 2007). Despite their hearing-related communication difficulties, most couples had good communication skills that

seemed to have been strengthened in response to the hearing loss (Yorgason, Piercy & Piercy, 2007). Couple adaptation seemed to have been aided by assisted listening devices as well (Yorgason, Piercy & Piercy, 2007). Strong resilience was demonstrated through couples' balance between dependence and autonomy, and through maintaining a balanced emotional ledger during interviews (Yorgason, Piercy & Piercy, 2007).

Another factor which has been found to enhance a couple's ability to sustain and strengthen their relationship is romantic nostalgia (Evans, Juhl, Hepper, Wildschut, Sedikides, & Fetterman, 2022). Evans, Juhl, Hepper, Wildschut, Sedikides, & Fetterman (2022) define nostalgia as an emotion that confers psychological benefits and explain how literature has neglected romantic nostalgia (nostalgia specifically for past experiences shared with one's partner) and its potential advantages for relationships. They conducted multiple procedures, one correlational study, two experiments, and one daily diary study and found that romantic nostalgia was positively associated with greater relationship commitment, satisfaction, and closeness. Inducing romantic nostalgia through a writing or music task was shown to strengthen relational benefits as well. Lastly, participants reported more positive relationship-specific experiences on days when they felt greater romantic nostalgia (Evans, Juhl, Hepper, Wildschut, Sedikides, & Fetterman, 2022).

In order to improve quality of life for older couples who experience hearing loss, Yorgason, Piercy & Piercy (2007) and Evans, Juhl, Hepper, Wildschut, Sedikides, & Fetterman, (2022) assert that researchers and medical providers must look beyond the physical symptoms of HL and study its deeper emotional and psychological ramifications. Incorporating tools that bolster a couple's resilience process and romantic nostalgia will enable professionals to design

more effective treatment plans for older couples with HL (Yorgason, Piercy & Piercy, 2007 and Evans, Juhl, Hepper, Wildschut, Sedikides, & Fetterman, 2022).

Ruth Morgan-Jones, a social worker, counselor, wife and mother with profound hearing loss, built on researchers' attempts to understand the impact of hearing loss on relationships (Morgan-Jones, 2001). Inspired by the work of Elizabeth Bott who interviewed couples to look at family sociology, Morgan-Jones used an intensive and repetitive interviewing technique to conduct 150 in-depth interviews with eleven couples in committed relationships where one partner was hearing and the other experienced hearing loss. Discoveries were made about the way each couple managed conflict, decision making, household chores, communication, and perceived the hearing impairment within their relationship (Morgan-Jones, 2001). Data from these interviews show that intimate family relationships, social support networks, communication strategies, the nature of care and recommendations for social policy, play a role in shaping a couple's response to hearing loss (Morgan-Jones, 2001). Through utilizing concepts from fields such as family and marital therapy, sociology, psychology, linguistics, and disability and deafness, Morgan-Jones revealed a more positive approach toward managing hearing loss in intimate relationships.

Morgan-Jones hypothesized that couples need to assess how HL is affecting the quality of their intimate and family relational processes at regular intervals throughout the life-cycle. If they do not do this, she predicted that familiar processes would deteriorate or fail to develop appropriately (Morgan-Jones, 2001). Morgan-Jones recognized that in order to test this hypothesis, hearing loss would need to be studied within the context of a marital relationship. Through coursework backed by the Tavistock Institute of Marital Studies (TIMS), Morgan-Jones observed how influential the marital interaction of a couple could be in regard to health or illness

(Morgan-Jones, 2001). This clarified the importance of first studying psychological theories on the complex nature of marriage in order to get a proper footing for studying HL in these relationships. Morgan-Jones analyzed numerous theories on individual and social psychology in order to construct a pragmatic study on couples with hearing loss.

Morgan-Jones aimed to assess whether two medical factors, degree of hearing impairment and age of onset, influence a couple's ability to adapt successfully to hearing loss that emerges in one member. Degree of hearing loss is important because it indicates how well a person can understand human speech and interact with others appropriately and meaningfully (Morgan-Jones, 2001). In terms of onset timing, people with prelingual hearing loss will respond to their life experiences and present themselves much differently from those who suffer from hearing loss postlingually (Morgan-Jones, 2001). Morgan-Jones inferred that a person's age and the age of onset will indicate the meaning of hearing loss to that individual. If hearing loss is acquired at a stage of life that is felt to be untimely or exceptional, it is experienced as more threatening than the same disorder encountered at a later stage when it is seen as part of the aging process (Humphrey, Gilhome-Herbst and Faurqi, 1981).

Morgan-Jones recruited couples who varied from each other in age and life-stage. They were divided into two categories: the first group consisted of five couples where one spouse already experienced severe hearing loss at the time of their first meeting, and the second group consisted of the other six couples who were married to each other for a time before one of the members experienced their hearing loss. Based on their interview responses, Morgan-Jones used three developmental stages to describe the first group, where one spouse was experienced HL at their first meeting; meeting and liking, getting serious, and making it work. In 'meeting and liking', both members expressed that they needed to clarify their feelings and concerns about

deafness and any other differences that would present challenges in their relationship (Morgan-Jones, 2001). At this stage, some hearing partners became aware of the ETTA factor (Effort, Thought, Time, and Attention), or the requirements needed for their partner with HL to lip read (Morgan-Jones, 2001). In 'getting serious', couples began to view their partner as a significant other and it was expected that couples would test the interpersonal power imbalance in their relationship. The last stage of 'making it work' describes the phase where couples felt less tense and more secure with their shared perception of 'deafness as difference' which helped them bring more order into family responsibilities and friendships (Morgan-Jones, 2001).

Couples in the first group showed to come into conflict sooner than the other couples did. The problems of such a marriage were by nature the same as those of an ordinary marriage, but they were experienced earlier because of the challenges caused by hearing loss in a relationship (Morgan-Jones, 2001). In accepting at the very beginning of the relationship for ways the other person was different, it was found that pleasure for both partners was created as they became aware of the variety in their relationship (Morgan-Jones, 2001).

In the first group of couples, where hearing was present at the onset of their relationship, Morgan-Jones suggests that the deafness was unconsciously if not consciously part of the attraction. The hearing members knew exactly what they were committing to, unlike those in the second group, where hearing loss developed in one member after the relationship had been established. This second group of couples explained how a new 'contract' had to be implicitly negotiated which incorporated the realities of the degree, type and nature of hearing impairment along with methods for coping with it (Morgan-Jones, 2001). Although initially, it was more difficult for the second group of couples to negotiate the hearing loss in their relationship, once a

new equilibrium was found, the couples demonstrated an ability to adapt to their circumstances and strengthen their intimate connection.

While previous literature argues that marriages between hearing individuals and those with hearing loss are rarely mutually satisfying and are more likely to deteriorate (Ask, Hjertager Krog, & Tambs, 2010), results of this study showed that marriages are in fact successful if a certain ‘quality factor’ develops despite and/or because of a mild to profound hearing loss within the relationship (Morgan-Jones, 2001). Additionally, although clinicians have seen time of onset and degree of deafness as the most significant factor in predicting the level of adjustment to hearing loss, it was discovered that psychosocial factors, specifically those found in intimate relationships, are as important, if not more important than medical factors in predicting long-term adjustment (Morgan-Jones, 2001). I will build on this discovery of the significance of psychosocial factors in determining individual and couple responses to HL by proposing to study the relationship between timing of hearing loss onset and Erikson’s Stages of Psychosocial Development.

While Morgan-Jones studied the experience of both the hearing individuals and their spouses with HL, she did so mainly to paint a clearer picture of the broad context of the shared intimate relationship (Morgan-Jones, 2001). I will therefore propose research that will focus on the individual perceptions of the unaffected spouses in isolation, separate from the experiences they share with their spouses. Because most studies have focused on the partners with hearing loss in intimate relationships, my proposed research will give attention to the unaffected spouses.

Research Proposal

Purpose

Research has been done to search for causes of success and failure in couples with HL, but there has been a slowdown over recent years. Discoveries are old and may be outdated and a new collection of data is therefore needed. Backing this line of research is the need for professionals to improve treatment techniques by targeting psychological and medical factors that determine the progression of intimate relationships. While timing of hearing loss onset and personal identity have been identified as two independent factors that influence a couple's experience with HL (Morgan-Jones, 2001), the relationship between the two components have not been assessed. As seen through the systems perspective (Morgan-Jones, 2001), no variable stands alone. I will therefore propose to look at how timing of onset and psychosocial development interact with one another to shape individual and couple responses to hearing loss.

Erik Erikson, a German-American developmental psychologist and psychoanalyst, developed a formative theory on the psychosocial development of human beings (Erikson, 1950). Erikson mapped out eight sequential stages of natural human development, all which he asserted are influenced by biological, psychological, and social factors (Positive Psychology, 2020). Erikson believed that in order to become fully functional, confident members of society, people must successfully resolve the two conflicting states present in every stage (Positive Psychology, 2020). The conflicts within each stage build off one another and become more complex as they progress. A person's ability to resolve the conflict of a particular stage is dependent on if he or she was successful in the previous one (Erikson, 1950). Erikson's theory has grown to be widely

accepted as one that characterizes the progression of psychosocial human development and is often used as a model for psychodynamic psychotherapy (Orenstein and Lewis, 2022).

It can be inferred that hearing loss, which alters a person's physical and emotional experience, affects and is affected by the stage of psychosocial development that it manifests itself in. In an attempt to isolate reasons for why some intimate relationships with HL are jeopardized and others remain secure, I will propose a study that will look at timing of hearing loss onset in relation to Erikson's stages. Because the research will focus on adult relationships where hearing loss is present, I will look only at the last three stages, which take place from the age of 18 years through finality. These stages are intimacy vs. isolation, generativity vs. stagnation, and integrity vs. despair (Erikson, 1950).

The sixth stage of intimacy vs. isolation, which takes place between the ages of 18 and 40, is a time when major conflict can arise as we attempt to form longer term commitments outside of our families (Positive Psychology, 2020). It is most common for people in the sixth stage to face challenges that accompany the formation of intimate relationships. The seventh stage of generativity vs. stagnation, between 40 and 65 years of age, is when we aim to make a mark on the world and nurture things that will outlive us (Positive Psychology, 2020). The eighth and final stage of integrity vs. despair takes place from the age of 65 and on. It is during this stage that we slow down, are less productive, and spend time reviewing our accomplishments and setbacks (Positive Psychology, 2020). An external challenge or crisis, such as hearing loss, that presents itself during any of these stages, will complicate the already difficult task of resolving the conflicts present in each stage of psychosocial development. The goal of the proposed research will be to assess how HL in one member of an intimate relationship shapes the unaffected spouse's ability to progress through a particular stage of psychosocial development. It

will also seek to clarify how the stage of development that the hearing spouse is in influences his or her response to the partner's hearing loss.

Participants

Once approved by the International Review Board, a two part assessment will be provided to audiologists who work with adults in outpatient clinics. Audiologists will then administer the assessment to clients who meet the criteria for the study and opt to participate. Participation will require adults over the age of 18 to have been diagnosed with acquired, bilateral or unilateral, post-lingual hearing loss. Of these constituents, audiologists will inform them of the procedure and goal of the research. There will be no means of coercion in the recruitment process; it will be emphasized that participation is voluntary. Confidentiality and all other code of ethics standards will be honored. Keeping with the research question, participants will consist of married couples, all of whom experience hearing loss in one member. The ages and timing of hearing loss onset in each couple will vary.

Residents of inpatient facilities (i.e. nursing homes) will be excluded from the study due to the increased likelihood of confounding variables such as other existing medical conditions or quality of patient care. In such settings, spousal interactions could also be diluted or mitigated by the increased level of distractions present. Of course, external medical conditions are often inevitable and the chance of their diagnosis typically increases with age. Therefore, physical complications that are separate from hearing loss will be accounted for when reviewing and analyzing results. However, to maintain some level of uniformity of the living conditions of the pool of participants, data collection will be limited to couples who live in natural home environments. Thus, influences that exist in nursing homes or rehabilitation centers will be eliminated.

Methods

First, both spouses will complete a standardized mental well-being questionnaire. This part of the assessment will serve as a calibrator to establish a baseline for the quality of mental health in the participants. Morgan-Jones (2001), pointed out that pathological labels are often given to people with hearing loss because their mental health is compared to that of the mainstream 'hearing' norms. It will therefore be important to assess the mental health of the participants with HL by looking at what constitutes appropriate cognitive, affective and behavioral standards for those who are deaf and hard of hearing (Morgan-Jones, 2001). In summary, the results of the hearing participants will be measured on a different scale from the results of the participants with HL. Although the focus of this study will be on the hearing spouses, both members will complete the mental well-being assessment. The reason for this is once again backed by the systems perspective (Morgan-Jones, 2001), which shows how challenges that an individual experiences impacts the entire family sphere. Therefore, looking at the mental health of the spouse with HL will help provide informative context for the mental health of the hearing spouse.

The mental-health questionnaire provided in the first part of the assessment will be the 12-item Short-Form Health Survey (MCS-12), which is a multipurpose short form generic measure of mental health status (Ware, Kosinski, and Keller, 1995). SF-12 was developed as a more efficient substitution for the longer SF-36 mental health assessment (Ware, Kosinski, and Keller, 1995). Like SF-36, SF-12 is most commonly used to assess the impact of health on a person's everyday life and is often used as a quality of life measure (Thomas, Physiopedia). Like many standard assessments, SF-12 provides a list of questions and prompts with select answer

choices. The following are examples of prompts listed in the SF-12 assessment (Ware, Kosinski, and Keller, 1995):

In general, would you say your health is excellent, very good, good, fair, or poor?

Does your health limit you to carry out the following (list of specific activities)?

During the past 4 weeks, were you limited in your work or other regular activities as a result of your physical health?

During the past 4 weeks, were you limited in your work or other regular activities as a result of your emotional health?

During the past 4 weeks, how much has your physical or emotional health interfered with social activities?

It can be inferred that SF-12, which has shown to yield efficient estimates of physical and mental health (Ware, Kosinski, and Keller, 1995), will enable professionals to better understand the psychosocial conditions and complications that exist in couples with HL. As such, the first part of the procedure will utilize SF-12 in order to assess the mental health status of spouses in the context of HL being present in their relationship.

Following the initial mental health survey, each couple will participate in a preliminary interview in order for researchers to identify specific characteristics in each pair. Results will be used to group and identify significant differences between the heterogeneous group of participants and enable researchers to create effective subcategories within the large pool of members. For example, couples where HL was present in one member prior to their meeting will be separated from couples where HL became present in one member only after their meeting. Based on the specific characteristics of each group, professionals will implement different points of research and treatment techniques to meet the individual needs of each group. Categorizing

the participants in this will allow the data collected to be more specific and thus more productive to the ultimate research goal.

As seen from past studies (Hallberg and Berrenas, 1993, Ask, Hjertager Krog, & Tambs, 2010, Yorgason, Piercy & Piercy, 2007 & Morgan-Jones, 2001), significant findings have resulted from in-depth interviews, where subjects were given the opportunity to elaborate in their responses. Thus, the final part of my proposed study will also expand beyond standard assessments with select answer choices. Following both spouses' completion of the SF-12 short form survey, the unaffected spouses only will participate in non-directive, in-depth interviews. Researchers who utilize the non-directive interview style often seek to gather in-depth information and usually do not have pre-planned questions (Jamshed, 2014). This method of assessment is often seen more as a conversation than an interview as it allows for participants to uniquely express their feelings and biases (Jamshed, 2014). Thus, administering non-directive interviews to the unaffected spouses will enable them to freely describe their views of each partner's role in their marriage and of the overall relationship dynamic. The assumption is that participants will most accurately convey their beliefs and feelings when not confined to set questions, such as in directive and semi-directive interviews (Jamshed, 2014). The goal for this setup will be to enable researchers to analyze the individual perspectives of the hearing spouses in relation to their particular stage of psychosocial development.

With the data collected from the SF-12 Surveys, the preliminary interviews and the final non-directive, in-depth interviews, researchers will look for factors that will lead to success for the hearing and non-hearing members in each relationship. They will use the data found to look for specific strategies that will meet the needs of each couple. Lastly, professionals will work to

come up with practical ways of measuring clinical outcomes in order to measure the progress of the new treatment for each couple.

The goal is for the new information from these assessments to arm professionals with the knowledge necessary to create more effective and progressive treatment plans for people with HL and their spouses. If this process is successful and better treatment strategies are discovered and executed, relationships will be strengthened and sustained, one at a time. Spouses will help each other grow, develop their characters and improve the world at large.

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