

The Effects of a Visual Disability on Marital Relationships

by

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ABSTRACT

This qualitative study examines the major changes in relationship closeness of married couples when one spouse acquires a vision disability. Turning Points analysis and Retrospective Interview Technique (RIT) were utilized which required participants to plot their relational journey on a graph after the onset of the disability. A sample of 32 participants generating 100 unique turning points and 32 RIT graphs lent in-depth insight into the less explored area of the impact of a visual disability on marital relationships. A constant comparison method employed for the analysis of these turning points revealed six major categories, which include Change in Relational Dynamics, Realization of the Disability, Regaining Normality in Life, Resilience, Reactions to Assistance, and Dealing with the Disability. These turning points differ in terms of their positive or negative impact on the relational closeness between partners. In addition, the 32 individual RIT graphs were also analyzed and were grouped into four categories based on visual similarity, which include Erratic Relational Restoration, Erratic Relational Increase, Consistent Closeness and Gradual Relational Increase. Results provide theoretical contributions to disability and marriage literature. Implications for the application of turning points to the study of post-disability marital relationships are also discussed, and research directions identified.

DEDICATION

I dedicate this thesis to my loving parents for their support and encouragement at each step of my life. This thesis is a result of their indelible confidence in my abilities despite the numerous challenges that we had faced together due to my visual disability. Next, my sister and brother-in-law who helped me in every way possible to settle down in a new country, away from home. Last but not the least, my boyfriend whom I have always found right by my side through thick and thin.

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CHAPTER 1

INTRODUCTION

Marriage is one of the most important social institutions that unite two individuals to share their entire lives together based upon vows to honor one another in sickness and in health. However, when sickness or disability casts over a couple's life, a number of significant structural and emotional difficulties could ensue. While short term illness or disability can be stressful for the couple, a permanent physical disability could lead to sudden and profound effects on the marital relationship (Braithwaite & Harter 2000; Crewe & Althelstan 1985; Peterson 1979; Rolland, 1964) and may even precipitate divorce (Nagi & Clark, 1964; Singleton, 2012).

The functional status of an individual is a major factor influencing relationships (Sandhu, Kemp, Ball, Burgess & Perkins, 2013). In the case of marital relationships, when a spouse's functional capacity becomes limited due to a disability the need for a healthy partner's support may increase substantially. This increase in support could further cause a lack of reciprocity among the married partners (Yorgason, Booth & Johnson, 2008). This lack of reciprocity could also manifest into several other unique challenges depending on the type and severity of the disability as different types of disabilities may demand different types and levels of changes and adjustments (Braithwaite & Thompson 2000).

There is abundant literature that documents the impact of a wide spectrum of disabilities on the afflicted individual and the healthy spouse including work that considers cancer (Banthia et al., 2003; Emslie et al., 2009), sclerosis (Boeije, Duinstee &

Grypdonck, 2003; Harrison, Stuifbergen, Adachi & Becker 2004), arthritis (Mann & Dieppe, 2006; Walsh, Blanchard & Kremer, 1999), brain injuries (Claude Blais & Boisvert, 2005; Oddy, 1999), Alzheimer's disease (Pruchno & Resch, 1989; Wright, 1991), and hearing impairment (Scarinci, Worrall & Hickson, 2008; Yorgason & Piercy, 2007). Other studies have examined physical disabilities or cognitive disabilities with a more holistic approach, presenting an overview of the overall impact on the marital relationship (e.g. Feigin, 1998; Nagi, 1964; Peterson, 1979). Yet, despite the plethora of these research studies, a thorough review of literature reveals a significant paucity of scholarly work on one specific type of disability in the context of marital relationship the visual disability.

The existing literature on visual disabilities provides a great deal of scholarly information on different aspects of an individual's life such as impact on the afflicted person (Bernbaum, Albert & Duckro 1988; Chia et al., 2004; Green, Siddall & Murdoch, 2002; Keeffe, Lam, Cheung, Dinh & McCarty, 1998), impact on the sighted spouse (Strawbridge, Wallhagen & Shema, 2007), rehabilitation programs for the visually impaired (Boerner & Cimarolli, 2005; Lamoureux, 2008; Reeves, Harper & Russell, 2004), issues with dating (Fichten, Judd, Tagalakis & Amsel, 1991; Kef & Bos, 2006), assistive technology (Abner & Lahm, 2002; Berry, 1999; Ulrich & Borenstein, 2001), and communication apprehension with sighted classmates or coworkers (Jindal-Snape, 2004; Naraine & Lindsay, 2011; Read, 1989). In addition, numerous background factors have been examined against visual disabilities such as gender differences (Abou-Gareeb, Lewallen, Bassett & Courtright, 2001), cultural beliefs (Cowen, Underberg & Verrillo,

1958), religious beliefs (Clapton, 1997; Rose, 1997), and societal discrimination and stereotyping (Duckett & Pratt, 2001). However, marriage, one of the most significant aspects of an individual's life has been largely overlooked in the disability literature. Very negligible and piecemeal information is available on how a visual disability translates into the afflicted individual's married life and how the partners cope with it as a couple.

The present study is designed to fill this gap by investigating the significant turning points or key moments in a couple's life after the onset of a spouse's visual disability with the intention of examining how these events shape their relationship with each other. Previous research demonstrates that turning points have strong implications for romantic relationships (Baxter & Bullis; 1986; Baxter & Erbert, 1999; Baxter & Pittman, 2001; Bullis, Clark & Sline, 1993). Hence, it is highly plausible to generate further insight into marital relationships in the presence of a visual disability by applying a turning point framework to a population of couples where one partner is afflicted with a permanent visual disability.

Thus, this study aims to enrich the existing marriage literature with detailed qualitative information on the coping process of couples, their ups and downs, and their overall experience with the disability through the application of the turning points analysis. Exploring the closeness of these relationships also has further interdisciplinary academic implications for psychology, family communication, health communication, and rehabilitation counseling.

In order to understand the effects of a spouse's unexpected acquisition of visual disability on marriage in its entirety, it is necessary to gain some background knowledge about the different elements of the institution of marriage as well as visual disability. Therefore, this study begins with a review of literature on the initial years of marriage and how couples settle into daily routines. The second section delineates some of the most common factors that lead to marital success as well as marital disruptions. Section three begins with literature on some common consequences physical disability may have on marriage and concludes by narrowing down these implications based on the time of the onset of the disability, giving particular consideration to whether the disability occurs suddenly or adventitiously. Then, this study presents an overview of the impact of visual disability on the daily functioning and marital life of the afflicted individual. The next section aims to establish a general understanding of the adjustment process after the onset of a disability with a review on the different adjustment models proposed by previous researchers. Finally, the last section of the literature review discusses the rationale behind utilizing turning points and RIT methodology in order to legitimize the framework of this study.

Further chapters will throw light on some of the research implications and the research questions addressed by this study. This will be followed by a thorough discussion of methods, procedures and participants for this study. Finally this study will provide results, analysis, and discussion pertaining to the findings, as well as conclusions, limitations and recommendations for future research.

CHAPTER 2

REVIEW OF LITERATURE

The early years of marriage may represent a critical phase for the developmental course of the marriage (Leonard & Roberts, 1998). When two individuals marry, they may experience a significant change in their views of themselves and the social world, the nature of their conversations with friends and family, and their transactions with the broader social network (Boss, 1983). This is mainly because each experiences a sense of obligation and a change in lifestyle in their new married life. Hence, the conjugal ties between two individuals not only entitle them to share mutual living spaces and to enjoy greater physical intimacy but also rest several responsibilities on their shoulders in their practical life. These responsibilities include managing money, reestablishing or redefining ties, both as individuals and as a couple with each member's extended family and social network, and distributing the household duties (Leonard & Roberts, 1998; Navran, 1967). Sharing these responsibilities requires adjustments by partners that are made at different levels during the first few months of the marriage or cohabitation.

During the course of this adjustment process, the newly married partners create unique realities with their own processes, structures, and routines that form their own small world that they cohabit (Fitzpatrick, 1990). These implicit realities not only serve as a reference guide for interpreting what they say and do but also represent the frameworks of their relationships (Vangelisti & Huston, 1994; Sillars & Wilmot, 1989). As the couples progress further in their marital life, they also develop efficient and unique relational codes and taken-for-granted meanings (Sillars & Wilmot, 1989). Thus

their communication style becomes more attuned to each other. Once the couples reach this level, they can be considered to have completed the initial adjustment process successfully.

Furthermore, Berger and Kellner (1964) present a comprehensive analysis of the ideal-typical process that takes place in this social construction of reality by the couples. The researchers argue in their study that this is a challenging process as it involves a dramatic change in partners' definitions of reality and of themselves. They explain that when two individuals enter into a marriage, most of each partner's actions have to be projected in conjunction with those of the other. Each partner's definitions of reality must be continually correlated with the definitions of the other as the other is present in nearly all horizons of everyday conduct. The researchers state, "the nomic instrumentality of marriage is concretized over and over again, from bed to breakfast table, as the partners carry on the endless conversation that nearly all they individually or jointly experience" (p.14).

Additionally, the researchers contend that it is not only the ongoing experience of the two partners that is constantly shared in the course of their conversations that construct their present life, but that the same sharing extends into the past where their experiences are re-evaluated and re-interpreted. The couple fabricates a common memory by integrating recollections of their individual pasts together in an attempt to reconstruct their past reality.

The researchers further argue that a newly married couple also shares future horizons, which leads not only to stabilization, but inevitably to a "narrowing of the

future projections of each partner” (p. 16) with due consideration of some obvious factors that marriage brings along such as vocational and career plans. The married individual will therefore have to project the future in accordance with this mutually defined identity.

The above analysis by Berger and Kellner (1964) highlights the significance of the initial years of marriage where partners revisit their past, live their present and build their future in conjunction with each other. However, all these efforts made by the couple in the initial years may turn futile if a disability strikes adventitiously after the couples have gone through this preliminary phase of their marriage.

Common Factors Causing Positive and Negative Marital Outcomes

Marriage is one of the most important as well as most awaited events in an individual's life and it still remains a highly valued goal for most people. As noted by Stevenson and Wolfers (2007), marriage maintains a central role in American life as compared to other countries. However, it's a very complex and delicate relationship that builds on factors such as trust, commitment, mutual understanding and compatibility between partners. There is extensive literature that examines the developmental course of marital functioning from premarital events to postmarital events (e.g., Ahrons, 1980; Buehler, Hogan, Robinson & Levy, 1985; Karney & Bradbury, 1995; Larson & Holman, 1994; Manning & Smock, 1995).

For the purpose of the present study, it is important to understand some of the common factors that lead to successful long term marriages and some common causes that lead to marriage dissolution. This is because an understanding of this sort will help us to better contextualize the consequences of a disability on the marital relationship.

The maintenance of a marital relationship is an intricate task and requires continual efforts on a variety of marital aspects from both partners equally. This maintenance has been examined by researchers using different dimensions such as marital happiness (Hicks & Platt, 1970; Kirchier 1988; Terman, Bittenwieser, Ferguson, Johnson & Wilson, 1938), marital stability (Heaton, 2002; Larson & Holman, 1994), and marital satisfaction (Bradbury, Fincham & Beach, 2000; Botwin, Buss & Shackelford, 1997; Duba, Hughey, Lara & Burke, 2012; Eysenck & Wakefield 1981; Karney, Bradbury, Fincham & Sullivan, 1994). Another set of researchers studied factors contributing to long term and long lasting marriages in general (Bachand & Caron, 2001; Fenell, 1993; Kaslow & Robinson, 1996; Kaslow & Hammerschmidt, 1993; Lauer and Lauer 1986). Some common factors that were found consistent in each of these studies include spousal communication, sexual satisfaction, increase in education, rising age at marriage, and fulfilment of interpersonal goals.

At the other end of the marriage continuum, researchers have invested significant efforts in examining the factors causing marital breakups. The different lenses through which this topic has been examined include perceived determinants/reasons of divorce (Amato & Previti, 2003; Burns 1984; Michael et al., 1988; Ponzetti, Zvonkovic, Cate & Huston, 1992; South & Spitze, 1986), gender perspectives on causes of divorce (Dolan & Hoffman, 1998; Gigy & Kelly, 1993; Mott & Moore, 1979), and specific social (Thurnher, Fenn, Melichar & Chiriboga, 1983), economic (Spitze & South, 1985) and psychological (Jocklin, McGue & Lykken, 1996) causes of divorce. A thorough review of this literature reveals some common factors that most likely lead to a marital breakup.

These include communication issues, number of children, lack of quality time spent with each other, infidelity, and role conflicts.

The interesting fact that emerges from this literature is that spousal interaction/communication has been identified as a factor responsible for marital success as well as marital discord. Hence, communication can make or break a marriage. As rightly noted by Bienvenu (1987), if a married couple are to live together in harmony they must establish honest, uninhibited, and workable systems of communication. Failures and disruptions in communication are almost universal in unhappy and broken marriages. In fact Karlson (1963, p. 12) defines marriage as:

A process of interaction between two people, a man and a woman, who have fulfilled certain legal requirements and have gone through a wedding ceremony or are otherwise accepted as married by the law. This process of interaction is considered as continuing as long as the union is not legally declared dissolved.

Also, communication not only plays a vital role in the selection of a partner, it is pivotal in the early years of marriage and remains significant throughout the course of married life. This implies that a good understanding of each other's verbal and non-verbal communication can prevent couples from unnecessary misunderstandings and help in resolving conflicts at times of high marital stress or life changing events such as the onset of a disability.

Common Implications of Physical Disability on Marital Relationships

The acquisition of a permanent physical disability is a catastrophic life event for an individual. There is abundant literature that examines the different dimensions of this

impact on the afflicted individuals as well as on their family members. The ample scholarly information pertaining to family members of a disabled individual suggests that the spouse experiences the most noticeable impact (Beauregard & Noreau, 2010; Blieszner, Roberto, Barham & Winston, 2007; Goodman & Shippy, 2002), which may manifest in the form of acute depression (Gallagher, Rose, Rivera, Lovett & Thompson, 1989), distress (Feigin, 1998) and burnout (Holicky, 1996).

It is also important to understand from the previous research that spouses of the disabled partner are not only the most affected family member, but they are also the most important source of support for the disabled individual (Emslie et al., 2009; Mann & Dieppe, 2006; Russell, 2009; Waite & Lehrer, 2003). Hence, as previous studies suggest, the marital dyad is the central social context in which disablement occurs (Warner & Kelly, 2012).

Regardless of the significance of an acquired disability on the marriage, its exact type of impact still remains ambiguous. According to Goodman and Shippy (2002), “As of yet the nature of the impact of disability on marital relationships over time has not been systematically studied” (p. 267). Also, it is evident from the literature that there is still a lingering debate on this topic. While some researchers contend that illness and disability could lead to marriage termination (Bernbaum, Albert, Duckro & Merkel, 1993; Booth & Johnson, 1994), others argue that disability is not a significant factor for marital dissolution (Cutrona, 1996; Getty & Hetu, 1991). Taking a rather neutral stand a few also argued that caring for a disabled spouse is a complex phenomenon that can have both deleterious and beneficial consequences (see Beach, Schulz, Yee & Jackson, 2000).

To complicate the issue further, another set of researchers extrapolate that the effects of a physical disability are conditional. Accordingly, the disability negatively affects a relationship only if the relationship was established before the disability occurred (Thompson, 1981; Singleton, 2012). Yorgason, Piercy and Piercy (2007) explain this phenomenon in their study of the experiences of elder couples with acquired hearing impairments. They recognize that adjustments may be more challenging for couples where one spouse acquires a hearing loss after relationship patterns have become established (e.g., later in life), as opposed to couples where the spouse had the disability before marriage (giving couples sufficient time to develop strengths in response to the challenges they face).

In addition, different kinds of disabilities require different modes of communication. For example, a person with a visual disability will need and benefit from more verbal communication while a person with a hearing impairment may need and benefit from more nonverbal modes of communication. Therefore in the context of marriage, when a disability strikes unexpectedly, the afflicted partner may no longer be able to make sense of the relational codes and communication patterns established by the couple in the initial years of marriage. This in turn can make the marital adjustment more challenging.

Cleek and Pearson (1985) found communication problems to be the most common perceived cause of divorce. Further, Navran (1967) discovered that communication and marital adjustment are so commingled that any event having an effect on one will have a similar effect on the other. Thus, it would appear that any event

which impairs the couple's relationship could put a negative strain on their capacity to communicate effectively. This could also make the maintenance of marital stability very challenging as the couples are required to adapt and change to every aspect of these relational roles, routines, codes and communication patterns (Crewe & Althelstan, 1985; Thompson 1981).

In addition to the communicative challenges, there is a whole spectrum of other physical, social and psychological challenges that an afflicted person may have to face. In their study of the psychosocial adaptations of people with chronic illness and disability, Livneh and Antonak (2005) document some of the most common consequences that have profound effects on the lives of the afflicted individuals. These include the degree of functional limitations, interference with the ability to perform daily activities and life roles, uncertain prognosis, the prolonged course of medical treatment and rehabilitation interventions, the psycho-social stress associated with the incurred trauma or disease process itself, the impact on family and friends, and the sustained financial losses such as reduced income and increased medical bills.

Amid all these challenges it may also become difficult for the couple to maintain a sense of equity in their relationship. This is because the healthy spouse may feel overwhelmed with the additional responsibilities that they might have to take over when the afflicted partner is no longer able to fulfill the traditional family roles. This lack of perceived equity may negatively affect marital satisfaction (Weigel, Bennett & Ballard-Reisch, 2006).

Common Implications of Visual Disability on Marital Relationships

Vision is one of our most vital senses, and its loss produces very serious social, economic, physical, and psychological consequences (Heppen & Petersen, 1979). The simplest tasks of daily living like eating, and walking, are affected and must be relearned. Patients who have had adventitious vision loss due to accident or injury may often have extreme reactions such as feelings of shock, depersonalization, and emotional indifference. Further, being informed of a poor visual prognosis can cause some patients to become so overwhelmed with anxiety that they experience the "upset in steady state" which can constitute a crisis (Caplan, 1964; Rappaport, 1970).

In the context of marital relationships, the onset of a spouse's vision disability may cause several difficulties for a couple that may manifest in different forms of psychological stress (Goodman & Shippy, 2002; Strawbridge et al., 2007; Bernbaum et al., 1993). Numerous communicative nuances may also surface that may lead to dialectical contradictions. For example, Stromer (1983) suggested that people with disabilities often avoid the subject of their disability in their conversations with others. Instead they would prefer for references to their disability to come up casually in conversations like when someone mentions "the inability to swim or to play a tuba" (p. 427). Therefore the sighted partners may struggle with how and when to talk about the disabled partner's disability and the visually impaired partners may face the dilemma of how much to disclose about their visual impairment. Both partners will need to decide mutually when and how to bring up the topic of disability in their conversation. Furthermore, Subramani (2010) argues that around 65 percent of the social meanings of

the messages are exchanged with others non-verbally. Additionally, another study found that sighted individuals used more subtle visual cues to express interest than persons who are visually impaired may not be able to perceive (Fichten et al., 1991). The resulting lack of response may be interpreted as a lack of interest and may cause interpersonal conflicts. Similarly, Wiley (2006, p.2) illustrates the importance of nonverbal interaction in relationships through a simple example:

It might make a wife feel differently if her husband says with a beaming smile and a catch in his voice - "Aren't you beautiful, than if he sneers in an ugly moment - "Aren't you beautiful." A lot of what partners communicate to each other does not come out in words".

In the case of a visual disability, the afflicted partners may not be able to understand the actual emotions of the sighted spouse due to the inability to establish eye contact and in extreme cases it could lead to misinterpretations. Hence, alternate modes of communication need to be developed by the partners.

Also, vision loss may impede a partner's mobility and/or basic functioning in daily activities. The afflicted partner may need assistance while performing the most mundane tasks including cooking, dining, selecting clothes, grocery shopping, and commuting (Branch, Horowitz & Carr, 1989; Salive, Guralnik, Glynn & Christen, 1994). Research suggests that people with disabilities are often confronted with a dilemma regarding whether or not to ask for assistance as they may experience feelings of embarrassment, threat to the face, sense of dependence and low self esteem (Braithwaite

& Eckstein, 2003). At the same time, there is evidence to suggest that non-disabled people face competing norms of "help the handicapped" and "let others stand on their own two feet (Braithwaite & Eckstein, 2003, p.4). Therefore partners will need to work out how to ask for and/or offer assistance (Braithwaite, 1987; Lyons & Meade, 1995). This study will also strive to examine how people with visual disabilities manage seeking/receiving assistance within their interpersonal relationships.

The Adjustment Process to an Acquired Disability

The general definition of adjustment views it as a response to a change in the environment that allows an organism to become more suitably adapted to that change. In the context of a disability, the process of adjustment could be viewed as the socialization into the role of a "disabled" person, which limits personal control and choice of alternatives in the rehabilitation process (Livneh, 2001 as cited in Parker, Schaller & Hansmann, 2003). This complex and challenging process has been explained by several researchers who proposed a number of stage models. For example, Gullacksen and Lidbeck (2004) in their qualitative study on the subjective experience of women diagnosed with chronic musculoskeletal pain describe their adjustment process as comprised of three stages. In Stage I, there was increasing pain, disability, and physical and mental exhaustion. Alongside frustration and chaos there was a struggle to restore daily life. Stage II was characterized by sorrow and loss, and the picture of a dark future. In Stage III the adjustment eventually progressed with the constructive use of past experiences, and increased competence and control that enabled envisionment of a more

manageable and positive future. However, living with pain still required regular maintenance work.

Drotar, Baskiewicz, Irvin, Kennell and Klaus (1975) focussed on the parental adjustment process where the child had congenital malformations. The researchers posit a five stage model of adjustment with reactions of shock, denial, sadness and anger, adaptation, and reorganization in dealing with a congenitally malformed child during the course of his or her development and care. Similarly, Colabro (1990) proposed a cognitive-behavioral model of adjustment to disability. In the pre-encounter phase, shock and denial are present. The post-encounter phase includes bargaining behavior, anxiety, and depression. Lastly, in the rational re-encounter phase, patients may experience various combinations of anxiety, as well as depressive and hostile affect. However, in this model the progression from one stage to another is not uniform in direction or across patients.

As discussed earlier, the impact of a disability extends far beyond an afflicted individual to his family, friends and social network. Deloach and Greer (1981) examined this phenomenon in detail and posited three phases of adjustment that the person with the disability must make in their interpersonal relationships. These phases are: stigma isolation, stigma recognition and stigma incorporation. In the first stage the person with the disability has not grown accustomed to the disability, and for this reason attributes lack of time spent with friends and family on external factors, not the disability. In the second stage the person recognizes the differences he or she now experiences when communicating with able-bodied individuals due to the disability and seeks out

professionals or other disabled persons who can help them cope. Finally, in the third stage the person embraces the disability for the positive and negative aspects and accepts him- or herself as a part of the minority culture.

Perhaps the most comprehensive effort to review the literature on the psychosocial adaptation to disability and chronic illness to date has been accomplished by Livneh and Antonak (1997), who developed a model incorporating all previous research findings. Their review indicated that adaptation to disability consists of a series of reactions, unfolding in a stable sequence of eight phases: shock, anxiety, denial, depression, internalized anger, externalized hostility, acknowledgment, and finally, adjustment. They subsequently noted that research suggests that the eight stages are grouped into three clusters: (a) earlier reactions (shock, anxiety, and denial), (b) intermediate reactions (depression, internalized anger, and externalized hostility), and (c) later reactions (acknowledgment and adjustment). In the context of the present study, this model will be useful to understand how both the partners adjust to one person's acquired visual disability after being married for a considerable duration of time.

Turning Point Approach

This study uses the Turning Points approach to determine the relational trajectories of married couples after a partner's onset of a visual disability. The approach was first introduced by Bolton (1961) in his study examining the selection of marriage partners. Suggesting a paradigm shift, Bolton viewed mate selection as a process of building human relationships over time as opposed to the conventional scholarly perception of mate selection as a unitary non-processual, psychological act of choice.

Baxter and Bullis (1986, p. 470), define Turning Points as "any event or occurrence that is associated with change in a relationship" that allows researchers to examine relationships from a process point of view.

Research studies in the past have employed the Turning Point Approach to examine a wide array of subjects including criminal activity (Corman, Noonan, Reichman, & Schwartz-Solcher, 2011), romantic relationships (Huston, Surra, Fitzgerald, & Cate, 1981), post divorce relationships (Graham, 1997), parent child relationships (Golish, 2000), and friendships (Johnson et al., 2004; Becker et al., 2009). However, there is negligible research examining romantic relationships after the acquisition of a disability using a Turning Points approach. Therefore, more research is needed to delineate the factors important for successful and continued adaptation for individuals with disabilities.

As described earlier in this review, disability is a life changing event for a person and may lead to several negative as well as positive changes depending on the way one accepts and adjusts to the disability. The relationship may be consumed by periods of emotional highs, when the couple work together closely to make changes necessary to cope with the acquired disability, and then periods of emotional low points, when the relationship may experience uncertainty and negativity due to the adjustments. Hence, the acquisition of a disability can be viewed as a significant life and relationship-altering event that sets in motion a unique and identifiable set of turning points. Understanding the impact of an acquired disability on marital relationships as a series of turning points will help highlight the subsequent communication between relational partners.

Dunleavy (2004) examined the satisfaction, emotional support and solidarity of those who have acquired a disability in their life and one of their able-bodied relational partners. The stages of adjustment to a disability were also quantitatively analyzed. Both the participants who acquired a disability and their relational partners completed self-report measures. However, this pioneering study on acquired disability using turning points approach included close friends and romantic partners in addition to marital partners. There is no study so far that examines the effects of an acquired visual disability on the marital relationship using the turning points approach.

Retrospective Interview Technique

The Retrospective Interview Technique (RIT) is a frequently employed method in the study of turning points (Huston et al., 1981). In this technique, each individual participant identifies all of the turning points in his or her relationship since the time of first meeting and plots these points on the RIT graph that captures their commitment level (Baxter & Pitman, 2001). The abscissa axis of the graph marks time in monthly intervals and the ordinate axis reflects some index of relationship commitment or closeness, most commonly in percentage points from 0 to 100 percent. At each identified turning point, the interviewer probes for elaboration about that particular point (Baxter, Braithwaite & Nicholson, 1999).

A remarkable accuracy has been confirmed in participants' recollection of turning point phenomena in previous studies (Miell, 1984 as cited in Bullis & Bach, 1989), thus legitimizing the validity of the technique. Due to its interactive nature, the RIT technique fosters participant/researcher rapport. Thus, given the intimate character of marriage

research as well as the sensitive topic of visual disability, RIT seems appropriate, by nature, in order to establish a partnership between the participant couples and researcher that may increase the reliability of results.

Research Rationale and Questions

Visual disability is one of the most prevalent and grave forms of physical disabilities in the world. According to the World Health Organization's recent statistics, 285 million people are visually impaired worldwide: 39 million are blind and 246 have low vision (2013). What is most serious is that every 5 seconds, one person in the world goes blind (WHO, 2002). Given that visual disability can strike at any moment in a human being's life, a comprehensive understanding of how the individual and his or her spouse deals with it is critical to bolstering marriages confronted with the onset of visual disability.

Also, amid these alarming figures, research suggests that of all the modes of learning and interaction within both the physical and social environment vision is used most with estimates that sighted people use vision in 85% of all their interactions (Hill & Blasch, 1980; Omgvig, 2002). In lieu of this finding, it would be accurate to conclude that individuals with visual impairments face additional challenges when interacting with sighted people. As a matter of fact, the disability literature provides mounting evidence that communication between the disabled and able-bodied is characterized, at least initially, by rigidity, stereotyped perceptions, uncertainty, and discomfort and that having a disability negatively impacts relationships between these groups (Belgrave & Mills,

1981; Braithwaite & Harter 2000; Braithwaite & Labreque; 1994; Kleck, 1968; Thompson, 1982b).

The couples where one partner acquires a vision loss may experience similar conflicts as the adventitious disability inevitably divides them into the “visually impaired“ and “sighted” groups. These conflicts may significantly affect the marital quality of couples as it is well established in the marriage literature that communication is the key to maintaining harmonious marital relationships. Chan (2000) who explored the impact of Spinal Cord Injury on family and marital relationships found that a lack of communication was the root cause for most of the problems between married couples.

In addition, marital conflicts could also lead to further deterioration of health among partners. Choi and Marks (2008) examined the effects of marital conflict and found that greater marital conflict directly increased depressive symptoms and functional health limitations for both men and women. Examining the effects of visual disability on married couples through the turning points approach will help in identifying some of the major causes of conflicts among partners around the disability which in turn could be useful in disease prevention and control.

To date, there is a wealth of literature available on visual impairment and blindness that provides a great deal of scholarly information on the subject. However, despite of the abundant literature, there are many gaps in the research that help shape the design of this study. The plethora of research studies available can be broadly divided into two categories—research that considers the impact of visual disability and research that considers the types of visual disabilities. The first category of research studies

includes work that considers how visual impairments affect different aspects of life such as employment (Capella-McDonnall, 2005; Kirchner, Schmeidler & Todorov, 1999), parenting (Cardinali & D'Allura, 2001; Conley-Jung & Olkin, 1900), education (Eaglestein, 1975; Ramloll, Brewster, Riedel, Burton & Dimigen, 2000), and socialization (Cambra & Silvestre, 2003; Sacks, Kekelis & Gaylord-Ross, 1992). The second category deals with specific types of impairments such as cataracts (Hodge, Whitcher & Satariano, 1995; Seddon, Fong, West & Valmadrid, 1995), glaucoma (Klein et al., 1992; Quigley & Broman, 2006) diabetic retinopathy (Klein, Klein, Moss, Davis & DeMets, 1984; Kempen et al., 2004), macular degeneration (Klein et al., 2005), and retinitis pigmentosa (Bunker, Berson, Bromley, Hayes & Roderick, 1984; Kajiwarra et al., 1991).

Overall, some research studies provide solid quantitative data on topics such as prevalence and types of visual impairments (Congdon et al., 2004; Vitale, Cotch & Sperduto, 2006), effectiveness of assistive technologies (Winberg & Bowers, 2004; Yu, Kuber, Murphy, Strain & McAllister, 2006), and relationship of visual disability with other disease-specific and psychological correlates (Brody et al., 2001; Mangione, Gutierrez, Lowe, Orav & Seddon, 1999), whereas other work provides rich qualitative data on topics such as adjustment and coping with visual impairments (Hayeems, Geller, Finkelstein & Faden, 2005; Teitelman & Copolillo, 2005), communication and interaction with the sighted world (Heine & Browning, 2004; Iverson & Goldin-Meadow, 1997), and social support (Cimarolli, Goodman & Sussman-Skalka, 2004). However, a

careful observation reveals that most of this literature primarily deals with the afflicted individual.

Relatively less scholarly effort has been directed toward understanding the impact of a visual disability on friends and family members. For example, in their longitudinal study, Strawbridge et al. (2007) considered the impact of older spouses' vision impairment had on the health and well-being of their partners and tested for gender differences. Findings revealed that the spouse's vision impairment negatively affected the partner by causing depression. Although this study presents a comprehensive description of the impact of visual disability on the sighted spouse, it does not address the issues faced by both partners together as a couple in their marital life.

Another study by Cimarolli et al. (2004) evaluated the effectiveness of support groups for partners of adults with visual impairments, with the goals of alleviating the burden and stress associated with coping with a visual disability, of improving the sighted partner's understanding of the issues faced by the visually impaired partner, and of enhancing the partner's quality of communication regarding these issues. While the literature reviewed thus far provides preliminary information about some of the most common challenges faced by the couple or the partner, this area of inquiry is still in its initial stages.

Because marriage is such a delicate relationship, it will be interesting to examine the fluctuations in the relationship closeness between couples that arise due to the onset of the disability over a period of time. Previous research demonstrates that turning points have strong implications for romantic relationships (Baxter & Bullis; 1986; Baxter &

Erbert, 1999; Baxter, Clark & Sline, 1993; Baxter & Pittman, 2001). Hence, it is plausible that further insight into marital relationships in the presence of a visual disability can be generated by applying existing turning point framework to the population of couples with one partner afflicted with a permanent visual disability.

This study builds upon the work of Dunleavy (2004) who applied the turning points framework to investigate the satisfaction, emotional support and solidarity of those who have acquired a disability in their life and one of their able-bodied relational partners. It is suggested by the researcher that acquiring a disability constitutes a discrete event that affects the communication between relational partners and future studies should continue to examine those who have acquired disabilities from this perspective. In light of this direct suggestion, discrepancies in existing literature, the increasing cultural and social need for inclusion of people with visual disabilities, and increased rates of marital dissolutions, this study aims to provide rich qualitative data on the effects of visual disability on couples' lives.

Research Objectives

The present study aims to identify what types of events are considered to be noteworthy by partners in their marital relationships and also how these turning points or events interact with each other to shape their overall relational closeness under the influence of a visual disability. It is the conviction of this study that the RIT technique will lend a greater understanding of the interpersonal history and relational trajectory between the visually impaired individuals and their sighted spouses and will help in

expanding the body of scholarly literature surrounding romantic marital relationships and visual disabilities.

Three research questions are addressed for the purpose of contributing rich data to the existing body of marriage and disability literature as well as to build a foundation for future study of visually impaired and sighted couple relationships. First, in the case of married couples where one partner suffers from a visual disability, each partner's independent views and marital experiences surrounding the disability need to be taken into account. This will be achieved by eliciting descriptions of specific turning points that partners considered to be significant in their relational journey. The following research question addresses this objective:

RQ1: What turning points do married partners encounter in their relationships after one partner has become visually impaired?

Next, it is important to assess the relational development of these couples under the impact of visual disability. Hence, the analysis of these turning points in terms of their quantitative positive or negative shifts on the RIT graphs as plotted by partners individually must also be considered in order to examine how these turning points work to shape their relational closeness. Thus, a second research question designed to address changes in relational closeness is offered:

RQ2: How are the turning points identified by married couples, where one partner suffers from a visual disability, associated with changes in relational closeness?

It is also highly plausible that the visually impaired spouses and their sighted partners may perceive the valence of these turning points differently depending on a number of factors such as individual perspectives, prior exposure to people with disabilities, gender difference etc. Hence, their RIT graphs may show variations in their overall relationship trajectory. Because RIT is a methodology that allows for a visual representation of relational change, a third research question designed to examine married individuals' impressions of relational trajectories is offered:

RQ 3: In what ways do marital relationships change over time among couples where one partner suffers from a visual disability?

CHAPTER 3

METHODOLOGY

Participants

Heterosexual married couples in which one of the partners suffered from a visual disability were recruited as participants for this study. Participants were recruited with the help of non-profit organizations located in Arizona that work for the empowerment of people with visual disabilities. Recruitment letters with details of the research study were emailed to the managers of six such organizations. They were requested to circulate the letter to the prospective participants who use their organization's services. These organizations included the National Federation of the Blind, Foundation Fighting Blindness, Foundation for Blind Children, Arizona Center for the Blind and Visually Impaired, Arizona Bridge to Independent Living and Southern Arizona Association for the Visually Impaired.

A number of eligibility criteria were formulated in order to qualify for participation. The couple should have been married and living together at the time of the study, only one of the partners should have the visual disability, the disability should have occurred only after at least six months of marriage or the effects of the vision disability should have been realized by the couple only after six months of being married. In addition, the vision acuity during the time of interview of the afflicted partner should be more than or equal to 20/200, in other words the partner should either be legally blind or completely blind. Although married couples were sought for participation, interviews with each partner were conducted and analyzed separately to not only reduce chances of

biased responses but also to take into account the difference in perspectives of the partners regarding the visual disability.

Semi-structured qualitative interviews with open ended questions were conducted with each individual separately from 17 couples ($N = 34$). Due to technical glitches (i. e., file corruption) two interviews (from one couple) had to be eliminated from the sample. Hence, a total of 16 couples or 32 partners ($N = 32$) were used for the final analysis of this study. The first three interviews were conducted at the homes of the participants, however due to mobility restrictions and time or distance constraints the remaining interviews were conducted over the phone or online via Skype.

Data collection ceased when interviewees recounted similar themes over and over again. Thematic saturation was achieved towards the end of the last 2-3 couples' interviews. Hence, 16 couples or 32 interviews seemed to be like a good number for achieving the research purposes of this exploratory study.

The age of participants ranged from 29 – 90 years ($M = 56.3$, $SD = 14.6$). The number of years that participant couples had been married ranged from 6-57 years ($M = 26.3$, $SD = 14.9$) and the number of years since the participants had acquired the visual disability ranged from 1-42 years ($M = 13.4$, $SD = 12.2$). Out of the 16 participants who were afflicted, 11 had degenerative eye disorders such as Retinitis Pigmentosa and Macular Degeneration while the remaining five acquired the visual disability adventitiously for reasons such as a road accident and diseases causing permanent eye damage. Among the 16 couples interviewed, the ratio of visually impaired wives to

visually impaired husbands was equally distributed (i.e., eight visually impaired wives and eight visually impaired husbands).

Procedure

Participants were called on the phone prior to the interview for the purpose of explaining the methods and the intent of the research study. An appointment was scheduled for the interview once they indicated they understood the parameters and procedures for participation in the research. At the day of the interview, participants were briefed about the research purpose and methods once again and were asked to give their oral/written consent for participating in the study. They were free to ask questions about the study. They were also informed that they were entitled to quit the interview or skip a question at any point during the interview in accordance with the IRB guidelines. The interviews were conducted in an isolated room where the other spouse could not hear the conversation in order to avoid chances of biasing responses and to ensure the comfort of participants throughout the interview.

After consent was obtained, the interview progress began with a set of basic demographic questions including the age of the participant, type of visual disability, number of years of married, etc. This was followed by a general discussion about their journey in the marriage so far to set the tone for further investigation. Once the participants seemed to feel comfortable in sharing their experiences, the concept of relational closeness was discussed at length to ensure that participants had a basic theoretical understanding of this term. In accordance with Hess (2002), closeness in marriage was defined as shorter term evaluation of the emotional and physical proximity

experienced by the partners towards each other in the relationship. Further, the concepts of turning points and relational changes were introduced in detail with examples from previous research studies (e.g. Baxter and Pitman, 2001; Graham, 1991) to enable participants to gauge their responses as they pertained to the research questions. When it was evident that participants accurately understood the criteria for identifying turning points from their life, they were presented with a RIT graph with the timeline on the abscissa (x-axis) and the level of relationship closeness on the ordinate (y-axis).

Next, the participants were asked to recall the significant moments that occurred due to the disability starting from the time when it occurred until the present time. They were instructed to think about each recalled turning point in conjunction with its impact on their relational closeness. As they remembered each turning point, they rated their relational closeness on the graph using a 5-point Likert scale with 1 being the lowest level of closeness and 5 being the highest.

After all the points were marked on the RIT graph by participants, they were asked to join these points with a line that formed their relational trajectory. The participants were then asked to reflect on each turning point marked on the graph one by one and share its impact on their relational closeness in as much detail as they were willing to provide. The RIT graph positioned before the participant during the interview served as a reference guide for them to use as an indication of the types of information sought (i.e., the surrounding context, feelings, reactions, and circumstances associated with each turning point).

The participants appeared quite comfortable as they shared substantial amounts of personal information pertaining to their experiences, which sometimes were very emotional, stressful or hurtful. However, despite their unpleasant experiences, none of the participants chose to quit the interview or to skip any questions. There were some instances when participants recalled another turning point while describing a different turning point plotted on the graph. This showed participants' willingness to share their experiences. They were also free to change the points or adjust closeness level if required anytime during the interview. Open ended questions were asked in order to facilitate maximum information from participants. Interviews, which were audiotaped, range in length from 12 to 51 minutes.

In order to ensure full accessibility for the participants with visual impairments, special arrangements were made for this process. The graph paper was printed on a swell paper with raised lines that made the grid on the paper tactile for participants. To mark the turning points, stick-on acrylic jewels with a raised surface were given to the participants. The participants marked each turning point by sticking a jewel on the corresponding x-axis and y-axis. Once they finished marking all turning points, the jewels were joined together using *Wikkistix* (a sticky wax strip with raised surface that adheres with slight finger pressure) in order to create tactile relational trajectories. The participants with visual impairments read the graph with their fingers similar to reading Braille.

Data Analysis

Once completed all interviews were audio transcribed resulting in 301 pages of transcription. In order to ensure confidentiality of the participants, they were assigned a unique code number that included an assigned number for each couple, a designation of wife (W) or husband (H), and an indication of whether visually impaired (VI) or sighted (e.g. WV11, HVI4, W9, or H13). Additionally, all the RIT graphs were converted electronically using MATLAB, a numerical computing tool, for the purpose of Research Questions 2 and 3.

This study employed Glaser and Strauss's (1967) constant comparison method for the purpose of analyzing turning points and relational trajectories and generating relevant categories. The analysis process began with open coding where each turning point was analyzed individually and labelled, thereby facilitating the natural emergence of categories. The process was continued further by segregating each labelled or coded data into the different emerging categories. This was done using flash cards.

The categorization process proved challenging in instances when a turning point reflected ambivalence due to meta communication by the participants. In such cases, axial coding (Glaser & Strauss, 1967) was employed. Accordingly, the particular turning point was assessed further for its actual intended meaning conveyed by the participant and then placed back into the most relevant category.

In order to demonstrate a clear comparison of the different categories developed during analysis, the categories and their respective properties were integrated together. Also, each turning point was compared with the previously coded points to ensure

congruence in every individual category. Once congruence was achieved in all the identified categories, turning points within each category were sorted and grouped according to the ratings (positive, negative or neutral) provided by the participants during the interview. Finally, the categories developed during the analysis were considered collectively to determine any overarching themes that were apparent.

CHAPTER 4

RESULTS

Research Questions 1 and 2: Turning Points and Relational Impact

With the aim of answering Research Question 1, a total of 176 turning points with 76 duplications leading to 100 unique turning points were identified. The number of turning points per participant ranged from 0-9 ($M = 5.38$, $SD = 2.24$). A total of six unique categories of turning points were identified. Only one participant did not identify any turning point due to the spouse's disability. These categories include Change in Relational Dynamics, Realization of the Disability, Dealing with the Disability, Resilience, Reactions to Assistance and Regaining Normality in Life (see Table 1). In the next section each of the turning point categories identified is explored in greater depth.

Change in relational dynamics. The most frequently cited turning point was Change in Relational Dynamics ($n = 21$). This category includes participants experience with the change in their routines, roles and responsibilities ensuing from the disability. For most participants this category resulted in a decrease in their relational closeness. Quitting driving was one of the most commonly reported themes in this turning point category. One participant explained his overwhelming experience of having to be the sole driver:

This put a little bit, this put a strain on our relationship. Umm, because I was all of a sudden the only driver in a household of 4 people so whenever the kids needed to go to a doctor, I had to take off from work and take them to the doctor.

Table 1:

Definitions of Turning Point Categories, Frequency, and Impact on Relational Closeness

Category	Positives	Negatives	Neutral	Frequency	Definitions
Change in Relational Dynamics	7	11	3	21	Disruption in daily routine, redistribution of household chores, driving, work and other responsibilities
Realization of the Disability	4	14	0	18	Becoming cognizant of the limitations arising from the disability
Regaining Normality in Life	15	0	3	18	Settling back into the daily routine with adaptations, adjustments, and training.
Resilience	15	0	0	15	Determination to move on in life, not letting the disability impact life negatively
Dealing with the disability	7	4	4	15	Reactions to the inability to do things because of the vision impairment
Reactions to Assistance	5	6	2	13	Different experiences associated with the situation of receiving or giving assistance
Total	50	38	12	100	

Whenever they have appointments or sports or school activities, I was the driver.

And whenever she had to go anywhere or do anything, I was the driver. So things

got stressed, umm I didn't give... that didn't mean that I didn't still communicate with her or, but it's just, our closeness was less.

Many afflicted participants also acknowledged this burden on their sighted spouse's because of their inability to drive anymore. As one participant expresses his feelings on having his sighted spouse drive him to work every day:

I was still working and my wife would have to get up early, an hour early to take me to work so that she could be to work on time. And then, and then after she got off from work she had to come down and get me and drive me home so she was driving an extra fifty miles a day to get me. So she was putting in 12 hour days just to make it... so I can work. And that was very stressful for her and... And very demanding on her at times.

For participants with degenerative eye disorders, giving up driving confused daily routines and resulting in significant stress as the sighted spouse took time to understand the severity of the disability. One afflicted participant described how she felt during the time when there were conflicts with her spouse about the decision of giving up driving:

Umm, very stressful I would say...because he couldn't, my husband couldn't understand you know, just for driving he would say it's not like you see worse today than you did yesterday. But I myself knew it was coming and mentally tried to prepare myself and you know and got involved in a support group and umm, because I was just afraid. I would just go in a depression or something because it completely changes your life! It was pretty stressful when I had to... right after I had to quit driving because he couldn't understand that. He... It put a lot of

pressure on him. He had to take over...You know for me. You know we had two kids and they were all involved in all sorts of activities and you know, doctor's appointments and you know. I would say the major change was not being able to drive.

Another participant described her frustration with the additional work that she had to do:

I got frustrated because he couldn't discipline our twins the way a sighted parent would have been able to do because you know he would say - Don't do that but he couldn't tell that they were still doing it. And basically they would be looking wide at him as maybe thinking - well dad doesn't really mean if we will do that because he is looking wide at us. So I would say the down moments for me were you know disciplining our boys and happen to be the sole driver and it took several years before we really figured out that, how Steve could help me in the house.

Thus, driving was not only viewed as a symbol of independence in completing personal tasks by these participants but also as a parental responsibility that was shared with their partners. Consequently, participants noted adverse effects on their relationships when one of the partners became unable to drive. While a few of these participants felt burdened with additional responsibilities, others ended up in arguments about the decision to quit driving. Similar conflicts were also reported by participants regarding household chores. One afflicted participant explained her dismay at not being able to meet expectations:

Umm, because of my eyesight I can't... because I can't see you know dust or dirt you know and so umm, he didn't like that. At first he didn't really understand that

I didn't really see it you know. And so that was a little bit of friction you know. Umm, things like that and things like... ya you know he was working and I was here and I am sure it probably seemed like I was getting the easy end of the spectrum.

Another important point that was excavated from these participants' descriptions was that their situations not only caused stress and confusion but some communication issues as well. One afflicted participant described how her sighted spouse failed to communicate his feelings around the redistribution of work by saying "I think he felt so much stress by all that...I saw like he never really took my feelings into consideration even though he might say different. I never felt... I felt more like burden you know." For other participants the disability caused some level of communication gap that did not let them settle down with their day-to-day functioning. A strong example that exemplifies this issue came from a participant who described the time when her afflicted spouse was still coming to terms with the disability:

It was stressful in the fact that umm, you know she was angry about it so it affected our relationship. Plus you know sometimes she would not tell me when she had appointments and so like the very last minute you know and so I would have to adjust my schedule to be sure that she would be there and you know that was kind of stressful also.

In contrast, there were some afflicted participants who made proactive efforts to cooperate and compensate for the work that they could no longer do. As in the case of one participant who explained his situation:

You know I couldn't do the landscaping anymore, I couldn't take care of the pool anymore and so we had to hire people to do those things so to make up for that on the other side of the coin, I started doing more household work, you know laundry. I have had to do laundry and dishes and things like that but you know that took several years. I didn't start doing that for several years. I think some of that had to do with me just being a male you know a man. You know that's not the one to do it or whatever. But then once I realized that that's how I can contribute umm, you know I do...

Quitting work was also a commonly cited aspect of this category with respondents sharing comments like “my wife ended up having to go back to school. She ended up doing all the driving. She is now the main breadwinner of the home and that made a significant impact.” This change in traditional roles was cited by another sighted wife:

I am feeling the stress because I am not happy to get out there and do something I really don't want to do. I enjoyed being a house wife. That was our thing, the whole thing. I enjoyed it; I hated going out and getting a job. And he resented the fact that I was because he didn't want me to do it. To this day.

This example points to another important fact that open communication can be as destructive as lack of communication, if not done effectively. In this particular case, both partners communicated their feelings in a negative way that led to aggravation and intensification of their frustrations.

Other participants explained how a simple discussion about redistribution of work helped them in managing the situation effectively. For example, “we worked out the kind

of difficulties by redefining role reversal as role re-distribution where each had different roles and we distributed our roles and that worked itself out.”

A few of the participants did not view these changes as causes of stress or burden. Instead, they felt closer to their afflicted spouse in sharing additional household responsibilities. “You know that period of time during the day we had to be kind of together and do things together. And so yeah I think it went the other way.” Another sighted participant described his experience with shopping:

I guess the next thing would be the situation where we gradually started, I mean I was gonna be gradually doing more and more shopping and the grocery stuff which I have never done before either. I hardly ever stepped into a grocery store. I drop her off, she would shop, I would pick up stuff and bring it home. And then I was doing well. But now pretty much it's...it's full time and I will run over and do the shopping rather than her but I think when I started to do it's umm... It hasn't been as far as I am concerned any... any major impact on our relationship. It maybe has brought us closer because she really needed me more to do things than she used to do on her own and separate from me and now we more or less have to do it together and we did that for several years where we go in together and she would kind of point out this and that, what to look for and how to look for it and what we were going to need. Things like that yes.

It is clear from the above examples that these participants were happy with the overall change in their relational dynamics as it gave them the opportunity to interact more while they did a particular work together.

Finally, a small set of participants viewed this redistribution of roles as a significant turning point; however, they did not feel any impact on their closeness as it remained intact. One participant described her relief when her afflicted husband quit driving:

Umm, it was a relief for me, for him not to drive because I knew that he couldn't see well enough and he shouldn't have been driving. And this is, you know he already stopped driving at night. Umm, because RP takes away your night vision. Umm, so he already had not driven at night for some time. So for me to get into the driver's seat and him to get into the passenger's seat was not something that was terribly uncommon. Umm, and then when he finally gave up driving altogether I think it was such a relief for me you know for both of us.

Over all, this turning point served as a diverse category with mixed responses from the participants with regard to its impact on their relational closeness. While some sighted spouses felt closer in sharing responsibilities, others found it overwhelming in that it created additional work and effort on their part. The afflicted participants also displayed diverse feelings and perceptions on the role reversals that occurred because of their disability. This clearly implies that the onset of a disability could have profound effects on marriage since different people have different visual acuities and they hold different perceptions about the way they handle the changes.

Realization of the disability. This category was the second most frequently cited by participants ($n = 18$) and it manifested in a variety of emotions that participants felt when they first realized the limitations caused by their disability. Some afflicted

participants described this turning point in terms of their anger and frustration due to their inability to do things that they used to do. For example, a participant described his inability to continue general household tasks:

I had always been kind of doing things around the house you know. Doing repairs, doing the grass and all that stuff and I couldn't see to do any of that. So that... I lost some of my... some of my identity and some of my pride because I could not function normally. You know minor home repairs, painting a room, fixing a door, cutting the grass, sweeping the sidewalk. Just... just normal day-to-day things that need to be done around the house and I couldn't do them.

Other participants expressed their frustration at losing their independence: "I couldn't drive and that was a significant turning point for me because I no longer had the freedom that I used to have to do that." Another afflicted participant noted a similar sense of helplessness:

I used to be able to go and walk and do all that kind of stuff and now I am having to ask her to help me. I am asking her to guide me you know in the restaurants or guide me to the, you know, umm, to places I need to go and umm, to do that kind of stuff. So it was an awkward situation you know me being independent all my life and now having to depend on someone to guide me around was not a comfortable feeling from my part. And then my wife was willing to do that but yes umm you know it was... it was hard you know the transition to me and it definitely put some strain on the relationship.

A few of the sighted participants also perceived a decrease in relational closeness due to afflicted spouse's dependence for every small task. For instance, "He is so dependent on me all the time. Sometimes I am so, like I am smothered. You know because like... people don't understand I have to do everything for him." Further, there were some afflicted participants who disliked this sense of dependence that forced them to bother their sighted spouse. One participant shared:

He works all week long and he needs his time to relax and settle down. If there is something that I need to do then he needs to drive me so I guess as far as that... That might be a negative impact just because I feel bad because I am always happening to ask him to take me somewhere.

Another set of participants recalled this turning point in terms of their concern about performing their parental responsibilities:

And there were other things like going to my daughter's softball games, I no longer. At that point.... Well this is after I had to quit driving before I knew about dial-a-ride. You know a lot of moms were working that lived around me and I had no way to get to her games... and... It was really hard (emotional). You know to go from a very involved parent to one that you know just couldn't be a part of it anymore.

A sense of guilt among participants was apparent in all these descriptions as they found themselves unable to carry on with their responsibilities as a husband/wife or as a parent. This constant feeling of guilt made the partners grow apart in terms of relational closeness. On the other hand some participants indicated how they overcame their guilt

by sharing the concerns with their spouses openly, and how as a result they received positive responses in return:

Umm, about the birth of my son in 1994, my first son and umm, I had a lot of questions as to can I be the ideal father you know taking my son camping and fishing and doing the manly man things, or such things, so there was a lot of unknown and things that I thought I couldn't do because of my blindness. She was more the optimistic one that there were always another way to do things. It didn't have to be you know me taking him and we go camping on our own but she can drive us on, you know leave us there, come and get us. There was always another way. We could go with other people and so on.

Only a few participants expressed feeling closer to their spouses after the realization of the disability. For instance, one participant expressed his empathy for his afflicted wife:

You know our son plays sports and... Eventually we started going to games and the first time she told me... she really couldn't see what was going on, she couldn't see where he was... that affected me right... that made me umm...and that was really more sadness for her. She wasn't gonna be able to see him play like before. I started at that point having to do some thing for her that I obviously still do it today where I describe things to her right... I describe what's going on. And it kind of brought us closer in that aspect I would say. It was significant for me because you know we have our son to support and he was still only you know 12 at that time and he will do activities that you know she wouldn't be able to do

these things and just sad that you know she is not gonna be able to enjoy those things too and seeing them happen. Right?

One afflicted participant recalled her initial confrontation with the disability in connection with her parental responsibilities:

At that point when I was still getting used to things, getting used to the idea of having the umm, work out the things that our kids are gonna be able to do and what they are not gonna be able to do. Umm, he would step up and still do those things without me having to ask. Umm, that brought us to a 4. At a point later on I finally expressed to him that this is really important to me and it really needs to be something that we continue and that it doesn't ever, umm that we never lose that and at that point when he validated that, that yeah I will make sure that our kids will never have to lack in that area that brought to a 5.

In both of these examples, the participants point to the role of communication in making it a positive event for them. While the former participant initiated his communication with his wife in a more compassionate and empathetic manner that helped the couple become closer, the latter described how communication helped her and her husband to get through this phase smoothly.

Hence, this category of turning points demonstrates that the onset of a visual disability can be a very disturbing event for afflicted individuals and their spouses. It could result in a myriad of emotions that could take time to heal depending upon a number of factors such as an individual's mind set, partners' understanding with each other, partners' willpower and their willingness to adapt to new ways of life. Another

notable fact that emerges through these responses is that both parties expressed their willingness to communicate to take care of and comfort one another.

Regaining normality in life. Regaining Normality in Life was one of the most frequently cited ($n = 18$) categories, which encompasses all experiences related to a sense of resuming regularity for the participants. This category served as predominantly positive in the participants' lives. These participants spoke of rehabilitation training as a significant turning point in their life that helped them attain independence in activities such as cooking, personal care, household management, mobility etc. One participant expressed his sense of liberation achieved after such training:

After getting the vocational rehab and joining FBC, I think my attitude improved again to bring things back up to a 4. In the beginning it was positive because I would get help but it was negative because I would never be able to do some of the things I wanted to do. And now it's more of a positive thing because I have been given so many ways to redo some of the things I used to do. So umm, I really didn't expect to cook meals again. I really didn't expect to be able to go across town to Phoenix without calling a friend or a family member and say - hey I need a ride! Umm, I didn't expect to umm, walk down the street at night. I just... I had no comfort level for doing any of these things. Now my comfort level is such that I am ok with all of them!

Similarly, a sighted spouse expressed her satisfaction with her afflicted husband's rehabilitation:

And I think it made him feel better about himself you know. It's hard to stay home with kids all day and not have any of that adult companionship that he had at school you know with friends and co-workers and things of that nature. I think that he felt you know more normal.

Rehabilitation training not only helped afflicted participants in regaining independence and self confidence but also helped sighted participants in removing some of their communication apprehensions, as one participant explained that she had to be “more careful of her words” when talking to her husband initially. She further explained the benefit of training:

Yeah. But then once I saw that he knew what he was doing and received training on having access to information then I felt more confident and more at ease and didn't have to worry about that I would say something that might upset him.

For other participants normality implied being able to carry traditional roles in the family. One afflicted participant described how managing a family emergency made him feel more normal and worthwhile.

In 2001 we had a toxic mold in our house. We had to leave that house on a sudden notice with nothing but the shirts on our back and had to have the home completely remediated. It was a big deal and Christie really was stressed out about it but by that time I was running my agency and I was able to take control of that project and that was a big deal. We lost a lot of personal items and everything but I was able to deal with the remediation, contractors and the rebuilding contractors and the insurance companies and the attorneys and all that

and really insulate her from that. And so I think that helped the relationship. In that she saw that I can do those things and I felt better because I could.

Contributing to the family was another significant theme within this category “Umm, we were better off at work and I am in a better position to contribute to the family and also that I would go to a rehab training that would help me go back to work.”

For another set of participants the sense of normality manifested at a more personal level with their spouses. For instance, one participant appreciated how her afflicted spouse made proactive efforts to maintain their married life in the absence of any visual communication:

Well, I think... I think being able to look at each other is important and I think if you don't have that then you have to find a way to be able to connect and so I believe that Steve has done a really good job in trying to connect more by you know walking across the room and giving me a hug. You know just being a lot more aware of if I can't have a vision connection then I can certainly have a touch connection, you know?

Finding activities to do together was another major turning point that made up this category. One participant expressed her delight after discovering some activities that she could still do with her afflicted husband:

Well then we learnt that we could still travel somewhat and things like that that we used to like to do, we can still do them to some extent. We can go climb a mountain. It was... It was good yes! It was good to find those things

On the other side, for some participants regaining normality was accompanied by other issues. For instance, one afflicted female participant described how her rehabilitation training disrupted the family dynamics:

I went to a school for the blind, umm and that took me away from my... from being a, like the home maker that I was at that time and that took me from, it made me start having to bring my kids to a day care. It sort of changed the whole dynamic of our marriage because I was no longer at home taking care of the house and making sure you know there was dinner and umm, the kids were at school or any of that. He was in charge of all of that.

Another participant shared a similar story where her afflicted husband got over occupied with his assistive technology and how communication helped her deal with the situation:

Well, a lot of communication you know. A lot of... just being honest with each other and you know being able to say I feel overwhelmed right now or can you help me do this? So I would say communication has been the key. I told him that I was beginning to feel like he was locked in his own world. You know listening to his books on tape, listening to the news and really I felt like I was kind of a stranger you know. Like I was living in this world and we were kind of, we were just kind of passing each other because there wasn't that moment where you could just lower your guard down and connect visually. That happened probably two and a half years ago. It was right before my 50th birthday and we had a long conversation about it and it went through probably a couple of weeks umm just kind of reestablishing the relationship and understanding that you know I am a

girl, he is a guy. If we can't connect visually, we need to connect in another way.

Just by having that discussion it really helped.

However, these issues were not big enough to make any significant impact on these participants' relational closeness as both of these participants indicated neutral effect on their marital relationship

On the whole, this category demonstrates that things can be brought back on track with timely rehabilitation training and positive spousal interaction. Sighted spouses can feel less burdened with the additional responsibilities and afflicted spouses can make their lives more worthwhile. Both partners can experience a sense of purpose in life with support and mutual understanding.

Resilience. Participants unanimously rated Resilience ($n = 15$) as a positive turning point. This category of turning points was characterized by participants' strong determination to cope with the disability and move on in life. A number of participants acknowledged their spouse's willpower that helped them to move on. For instance, one participant who became blind in a road accident recalled his post accident time:

Well, to be honest with you, I thought after I got home from the hospital and got my wits about me, I decided that she would be better off without me because I didn't think I could do anything as a blind person. And I thought that she would be better off taking the babies back home with her parents. And so I told her my great idea and she thought that that was a really bad idea and explained to me that she was gonna stick with me no matter what and she married me for the good times and the bad and that she was gonna stay by my side. And then, over time

you know, and I saw she meant what she said and she was there through the good times and the bad, then it went you know back up to a 5.

This is a strong example of how compassionate communication from the sighted spouse helped the afflicted participant get back to life. Communication also helped participants become more resilient. For example, one participant said “Well, we were fortunate that a rehabilitation counsellor recommended in the beginning that we see a kind of like a marriage counsellor and we had a chance to talk things out. That was helpful.”

Some participants appreciated their sighted spouses’ support while going through different stages of dealing with disability such as surgeries, post-disability depression, and a recovery period. At the same time, sighted participants also reported feeling closer to their afflicted spouses who did not give up due to their disability and fought with their depression head on. One participant expressed the pride he felt for his afflicted wife:

She is amazing! I mean she is really umm, she tries not to give up you know... I mean just like maybe a year or two ago, she wanted a piano. She wanted to learn how to play a piano. So she has special books that she longed to find them with large musical notes to read. But she is learning that you know! She just didn’t let it get to her you know, she has never been – Well I just can’t do that, you will have to figure it out on your own, never, never been that way ever! May be she felt it but didn’t express it you know.

A few of the participants viewed this turning point in terms of their support and encouragement for each other. “Well you know we were both... you know we were both

there together going through... we did it all together you know. When she went for surgery I was there.” Another sighted wife shared her appreciation of her husband who decided to become a motivational speaker. “I could see that instead of him getting down and being depressed about losing his eyesight, he was making it into a positive and he wanted to help others out.”

Not only did the sighted participants speak of their appreciation for the afflicted spouses, the afflicted spouses also expressed being cognizant of their spouse’s appreciation of their willpower:

I think it impacted in a positive way because like when I go... My daughter lives in Seattle and umm, I will travel by myself. I think he just really... he on one hand really admires the fact that I still try to continue to be as independent as possible. Thus, afflicted spouses’ proactive efforts to maintain their independence, to look at the brighter side, and to avoid being depressed by the disability helped them become closer to their spouses. Both sides were able to pursue their personal interests independently while still being present for each other.

Finally, this category also included partners’ collective efforts to cope with the disability. As one participant described:

Well our 20 year anniversary has a lot to do with that because you know 85-90 percent of couples who go through a disability in their family get divorced. And we made our 20 year reunion. You know we had done that in spite of his disability.

Hence, resilience emerged as a significant category of turning points that helped participants in not only coping effectively with the vision loss but also in making them more appreciative of each other's support and encouragement. Ultimately, this category served as a catalyst in bringing these participants even closer to their spouses.

Dealing with the disability. Dealing with the disability was another category of turning points ($n = 15$) that was marked predominantly as a positive category by participants. A significant sum of both afflicted participants and sighted participants viewed acceptance of the visual disability as an important milestone in their coping journey. As in the case of a sighted participant who recalled one incident vividly:

It was at his graduation ceremony which was a turning point that he walked across the stage unassisted without a cane and fell down the stairs on the other side and I think... you know I don't know if it was a turning point for him but I think it was a turning point for me, for him to say - Look I need some help, it's not a bad thing.

So he went to cane training and then graduated to guide dogs after that.

There were some sighted participants who described how their acceptance of the disability enabled them to enjoy life beyond what they had hoped or expected:

She got worried that you know her vision wasn't getting better and she should probably do the things that she plan on doing, going to see the things that she planned on seeing so it... like we went on a trip to New York and I don't think without umm, her progression we would have made that trip, we would have probably gone a couple of years from now but you know, it was a financial burden but not a bad thing. I think it was a good thing we actually went and did it.

Interestingly, rehabilitation training and counseling were also noted as a common turning point in this category. People benefitted directly from the training and counseling in ways that helped them accept the disability. For example, one afflicted participant explained how rehabilitation helped the couple in dealing with the disability appropriately:

Once we determined that I was not able to work and I was not able to drive I began the rehabilitation process with rehabilitation teachers and support group work and so umm, dealing with the frustrations of not being able to do what I used to do was somewhat eased over the next year. So I think our relationship went back to you know about a 4.

Another participant expressed how improving her communication skills at the rehabilitation training helped her become closer to her spouse:

Ok umm... the... The first one I can think of that I think really drastically changed our marriage, I went into counselling. Umm, initially you know for my blindness for my depression and it changed my life. I mean it... I just learnt a lot of things and I am able to communicate better you know when I needed and that was in December of 2011. 2011 I think. No 2010! I am sorry it has to be 2010 and it changed my life because we were able to communicate better. You know he had to do all those things before but I didn't appreciate it and counselling really helped me you know learn to appreciate it more.

Thus, professional assistance in the form of rehabilitation and counseling worked to help people deal with the disability through effective communication.

A few participants regarded accepting the disability as an important turning point in their married life; however, they did not perceive it as making any significant impact on their closeness. For example, one participant recalled the time just after he lost his eyesight and gave up the driver's seat:

Before the accident I had never been in a car where she was driving and I was the passenger. It didn't happen. I drove everywhere so all of a sudden she had to drive everywhere and she didn't like that but she accepted it because there was no choice. It was strange because she didn't like to drive but it wasn't like you know she got mad at me (smiles) or blamed me or anything. She knew there's nothing we could do about it.

Similarly another participant expressed his helplessness at the situation where he realized that his afflicted spouse could not work: "You know it is what it is. So you know it made it kind of harder for me because she is more dependent on me to earn money but you know, what you gonna do? Right?"

On the other side of the spectrum, a few sighted participants experienced a decrease in relational closeness because of their afflicted spouse's self-denial. For instance, a sighted spouse described the concern she had for her afflicted husband who just could not accept that he needed to quit driving because of his vision disability:

If I ask to drive, he would yell at me. He was not going to give up his driving. You know we were all terrified in the car. I would definitely say maybe even a 2 because I was terrified for our family or anybody else on the road. You know

what I mean? I was terrified because I was like if something were to get killed you would never forgive yourself.

Not surprisingly, communication was an important element that was absent in extreme cases of self denial. For instance one participant recalled the time when her afflicted husband was very new to the disability:

It probably went... it was going down to a 4 because John wasn't communicating. John was in total denial and he would not talk about it. And I am one of these that has to know everything and he would not share with me his emotions. He wouldn't share with me umm, anything like that. He would just you know, he cut me off at that point. That's how he was dealing with it you know.

A sighted husband shared an account that illustrated the effects that self denial and a lack of communication had on his relationship. "She said she could do things but she couldn't do them. And so it was kind of stressful because I would have to go back and do them. You know what I mean? You know like cleaning and cooking."

On the whole, this category reflects the time after participants' realization of the implications of the disability that push them further into either extreme. While some accepted the disability and decided to move on, others took longer to come to terms with the disability. In either case, communication played a vital role in making it a positive or a negative experience for these participants.

Reactions to assistance. The category of Reactions to Assistance ($n = 13$) served as a diverse category of turning points containing positive, negative as well as neutral impact on relational closeness, hence displaying a wide range of nuances associated with

it. While some participants described feeling dissatisfied with the kind of assistance provided, others complained about the inappropriate reactions from their spouses when offered assistance. And still other participants were grateful to their sighted spouses for being so helpful.

On the whole, almost equal numbers of participants in this category considered it to have a positive or negative impact due to a variety of reasons. For instance, one participant described how giving and receiving assistance caused confusion and conflict between him and his wife:

We basically had to readjust our lives you know. Umm, it you know, going into the restaurant and you know going out I basically had to depend on her to help and guide me and that kind of stuff. And umm, we didn't really know how to... how to do all that stuff. It was from being awkward and sometimes we would get frustrated with one another.

Another participant explains how he and his wife avoided such awkward situations and frustrations with the help of open communication:

With her changing eyesight, it's constantly evolving into less and less visual field and less and less acuity. Umm, the way I would describe for her to go - the chair is over there or there is a tree to your right. She, she now likes if she can tell me how to best communicate to her. I think that brings us closer.

Thus, assistance and how it was enacted within the relationship could lead to positive or negative outcomes in the relationship.

One cause of negative outcomes was evident when sighted spouses appeared to lack attention or be inconsiderate while providing assistance. For example, one participant described that she was used to reading everything in detail, but now that she is unable to read her husband just reads an abridged version of the document which sometimes frustrates her. Similarly another participant shared that she does not appreciate when her husband forgets to read her account slips despite having done this now for some time.

Unsolicited assistance and excessive help provided by sighted spouses also proved troubling at times. For example, one participant shared:

Part of working out the adaptations was teaching her to resist doing things for me and putting me into a corner that this way didn't let her do things for me. That took a while to work out. That created a low point in our relationship.

By comparison, a few afflicted participants reported being very satisfied with the assistance given to them. One participant described in detail how much she appreciated her sighted husband's proactive efforts to help:

We did a commercial for Alice and it's been probably 8 years now and he helped me get dressed and he made sure that my makeup was applied properly. I can still apply makeup because I have been doing it for a long, long time but he will check it out and tell me you know if I have got mascara on my nose or if my cheeks are too pink. It's really sweet!) He helps me in every way possible. We had to walk down a runway and twirl and he made sure that we always had personal contact, whether it was just our fingers together or his arm around my waist or something

that we were always connected, so that I would not trip or I would not fall on a step or... nobody knew, nobody knew! Nobody knew that I was legally blind.

Nobody knew!

Assistance giving was problematic at times for the sighted spouse providing it as well.

Some sighted spouses spoke about their unhappiness with their spouses' behavior when providing assistance.

Oh you know, it is just hard you know like when you go to a restaurant you know or go some place and before he went to the school for the blind you know I had to lead him around everywhere and I am half as much as he is because he is a big guy. He would lean on my shoulders, he has hurt my shoulders. You know when we get inside some store, he would bump into things he would yell at me, embarrass me you know and it was just, it was just Oh! It was just like, Oh!

Please stay at home. I know sometimes he just wants to go and be with me, I mean just go out of the house but it would be very frustrating because he bumps into things and yells at me. It was very frustrating on both our parts you know.

This example underscores the importance of appreciating assistance offered or given.

Consider the excerpt from another spouse below that illustrates how his wife's appreciation made him feel closer to her.

I asked her last year, we were at a place umm, there were a lot of people and there was a Christmas concert type of thing and we were walking along a dirt trail, yup this was that desert botanical garden. We had to go from area to area in this huge arboretum. I had not been there before and so anyway it was challenging for her.

It was challenging for me to walk through the crowd. So I ask her to you know to give me a grade like a 1 to a 5 you know. I always call myself her seeing-eye dog you know. So I said what kind of rating would you give me as your dog? On a 1 to 5. And she'd say - Oh I give you a 5! You know how good that made me feel? Another participant shared an important incident from his life that reinforces the role of communication and spousal interaction with regard to the provision of assistance.

When we first got to New York, umm she ... I didn't... she... I wasn't very good at taking her around the museum and part of it was that she thought I should anticipate more. She wanted to stay and look at a particular piece, umm when I was done I started to walk away! Umm, I think that's kind of a non-verbal cue that you know would continue to... you know. A sighted person would be like well I will just stay for another couple minutes and then I can move but she needed to be with me so if I left she had to leave to. So she was frustrated by that. But you know I remember that night she talked to me more about it and I realized that I was being insensitive to what she wanted to see at the museum. Umm, and it was a learning moment so I try to be more sensitive after that now.

It was clear from this example and throughout the turning points in this group that communication was key to making the situations of assistance better, therefore making each partner more comfortable in providing or receiving assistance.

Research Question 3: Relational Trajectories

In addition to analyzing how turning points impact the relational closeness of married couples, this study also investigated the patterns of change in the relational

closeness by examining each participant's RIT graph. A comprehensive comparison of these graphs revealed four broad categories of relational trajectories, which are discussed in detail in the following section.

Erratic relational restoration. This relational pattern was the most frequently cited by participants ($n = 12$). Figures 1 and 2 illustrate this category of relational trend. In these instances, all participants marked their closeness at the same level before and after the disability occurred. However, there was a significant discrepancy in the additional markings provided by these participants, which could be further divided into two sub-categories — Extreme Fluctuational Restoration and Moderate Fluctuational Restoration. These two patterns are described in detail below

Extreme fluctuational restoration. Figure 1 illustrates the graphs depicting the extreme fluctuational changes in relational closeness of couples. Participants who indicated this relationship pattern ($n = 7$) in their graphs generally described significant increases or decreases in their relational closeness as they progressed from one turning point to another. For example, some participants (graphs HVI10 and H16) indicated phases in their life where their relational closeness dipped suddenly, moving three levels down and causing extreme fluctuation in their trajectories. Other participants' graphs (graphs WVI1, H7 and W15) reflect a sudden rise in their closeness as they advanced toward the restoration point in their relational closeness. Graphs W5 and W12 illustrate both sudden dramatic dips and revivals in closeness.

Moderate fluctuational restoration. This pattern was indicated by five participants ($n = 5$). This subcategory comprises all graphs where there were similar

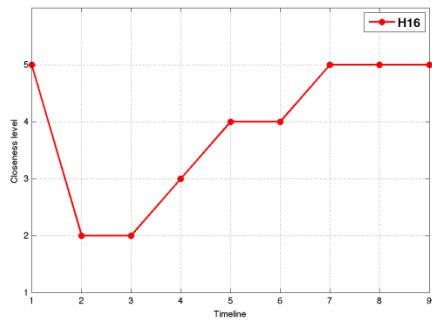
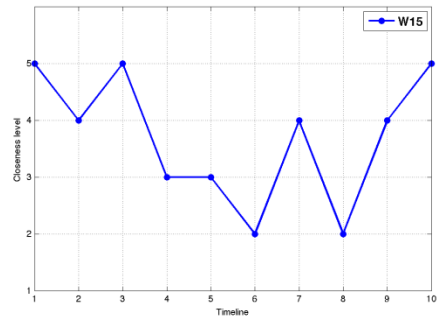
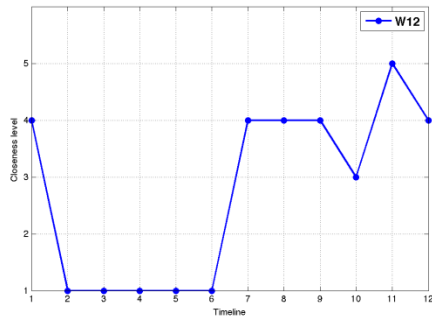
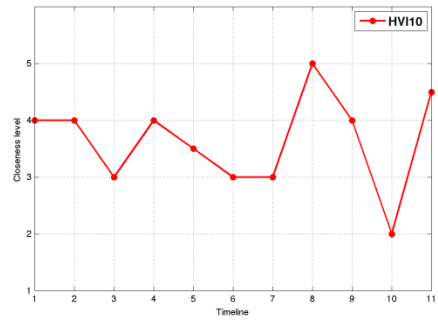
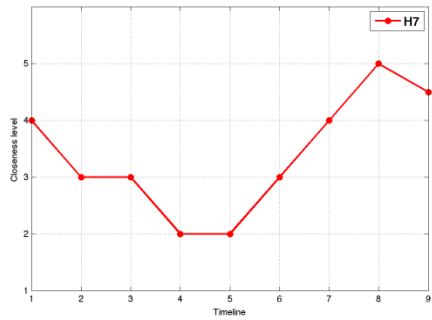
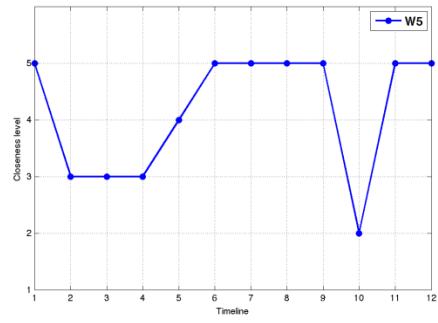
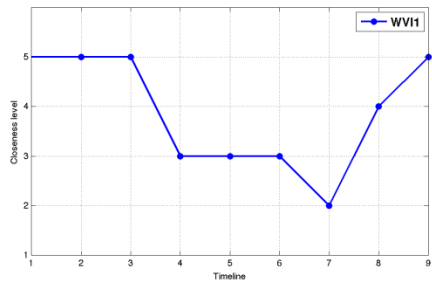


Figure 1 Extreme Fluctuational Restoration
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fluctuations in relational closeness but just not as pronounced (see Figure 2, graphs HVI4, HVI5, H8, WVI14, and HVI15). Sudden increases and declines were evident in these graphs; however, all of them displayed a maximum increase or decrease of 2 levels in relational closeness. In addition, none of the participants indicated a serious downfall in their closeness to the lowest level (1), which was observed in the Extreme Fluctuational Restoration subcategory.

Erratic increase. Erratic increase in relational closeness was the second most frequently cited pattern by participants ($n = 10$). Similar to the Erratic Restoration category, this category also contained examples of extreme and moderate fluctuations but the relational closeness ended up at higher levels (versus equivalent levels) after the onset of the visual disability (see Figures 3 and 4). This category was also divided into two subcategories, Extreme and Moderate Fluctuational Increase.

Extreme fluctuational increase. This category of relational trajectory was indicated by four participants ($n = 4$) through their RIT graphs. Similar to Extreme Fluctuational Restoration, the prime characteristic of this subcategory was the significant shifts in the relational closeness of participants as they advanced from one turning point to another. Figure 3 (graphs H6, HVI9, W9, and HVI12) illustrates this subcategory of relational trajectories. Graph W9 exemplifies this pattern, showing ratings ranging from 5 to 1 repeatedly and depicting significant turbulence in the relational turning points for this participant.

Moderate fluctuational increase. This subcategory was evident in six RIT graphs ($n = 6$). See Figure 4 and graphs H1, WVI3, W4, WVI8, H14, and WVI16. Participants

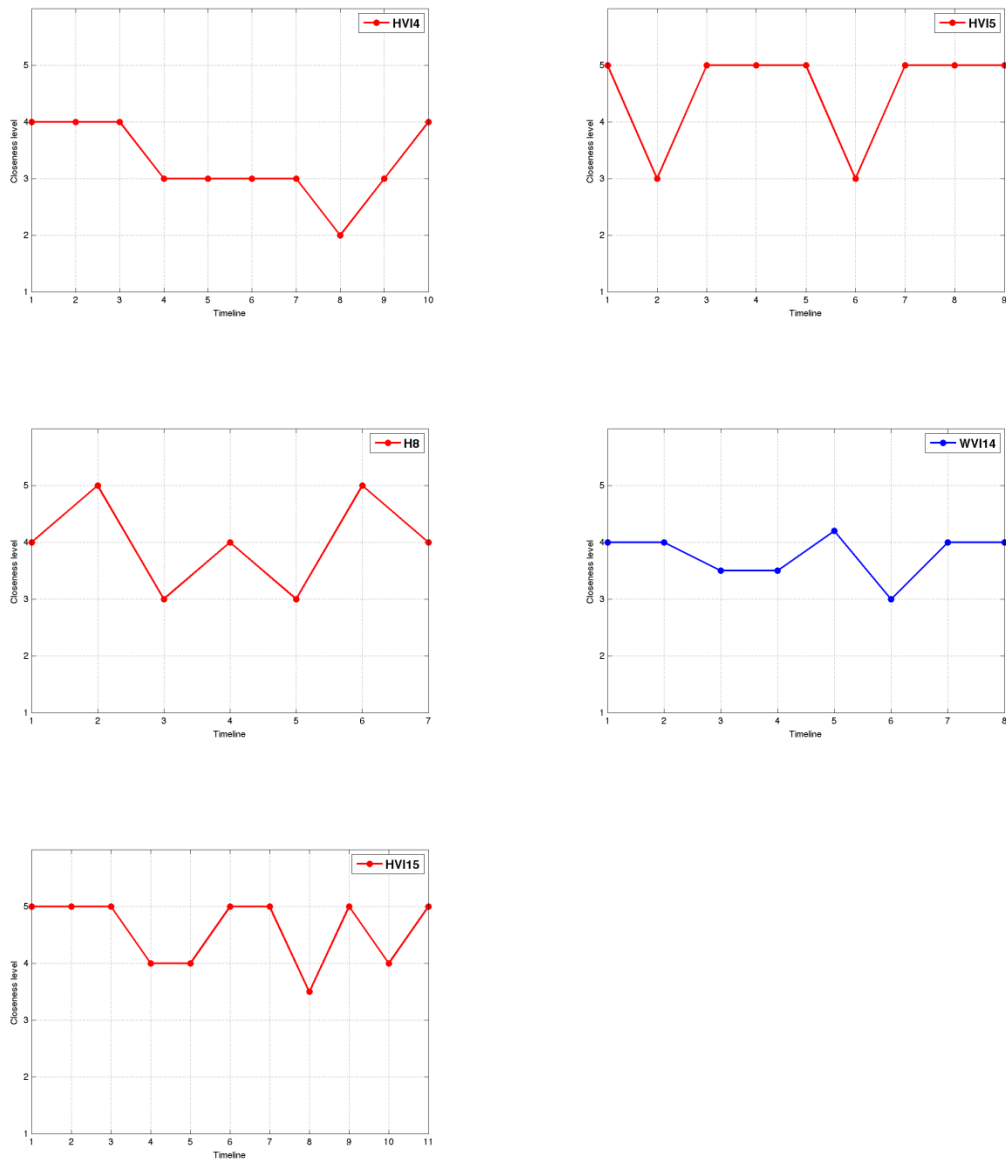


Figure 2 Moderate Fluctuational Restoration

within this category indicated that they became closer to their spouses over the course of their marriage while experiencing several ups and downs that caused erratic disruptions in their relational trajectories. A notable characteristic of this relational trend is that all but one (Graph W4) of the participants observed a period of maintenance once they

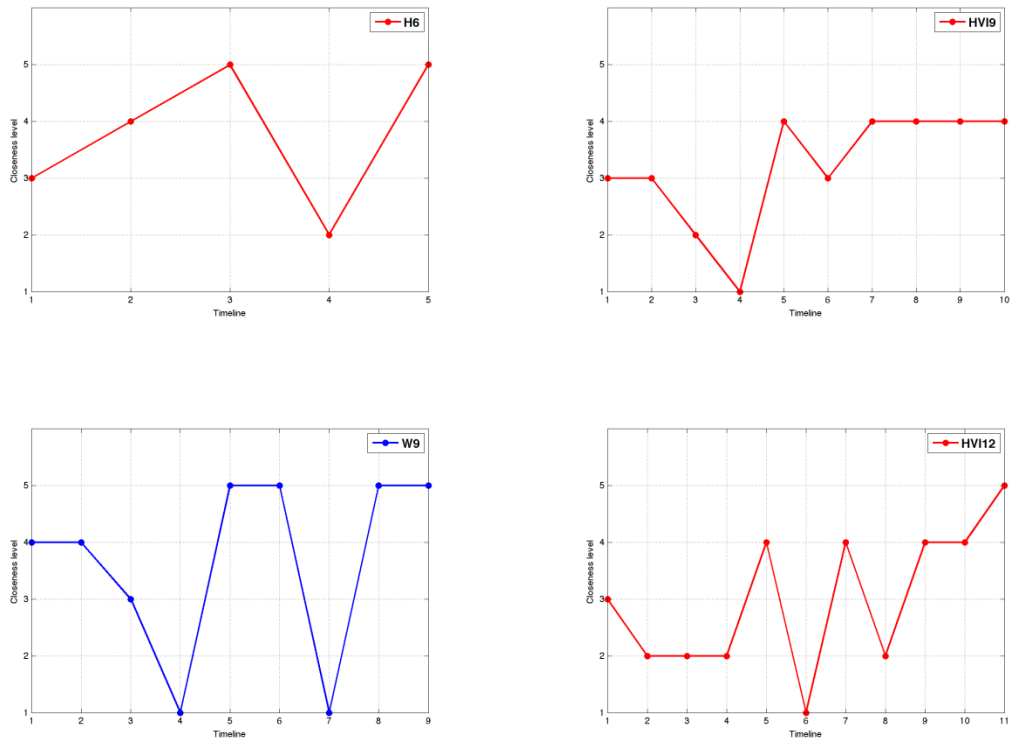


Figure 3 Extreme Fluctuational Increase

reached their highest level of relational closeness. In addition, among the six participants, only one (Graph WVI3) experienced and reported the lowest level of relational closeness (1).

Consistent relational closeness. Six participants ($n = 6$) provided evidence of this category of relational pattern. All participants in this category described turning points that had no impact or only a negligible one on their relational closeness, therefore marking a more or less straight line on their graph. Figure 5 (graphs HVI12, W2, HVI11, W11, H13, and WVI13) illustrates this relational trend.

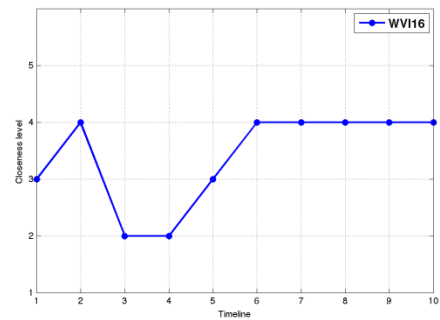
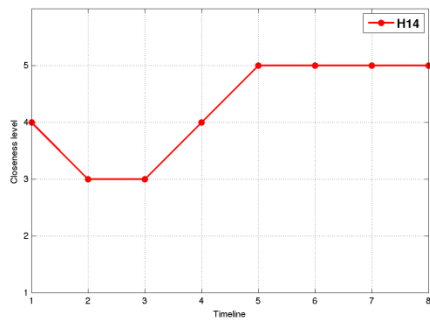
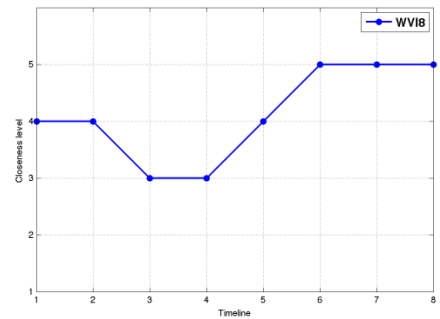
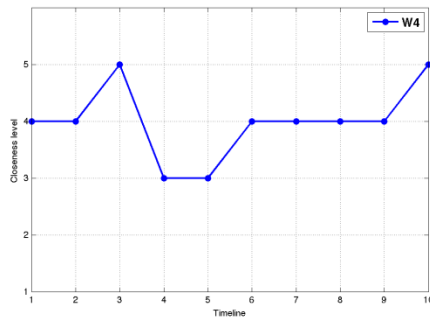
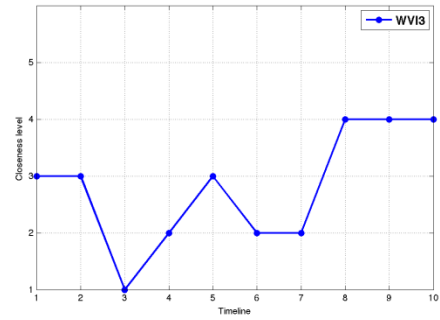
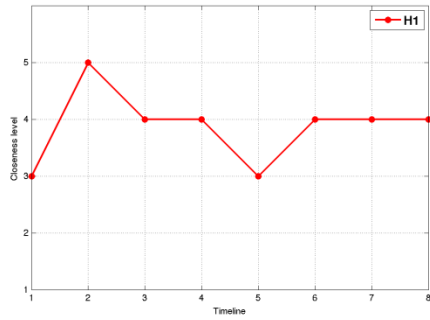


Figure 4 Moderate Fluctuational Increase

Two of the six participants in this category indicated one turning point that resulted in a decrease in relational closeness. However, the relationship closeness was

restored back to the previous level via the next turning point reported (see graphs HVI11 and WVI13). It is evident from this group of trajectories that participants in this group

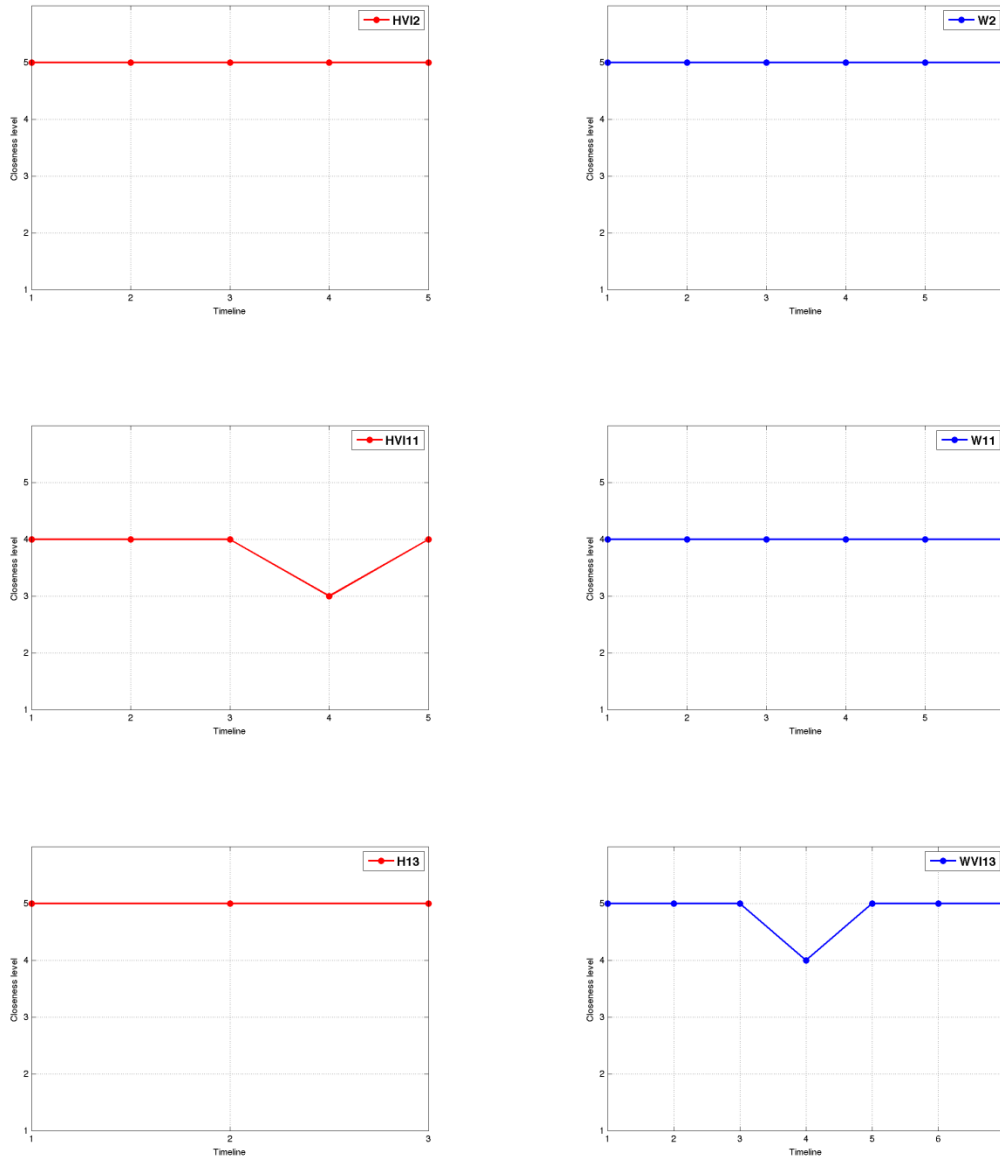


Figure 5 Consistent Relational Closeness

started with and maintained high levels of relational closeness despite the demands imposed by the onset of visual disability — seemingly keeping the disability from

their relationship.

Gradual relational increase. A final relational pattern appeared in two participants' ($n = 2$) RIT graphs (see Figure 6). People in this category experienced a gradual and steady increase in their relational closeness as they came to terms with the visual disability and their relationship progressed from one turning point to another. Graphs H3 and WVI6 show this type of trajectory. It is worth noting that these reports indicated moderate degrees of relational closeness in the beginning of the visual disability onset compared to those in the previous category where spouses began with and continued to maintain high levels of relational closeness throughout. In contrast, these people felt that the turning points they experienced enhanced their relational closeness over time. It is evident from the trajectories that both participants indicated better understanding with their spouse with every new turning point that brought them closer.

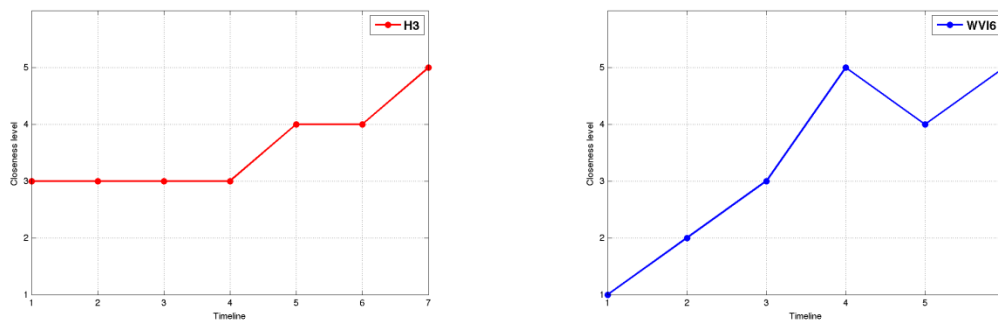


Figure 6 Gradual Relational Increase

Thus, in attempt to address research question 3, four different relationship patterns were revealed in the analysis with slight variations among graphs within each category of patterns. These variations emerged from the individual perspectives and experiences of participants experiencing the disability. While the majority of the

participants indicated a pattern that led to maintenance or restoration of their relationship to the same level of closeness as before the disability occurred, others plotted trajectories that pointed to an increase in relational closeness despite the challenges they faced because of the disability. This analysis clearly demonstrates the strong determination of these participants to not let the visual disability impact their marital life in a negative way.

CHAPTER 5

DISCUSSION

The purpose of this study was to illuminate some of the common effects on marital relationships when one partner acquires a visual disability. Turning points approach was utilized to examine the course of these relationships that followed after the onset of the visual disability. As Baxter and Erbert (1999) argue in their study of heterosexual romantic relationships, relational development is not a ‘unitary’ process; rather it is a sequential accumulation of a wide variety of turning-point events that may often cause several ups and downs in the relationship. Therefore, this approach was appropriate for the purpose of the current study as it covers the entire gamut of feelings and experiences of afflicted individuals and spouses surrounding the disability starting from its onset until the present. Examining RIT graphs also enabled a deeper examination of the relational trajectories apparent when people deal with the onset of a visual disability.

Additionally, this study shed light on some of the most sensitive issues related to the married life of participants surrounding the disability. In many cases, participants openly voiced their fears, concerns, and grudges or complaints with their spouses, therefore divulging rich qualitative data for the current study. The isolated room in which the interviews took place facilitated the open expression of these sentiments as participants delved deeper into the intricacies of their relationship and shared personal experiences with ease and comfort.

Identification of Turning Points

The first research question aimed at identifying the important turning points in the participants' life that impacted their relationship in a significant way. All but one of the 32 participants identified at least one turning point with their spouse that impacted their relational closeness. Collectively, a total of 100 unique turning points were identified by participants that were grouped into six main categories.

Change in Relational Dynamics was the most frequently cited category of turning points, which included participants' accounts of experiences related to negotiating the redistribution of work with their spouses. This category resulted in a decrease in relational closeness for most of the participants. While sighted spouses within this group of participants expressed feelings of frustration and anger with the additional work, afflicted participants experienced a decrease in closeness due to their sense of helplessness and dismay resulting from having to depend on their spouses for every small task. Other participants were simply overwhelmed with the dramatic changes in their daily routines due to the disability. Resolving this turning point often involved spending more time together and sharing chores which worked to bring individuals closer to one another.

The second most frequently cited category was Realization of the Disability which was predominantly rated as a negative experience. Turning points that formed this category showed the emotions experienced by participants as they realized the implications of the disability in their personal as well as their married lives. Most participants expressed feelings of fear, apprehension, helplessness, loss of identity and

sense of purpose in life. Negative feelings also emerged due to misunderstandings that resulted from the lack of spousal interaction in absence of eye contact and gestures. Very few participants perceived this category of turning points positively and it tended to highlight the struggles couples faced when they began to confront the real effects of the disability.

The next major category of turning points was Regaining Normality in Life. Overall this category resulted in a positive relational impact on couples. This category included events that enabled participants to resume their routines to the degree that the afflicted spouse could function almost normally. Rehabilitation training was one of the most commonly cited turning points in this category which prepared the afflicted spouses to re-enter the world with independence. Things such as mobility training, cooking classes, and household management training were seen as life changing events for many participants as they could rediscover their potential and regain their independence. A few participants perceived their ability to contribute to the family affairs as a turning point in this category. Hence, the sense of coming back to life with special trainings and detailed spousal interactions and discussions helped participants become closer to their spouses. Overall, in this category sighted participants expressed being more relieved while afflicted participants felt more liberated as they returned to some semblance of their previous life.

Resilience was another major category of turning points that resulted in an increase in relational closeness for all the participants who identified it. Most sighted participants appreciated their afflicted spouse's strong will power. On the other hand

afflicted participants expressed their gratitude for sighted spouses who stood by them when coping with the disability. Overall, being there for one another and facing the challenges with vigor and a desire to move forward in life characterized this category. Another noteworthy characteristic of this category was the significant role positive spousal interaction played in helping participants become more resilient.

The category of Dealing with the Disability comprised turning points predominantly rated as positive events by participants. Several different instances were noted under this category that pointed towards the participants' acceptance of the disability. Some related it to their decision to go to rehabilitation training, whereas others viewed it in terms of their resolution to enjoy life with whatever residual vision they had remaining. There were other participants who described their relief with the smooth redistribution of household work as they began to accept the prognosis. A few of the sighted participants described this turning point as the moment when they embraced some of the permanent inabilities of their spouses that ensued such as the inability to work, drive, or shop. Some sighted participants also shared instances where they had to deal with their afflicted spouses self-denial for days or even months, and recalled the frustration and impact on relational closeness self-denial had.

The category of Reactions to Assistance emerged as a more complicated category of turning points with a diverse range of feelings and perceptions expressed by the participants. This category resulted in a mixed relational impact. Participants who included positive turning points within this category mostly described instances of assistance where they were either satisfied or grateful with the assistance provided or

received. In contrast, negative turning points within this category mainly consisted of instances where participants shared their frustration with their inability to handle situations of assistance with their spouses. A lot of confusion, conflict, and argument emerged in these instances as participants tried to cope with the shortcomings in offering or receiving assistance.

Thus, the data revealed several sets of turning points that were distinguishable and relevant to understanding how people dealing with a visual disability in their marriage face up to and address significant issues that arise as a direct result of the visual disability.

Impact of Turning Points on Relational Closeness

In addition to the identification of major turning points, this study also sought to analyze how those turning points impacted the relational closeness of participants with their spouses. The impact was measured in terms of the valence of turning points as positive, negative or neutral, indicated by participants during the interview. Three categories (Regaining Normality in Life, Resilience, and Dealing with the Disability) associated clearly with positive turning points that led to increases in relational closeness. Of these, Regaining Normality, was identified by participants primarily as an indication of the afflicted participants' reestablishment of independence, which was apparent in activities like personal care, mobility, household management, and cooking. This category of turning points proved to be a liberating event not only for the afflicted participants but also for many sighted participants who were relieved of the burden experienced from taking on additional responsibilities. Therefore, most of the participants

(n= 15) who identified turning points within this category experienced an increase in their relational closeness. Being able to follow the same routine as before the onset of the disability brought the partners closer as both were able to pursue their personal as well as professional interests. For the remaining three of the 18 participants, this sense of normality was accompanied by some minor issues like the irritation that followed when a sighted wife grew frustrated with her husband's failure to turn off the assistive technology he used on the computer they shared.

Resilience was unanimously rated as a positive event that increased relational closeness among partners. Participants experienced this turning point in both direct as well as indirect ways. Some of the indirect ways included sighted spouse's caregiving and support in recovery periods such as post surgery time, and their appreciation of the afflicted spouse's determination to bounce back from the disability. Additionally, examples of resilience surfaced when spouses communicated compassionately and openly about their anger, depression, frustration, and inabilities. Examples cited by participants point to the fact that couples' combined efforts to make each other's life less affected by the disability also played a vital role in their efforts to become more resilient.

Finally, Dealing with the Disability was also rated predominantly as a positive category and usually led to an increase in relational closeness. This category of turning points was comprised of two extreme sets of reactions: acceptance of the disability and self-denial. Participants who accepted the disability viewed it as a positive event. Some framed the disability as a reminder to live in the present, whereas others linked it

critically to decisions about rehabilitation training. And a few participants found that attending counseling was important to the process of accepting the disability.

By comparison a considerably smaller group of participants identified Dealing with the Disability as a turning point that resulted in decreased relational closeness. Interestingly, a clear pattern emerged here as all of the instances pointed to the same issue: the afflicted spouse's self-denial. Thus, self-denial prompted significant turning points that eroded relational closeness during the time in which people worked to cope with the disability.

Less clear patterns of positivity were evident in other turning point groupings. In particular, the categories of Reactions to Assistance, Changes in Relational Dynamics, and Realization of the Disability were rated with mixed responses in terms of their impact on the relational closeness. Similar numbers of participants identified Reactions to Assistance as resulting in either positive or negative impacts on the relationship. This category of turning points included a range of experiences shared by both afflicted and sighted participants. People reported feeling closer when they were pleased by or satisfied with the type of assistance given or received, which in turn provided a better understanding of the afflicted partner's vision difficulties. Conversely, a similar number of people found it very challenging to handle situations requiring assistance when there was lack of communication between partners, a lack of knowledge about how to provide or ask for assistance, and when expectations for giving or receiving assistance were unmet or uncertain. One can conclude then that the expectations, knowledge, and

communication surrounding disability shape whether or not giving and receiving assistance will be a positive or negative experience.

Participants connoted Change in Relational Dynamics, the most commonly cited category in this study, with a decrease in relational closeness more often than they associated it with a positive relational change. In this category, participants spoke of the somewhat unexpected changes that occurred due to the disability. These changes included redistribution of household chores such as cooking, cleaning, laundry, and shopping, as well as the reassignment of significant responsibilities like driving, parenting, and working as the primary breadwinner. Added responsibilities, additional burdens, conflicts in redistribution of work, and communication gaps caused negativity among partners, whereas communication and working together, a sense of contributing to the family, and facilitating the partner's safety and convenience were some common factors that resulted in a positive impact on relational closeness.

Finally, Realization of the Disability included the emotional experiences of participants as their vision limitations became more noticeable to them. This category was predominantly viewed as a mark of relational decrease as 14 of the 18 participants rated it as a negative event in their life. The afflicted participants attributed feelings of loss of self esteem, loss of identity, depression and anger to the negative aspect of this category. Sighted participants recalled feeling sad, empathetic, overwhelmed and apprehensive about the future during the period evidenced by this turning point.

Analysis of Relational Trajectories

This study also sought to understand the relational trajectories of married couples (Research Question 3). The RIT graphs were analyzed and grouped into four distinct categories based on the common patterns evident in the relational trajectories of the participants. These categories reveal some expected and some unexpected relationship patterns that took shape when married couples confronted the visual disability. An important fact highlighted in these categories is that the sighted spouses had to adjust to the lifestyle changes as much as the afflicted partners. Also, despite these changes which were sometimes quite dramatic, all couples were able to maintain or revive their relationship closeness to the same level reported at the time the visual disability was first introduced. In some cases, the visual disability proved to be a positive influence on the overall relational trajectory, leading spouses to report higher levels of relational closeness than they had reported previously. Although these relational trajectories present a useful overview of the effects of the visual disability on the marital relationship, there are some important limitations discussed in the following section that should be considered before drawing any final conclusions from this study.

Limitations of the study

Several factors combine to highlight some important limitations of this study. The sample size and demographic heterogeneity are limited to a considerable extent. Hence, the results of this research study should not be generalized to a larger population of married couples; instead they should be viewed as a stepping-stone for future scholarly inquiry in the field. Since this study measured the effects of a visual disability in terms of

the changes in relational closeness, another challenge was to convey the contextual meaning of the term “closeness” which is highly subjective in nature. Even though the contextual definition of the term was explained to all participants at great length prior to the interviews, the individual interpretation of this term cannot be gauged completely. In addition, a few participants indicated some difficulty initially during the interview with regard to rating their closeness with their spouses quantitatively. However, to ensure participants’ clarity of the scale in such cases, the recording was paused while the researcher explained the interpretation of each level of the scale using examples from previous research studies that used Likert scales.

Another limitation of this study was age as a few of the elderly participants had difficulty recollecting the exact time when turning points occurred in their lives, thereby posing a methodological challenge. However, these participants were able to recall turning points in chronological order and provided approximate years when they occurred. Thus, while the time between turning points may have been compromised the recollection of turning points relative to one another in time remained intact.

Most of the interviews were conducted over the phone due to time and mobility constraints of participants. Interviewing over the phone disallowed directly showing people how to use the graphs. As a result this proved challenging at times when participants needed help an clarification regarding how to complete the graphs. In order to ensure reliability of results, once completed the RIT graph was read aloud to participants to elicit any changes and/or corrections that they wished to make. The

process was repeated after the end of the interview to ensure further coherence between every individual participant's interview recording and their RIT graphs.

It is also important to note that the relational trajectories generated from the RIT graphs do not represent a holistic overview of the couples' married life. Rather these depict only a particular aspect of their married life within the context of disability. Yet these provide noteworthy insights into the nuances associated with living with one's own visual disability or with a visually impaired spouse. The relational trajectories are also contingent upon factors such as participants' patience level and maturity, as well as the mutual understanding between partners and afflicted partners' regarding visual acuity and how it might change over time. Hence, the results of this study should be handled with due consideration of the above mentioned limitations and should be utilized as an example of how the method might need to be adjusted to accommodate particular sample groups.

Conclusion and Research Implications

Overall, the results of this study demonstrate that the onset of a visual disability can cause a wide range of effects on a marital relationship including initial issues with acceptance of the disability, a sense of loss of identity and self-esteem, misunderstandings and communication problems between partners, and changes in daily routines, roles and responsibilities. However, despite the wide range of changes that occurred in the participants' lives, the relational trajectories give solid evidence to the fact that their resilience overpowers this relational turbulence, as most of the participants indicated resuming or surpassing the levels of closeness that they shared before the onset

of the disability. For a few participants, the disability actually proved to be a significant factor that increased their relational closeness. Hence, this study presents a preliminary argument that counters the general notion that visual disability produces negative relational outcomes.

Another important takeaway of this study is the significant role of communication between afflicted individuals and sighted spouses in their adjustment to the disability. Communication was found inherent in all the identified categories of turning points in this study. While in some cases spousal interaction strengthened their understanding and coping abilities, in others communication or a lack thereof led to several implicit and explicit misunderstandings, conflicts, arguments, and frustration between partners.

In a nutshell, given the contingent nature of a visual disability, significant efforts have been made to better understand the different nuances associated with living with a disability. This exploratory study draws attention to one of the relatively less explored aspects of the visual disability that carries immense potential for scholarly inquiry. However, there is still a lot of room for growth and improvement within this area of disability and marital research.

A simple extension of this study may be to include a larger sample of married participants from across the globe. This will help not only in producing more generalizable results but also in addressing any cultural connotations associated with disability as different cultures and different religions may have different perspectives towards a disability (Westbrook, Legge, & Pennay, 1993). Another valuable extension of this study may be to include a sample of couples who were separated or divorced due to

the disability. A comparison of these couples with the couples who remain happily married despite the disability could help in unravelling some of the root causes of marital success or marital failure in the context of a visual disability. This study also carries implications for dialectics scholars as many participants indicated experiences associated with independence-dependence, old identity-new identity and similar dialectical tensions. This type of research may also be useful in counseling, rehabilitation, and marriage research.

In addition to the theoretical implications, this study also carries some practical implications. Couples who are new to the disability or couples who are on the verge of separation due to their inability to adjust could gain useful insights from the extensive range of experiences shared by the participants in this study. However, it is important to note that the intention of this study was not to provide guidelines on how to make marriages a success after the onset of a visual disability, rather it was to illuminate some of the significant factors that lead to increases or decreases in relational closeness of married couples in light of a visual disability. In this process, the study was able to generate substantial data that counteracts the common stigma that plague individuals with visual disabilities (i.e., they are a burden, overly dependent, handicapped, etc.). As such this work and the sample it included demonstrated that the vast majority of those facing visual disabilities within the context of marriage end up with a healthier marriage because of their shared experience.

REFERENCES

- Abner, G., & Lahm, E. (2002). Implementation of assistive technology with students who are visually impaired: Teachers' readiness. *Journal of Visual Impairment & Blindness (JVIB)*, 96(02), 98-106.
- Abou-Gareeb, I., Lewallen, S., Bassett, K., & Courtright, P. (2001). Gender and blindness: a meta-analysis of population-based prevalence surveys. *Neuro-Ophthalmology*, 8(1), 39-56.
- Ahrons, C. R. (1980). Divorce: A crisis of family transition and change. *Family Relations*, 533-540.
- Amato, P. R., & Previti, D. (2003). People's reasons for divorcing gender, social class, the life course, and adjustment. *Journal of Family Issues*, 24(5), 602-626.
- Bachand, L. L., & Caron, S. L. (2001). Ties that bind: A qualitative study of happy long-term marriages. *Contemporary Family Therapy*, 23(1), 105-121.
- Banthia, R., Malcarne, V. L., Varni, J. W., Ko, C. M., Sadler, G. R., & Greenbergs, H. L. (2003). The effects of dyadic strength and coping styles on psychological distress in couples faced with prostate cancer. *Journal of Behavioral Medicine*, 26(1), 31-52.
- Baxter, L. A., & Bullis, C. (1986). Turning points in developing romantic relationships. *Human Communication Research*, 12(4), 469-493.
- Baxter, L. A., & Erbert, L. A. (1999). Perceptions of dialectical contradictions in turning points of development in heterosexual romantic relationships. *Journal of Social and Personal Relationships*, 16(5), 547-569.
- Baxter, L. A., & Pittman, G. (2001). Communicatively remembering turning points of relational development in heterosexual romantic relationships. *Communication Reports*, 14(1), 1-17.
- Baxter, L. A., Braithwaite, D. O., & Nicholson, J. H. (1999). Turning points in the development of blended families. *Journal of Social and Personal Relationships*, 16(3), 291-314.
- Beach, S. R., Schulz, R., Yee, J. L., & Jackson, S. (2000). Negative and positive health effects of caring for a disabled spouse: longitudinal findings from the caregiver health effects study. *Psychology and aging*, 15(2), 259.
- Beauregard, L., & Noreau, L. (2010). Spouses of persons with spinal cord injury: Impact and coping. *British Journal of Social Work*, 40(6), 1945-1959.
- Becker, J. A., Johnson, A. J., Craig, E. A., Gilchrist, E. S., Haigh, M. M., & Lane, L. T. (2009). Friendships are flexible, not fragile: Turning points in geographically-

- close and long-distance friendships. *Journal of Social and Personal Relationships*, 26(4), 347-369.
- Belcrave, F. Z., & Mills, J. (1981). Effect upon desire for social interaction with a physically disabled person of mentioning the disability in different contexts. *Journal of Applied Social Psychology*, 11(1), 44-57.
- Berger, P., & Kellner, H. (1964). Marriage and the Construction of Reality An Exercise in the Microsociology of Knowledge. *Diogenes*, 12(46), 1-24.
- Bernbaum, M., Albert, S. G., & Duckro, P. N. (1988). Psychosocial profiles in patients with visual impairment due to diabetic retinopathy. *Diabetes Care*, 11(7), 551-557.
- Bernbaum, M., Albert, S. G., Duckro, P. N., & Merkel, W. (1993). Personal and family stress in individuals with diabetes and vision loss. *Journal of Clinical Psychology*, 49, 670-677.
- Berry, J. (1999). Apart or a part? Access to the Internet by visually impaired and blind people, with particular emphasis on assistive enabling technology and user perceptions. *Information technology and Disabilities*, 6(3), 1-16.
- Bienvenu Sr, M. J. (1987). 10 I MARITAL COMMUNICATION INVENTORY. *Handbook Of Measurements For Marriage And Family Therapy*, 103.
- Blieszner, R., Roberto, K. A., Wilcox, K. L., Barham, E. J., & Winston, B. L. (2007). Dimensions of ambiguous loss in couples coping with mild cognitive impairment*. *Family Relations*, 56(2), 196-209.
- Boeije, H. R., Duijnste, M. S., & Grypdonck, M. H. (2003). Continuation of caregiving among partners who give total care to spouses with multiple sclerosis. *Health & social care in the community*, 11(3), 242-252.
- Boerner, K., & Cimarolli, V. R. (2005). Optimizing rehabilitation for adults with visual impairment: attention to life goals and their links to well-being. *Clinical rehabilitation*, 19(7), 790-798.
- Bolton, C. D. (1961). Mate selection as the development of a relationship. *Marriage & Family Living*, 23, 234-240.
- Booth, A., & Johnson, D. R. (1994). Declining health and marital quality. *Journal of Marriage and the Family*, 218-223.
- Boss, P. G. (1983). marital relationship: boundaries and ambiguities. *Stress and the family/edited by Hamilton I. McCubbin & Charles R. Fisley*.

- Botwin, M. D., Buss, D. M., & Shackelford, T. K. (1997). Personality and mate preferences: Five factors in mate selection and marital satisfaction. *Journal of personality*, 65(1), 107-136.
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family*, 62(4), 964-980.
- Braithwaite, D. O. (1987, November). If you push my wheelchair, don't make car sounds": On the problem of "help "between disabled and ablebodied persons. In *annual meeting of the Speech Communication Association, Boston, MA*.
- Braithwaite, D. O., & Eckstein, N. J. (2003). How people with disabilities communicatively manage assistance: Helping as instrumental social support. *Journal of Applied Communication Research*, 31(1), 1-26.
- Braithwaite, D. O., & Harter, L. (2000). Communication and the management of dialectical tensions in the personal relationships of people with disabilities. *Handbook of communication and people with disabilities: Research and application*, 17-36.
- Braithwaite, D. O., & Labrecque, D. (1994). Responding to the Americans with Disabilities Act: Contributions of interpersonal communication research and training, 287-294.
- Branch, L. G., Horowitz, A., & Carr, C. (1989). The implications for everyday life of incident self-reported visual decline among people over age 65 living in the community. *The Gerontologist*, 29(3), 359-365.
- Brody, B. L., Gamst, A. C., Williams, R. A., Smith, A. R., Lau, P. W., Dolnak, D., ... & Brown, S. I. (2001). Depression, visual acuity, comorbidity, and disability associated with age-related macular degeneration. *Ophthalmology*, 108(10), 1893-1900.
- Buehler, C., Hogan, M. J., Robinson, B. E., & Levy, R. J. (1985). The parental divorce transition: Divorce-related stressors and well-being. *Journal of Divorce*, 9(2), 61-81.
- Bullis, C., & Bach, B. W. (1989). Socialization turning points: An examination of change in organizational identification. *Western Journal of Communication (includes Communication Reports)*, 53(3), 273-293.
- Bullis, C., Clark, C., & Sline, R. (1993). From passion to commitment: Turning points in romantic relationships. *Interpersonal communication: Evolving interpersonal relationships*, 213-236.

- Bunker, C. H., Berson, E. L., Bromley, W. C., Hayes, R. P., & Roderick, T. H. (1984). Prevalence of Retinitis pigmentosa in Maine. *American journal of ophthalmology*, 97(3), 357-365.
- Burns, A. (1984). Perceived causes of marriage breakdown and conditions of life. *Journal of Marriage and the Family*, 551-562.
- Calabro, L. E. (1990). Adjustment to disability: A cognitive-behavioral model for analysis and clinical management. *Journal of Rational-Emotive & Cognitive Behavior Therapy*.
- Cambra, C., & Silvestre, N. (2003). Students with special educational needs in the inclusive classroom: Social integration and self-concept. *European Journal of Special Needs Education*, 18(2), 197-208.
- Capella-McDonnall, M. (2005). Predictors of competitive employment for blind and visually impaired consumers of vocational rehabilitation services. *Journal of Visual Impairment & Blindness (JVIB)*, 99(05).
- Caplan, G. (1964). Principles of preventive psychiatry. Oxford, UK: Basic Books.
- Cardinali, G., & D'Allura, T. (2001). Parenting styles and self-esteem: A study of young adults with visual impairments. *Journal of Visual Impairment & Blindness (JVIB)*, 95(05).
- Chan, R. C. (2000). How does spinal cord injury affect marital relationship? A story from both sides of the couple. *Disability & Rehabilitation*, 22(17), 764-775.
- Chia, E. M., Wang, J. J., Rochtchina, E., Smith, W., Cumming, R. R., & Mitchell, P. (2004). Impact of bilateral visual impairment on health-related quality of life: the Blue Mountains Eye Study. *Investigative ophthalmology & visual science*, 45(1), 71-76.
- Choi, H., & Marks, N. F. (2008). Marital conflict, depressive symptoms, and functional impairment. *Journal of Marriage and Family*, 70(2), 377-390.
- Cimarolli, V., Goodman, C., & Sussman-Skalka, C. (2004). Program for Partners: Support Groups for Partners of Adults with Visual Impairments. *Journal of Visual Impairment & Blindness (JVIB)*, 98(02).
- Clapton, J. (1997). Disability, inclusion and the Christian Church: Practice, paradox or promise. *Disability & Rehabilitation*, 19(10), 420-426.
- Claude Blais, M., & Boisvert, J. M. (2005). Psychological and marital adjustment in couples following a traumatic brain injury (TBI): A critical review. *Brain Injury*, 19(14), 1223-1235.

- Cleek, M. G., & Pearson, T. A. (1985). Perceived Causes of Divorce: An Analysis of Interrelationships. *Journal of Marriage and the Family*, 47(1), 179-83.
- Congdon, N., O'colmain, B., Klaver, C. C., Klein, R., Munoz, B., Friedman, D.S. & Mitchell, P. (2004). Causes and prevalence of visual impairment among adults in the United States. *Archives of ophthalmology*, 122(4), 477-485.
- Conley-Jung, C., & Olkin, R. (1900). Mothers with visual impairments who are raising young children. *Journal of Visual Impairment & Blindness (JVIB)*, 95(01).
- Cowen, E. L., Underberg, R. P., & Verrillo, R. T. (1958). The development and testing of an attitude to blindness scale. *The Journal of Social Psychology*, 48(2), 297-304.
- Crewe, N., & Athelstan, G. (1985). Social and psychological aspects of physical disability. *Minneapolis: University of Minnesota, Department of Independent Study and University Resources*.
- Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress*. Thousand Oaks, CA: Sage Publications, Inc.
- DeLoach, C., & Greer, B. G. (1981). Adjustment to severe physical disability: A metamorphosis. NY: McGraw-Hill.
- Dolan, M. A., & Hoffman, C. D. (1998). Determinants of divorce among women: A reexamination of critical influences. *Journal of Divorce & Remarriage*, 28(3-4), 97-106.
- Drotar, D., Baskiewicz, A., Irvin, N., Kennell, J., & Klaus, M. (1975). The adaptation of parents to the birth of an infant with a congenital malformation: a hypothetical model. *Pediatrics*, 56(5), 710-717.
- Duba, J. D., Hughey, A. W., Lara, T., & Burke, M. G. (2012). Areas of Marital Dissatisfaction Among Long- Term Couples. *Adultspan Journal*, 11(1), 39-54.
- Duckett, P. S., & Pratt, R. (2001). The researched opinions on research: visually impaired people and visual impairment research. *Disability & Society*, 16(6), 815-835.
- Dunleavy, K. N. (2004). *Application of turning point theory to communication following an acquired disability*. (Order No. 1424300, West Virginia University). *ProQuest Dissertations and Theses*, , 70-70 p. Retrieved from <http://login.ezproxy1.lib.asu.edu/login?url=http://search.proquest.com/docview/305110261?accountid=4485>. (305110261).
- Eaglestein, A. S. (1975). The social acceptance of blind high school students in an integrated school. *New outlook for the blind*, 69(10), 447-451.
- Emslie, C., Browne, S., MacLeod, U., Rozmovits, L., Mitchell, E., & Ziebland, S. (2009). 'Getting through' not 'going under': A qualitative study of gender and spousal

- support after diagnosis with colorectal cancer. *Social Science & Medicine*, 68(6), 1169-1175.
- Eysenck, H. J., & Wakefield, J. A. (1981). Psychological factors as predictors of marital satisfaction. *Advances in Behavior Research and Therapy*, 3(4), 151-192.
- Feigin, R. (1998). The relationship between the sense of coherence and adjustment to disability studied in the context of marital interrelations. *Marriage & family review*, 27(1-2), 71-90.
- Fenell, D. L. (1993). Characteristics of long-term first marriages. *Journal of Mental Health Counseling*, 15(4), 446-460.
- Fichten, C. S., Judd, D., Tagalakakis, V., & Amsel, R. (1991). Communication cues used by people with and without visual impairments in daily conversations and dating. *Journal of Visual Impairment & Blindness*, 85(9), 371-378.
- Fitzpatrick, M. A. (1990). Models of marital interaction. *Handbook of language and social psychology*, 433-450.
- Gallagher, D., Rose, J., Rivera, P., Lovett, S., & Thompson, L. W. (1989). Prevalence of depression in family caregivers. *The Gerontologist*, 29(4), 449-456.
- Gigy, L., & Kelly, J. B. (1993). Reasons for divorce: Perspectives of divorcing men and women. *Journal of Divorce & Remarriage*, 18(1-2), 169-188.
- Glaser, B.G. & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. NY: Aldine De Gruyter.
- Golish, T. D. (2000). Changes in closeness between adult children and their parents: A turning point analysis. *Communication Reports*, 13(2), 79-97.
- Goodman, C. R., & Shippy, R. A. (2002). Is it contagious? Affect similarity among spouses. *Aging & mental health*, 6(3), 266-274.
- Graham, E. E. (1997). Turning points and commitment in post- divorce relationships. *Communications Monographs*, 64(4), 350-368.
- Green, J., Siddall, H., & Murdoch, I. (2002). Learning to live with glaucoma: a qualitative study of diagnosis and the impact of sight loss. *Social science & medicine*, 55(2), 257-267.
- Gullacksen, A. C., & Lidbeck, J. (2004). The life adjustment process in chronic pain: psychosocial assessment and clinical implications. *Pain Research & Management*, 9(3), 145-153.

- Harrison, T., Stuijbergen, A., Adachi, E., & Becker, H. (2004). Marriage, impairment, and acceptance in persons with multiple sclerosis. *Western Journal of Nursing Research, 26*(3), 266-285.
- Hayeems, R. Z., Geller, G., Finkelstein, D., & Faden, R. R. (2005). How patients experience progressive loss of visual function: a model of adjustment using qualitative methods. *British Journal of Ophthalmology, 89*(5), 615-620.
- Heaton, T. B. (2002). Factors contributing to increasing marital stability in the United States. *Journal of Family Issues, 23*(3), 392-409.
- Heine, C., & Browning, C. J. (2004). The communication and psychosocial perceptions of older adults with sensory loss: a qualitative study. *Ageing and Society, 24*(01), 113-130.
- Heppen, C. J., & Petersen, S. B. (1979). Visual impairment: facing possible blindness. *Social Work in Health Care, 5*(1), 41-49.
- Hess, J. A. (2002). Distance regulation in personal relationships: The development of a conceptual model and a test of representational validity. *Journal of Social and Personal Relationships, 19*(5), 663-683.
- Hétu, R., & Getty, L. (1991). Development of a Rehabilitation Program for People Affected with Occupational Hearing Loss 1. A New Paradigm. *International Journal of Audiology, 30*(6), 305-316.
- Hicks, M. W., & Platt, M. (1970). Marital happiness and stability: A review of the research in the sixties. *Journal of Marriage and the Family, 553-574*. Hicks, M. W., & Platt, M. (1970). Marital happiness and stability: A review of the research in the sixties. *Journal of Marriage and the Family, 553-574*.
- Hill, E., & Blasch, B. B. (1980). Concept development. *Foundations of orientation and mobility, 265-290*.
- Hodge, W. G., Witcher, J. P., & Satariano, W. (1995). Risk factors for age-related cataracts. *Epidemiologic reviews, 17*(2), 336.
- Holicky, R. (1996). Caring for the caregivers: The hidden victims of illness and disability. *Rehabilitation Nursing, 21*(5), 247-252.
- Huston, T. L., Surra, C. A., Fitzgerald, N. M., & Cate, R. M. (1981). From courtship to marriage: Mate selection as an interpersonal process. *Personal relationships, 2*, 53-88.
- Iverson, J. M., & Goldin-Meadow, S. (1997). What's communication got to do with it? Gesture in children blind from birth. *Developmental Psychology, 33*(3), 453-467.

- Jindal-Snape, D. (2004). Generalization and maintenance of social skills of children with visual impairments: Self-evaluation and the role of feedback. *Journal of Visual Impairment & Blindness (JVIB)*, 98(08), 470-483.
- Jocklin, V., McGue, M., & Lykken, D. T. (1996). Personality and divorce: a genetic analysis. *Journal of personality and social psychology*, 71(2), 288-299.
- Johnson, A. J., Wittenberg, E., Haigh, M., Wigley, S., Becker, J., Brown, K., & Craig, E. (2004). The process of relationship development and deterioration: Turning points in friendships that have terminated. *Communication Quarterly*, 52(1), 54-67.
- Kajiwara, K., Hahn, L. B., Mukai, S., Travis, G. H., Berson, E. L., & Dryja, T. P. (1991). Mutations in the human retinal degeneration slow gene in autosomal dominant retinitis pigmentosa. *Nature*, 354(6353), 480-483.
- Karlsson, G. (1963). *Adaptability and communication in marriage*. Bedminster Press.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. *Psychological bulletin*, 118(1), 3-34.
- Karney, B. R., Bradbury, T. N., Fincham, F. D., & Sullivan, K. T. (1994). The role of negative affectivity in the association between attributions and marital satisfaction. *Journal of Personality and Social Psychology*, 66(2), 413-424.
- Kaslow, F. W., & Hammerschmidt, H. (1993). Long term "good" marriages: The seemingly essential ingredients. *Journal of Couples Therapy*, 3(2-3), 15-38.
- Kaslow, F., & Robison, J. A. (1996). Long-term satisfying marriages: Perceptions of contributing factors. *American Journal of Family Therapy*, 24(2), 153-170.
- Keeffe, J. E., Lam, D., Cheung, A., Dinh, T., & McCarty, C. A. (1998). Impact of vision impairment on functioning. *Australian and New Zealand journal of ophthalmology*, 26(S1), S16-S18.
- Kef, S., & Bos, H. (2006). Is love blind? Sexual behavior and psychological adjustment of adolescents with blindness. *Sexuality and Disability*, 24(2), 89-100.
- Kempen, J. H., O'Colmain, B. J., Leske, M. C., Haffner, S. M., Klein, R., Moss, S. E. & Hamman, R. F. (2004). The prevalence of diabetic retinopathy among adults in the United States. *Archives of Ophthalmology*, 122(4), 552-563.
- Kirchner, C., Schmeidler, E., & Todorov, A. (1999). Looking at Employment through a Lifespan Telescope: Age, Health, and Employment Status of People with Serious Visual Impairment.
- Kleck, R. (1968). Physical stigma and nonverbal cues emitted in face-to-face interaction. *Human Relations*, 21(1), 19-28.

- Klein, B. E., Klein, R., Sponsel, W. E., Franke, T., Cantor, L. B., Martone, J., & Menage, M. J. (1992). Prevalence of glaucoma. The Beaver Dam eye study. *Ophthalmology*, 99(10), 1499-1504.
- Klein, R. J., Zeiss, C., Chew, E. Y., Tsai, J. Y., Sackler, R. S., Haynes, C., ... & Hoh, J. (2005). Complement factor H polymorphism in age-related macular degeneration. *Science*, 308(5720), 385-389.
- Klein, R. J., Zeiss, C., Chew, E. Y., Tsai, J. Y., Sackler, R. S., Haynes, C., ... & Hoh, J. (2005). Complement factor H polymorphism in age-related macular degeneration. *Science*, 308(5720), 385-389.
- Klein, R., Klein, B. E., Moss, S. E., Davis, M. D., & DeMets, D. L. (1984). The Wisconsin epidemiologic study of diabetic retinopathy: II. Prevalence and risk of diabetic retinopathy when age at diagnosis is less than 30 years. *Archives of ophthalmology*, 102(4), 520.
- Lamoureux, E. L., Pallant, J. F., Pesudovs, K., Tennant, A., Rees, G., O'Connor, P. M., & Keeffe, J. E. (2008). Assessing participation in daily living and the effectiveness of rehabilitation in age related macular degeneration patients using the impact of vision impairment scale. *Ophthalmic epidemiology*, 15(2), 105-113.
- Larson, J. H., & Holman, T. B. (1994). Premarital predictors of marital quality and stability. *Family Relations*, 228-237.
- Lauer, R. H., & Lauer, J. C. (1986). Factors in long-term marriages. *Journal of Family Issues*, 7(4), 382-390.
- Leonard, K. E., & Roberts, L. J. (1998). Marital aggression, quality, and stability in the first year of marriage: Findings from the Buffalo Newlywed Study. *The developmental course of marital dysfunction*, (pp. 44-73). Cambridge University Press.
- Livneh, H., & Antonak, R. F. (2005). Psychosocial adaptation to chronic illness and disability: A primer for counselors. *Journal of Counseling & Development*, 83(1), 12-20.
- Lyons, R. F., & Meade, D. (1995). Painting a new face on relationships: Relationship remodeling in response to chronic illness. *Confronting relationship challenges*, 181-210.
- Mangione, C. M., Gutierrez, P. R., Lowe, G., Orav, E. J., & Seddon, J. M. (1999). Influence of age-related maculopathy on visual functioning and health-related quality of life. *American journal of ophthalmology*, 128(1), 45-53.

- Mann, C., & Dieppe, P. (2006). Different patterns of illness- related interaction in couples coping with rheumatoid arthritis. *Arthritis Care & Research*, 55(2), 279-286.
- Manning, W. D., & Smock, P. J. (1995). Why marry? Race and the transition to marriage among cohabitators. *Demography*, 32(4), 509-520.
- Michael, R. T., Atoh, M., Otani, K., Lieberson, S., Waters, M. C., Levitan, S.A. & Prioux, F. (1988). Why did the US divorce rate double within a decade? *Family Relations*, 37(4), 367-99.
- Mott, F. L., & Moore, S. F. (1979). The causes of marital disruption among young American women: An interdisciplinary perspective. *Journal of Marriage and the Family*, 355-365.
- Nagi, S. Z., & Clark, D. L. (1964). Factors in marital adjustment after disability. *Journal of Marriage and the Family*, 215-216.
- Naraine, M. D., & Lindsay, P. H. (2011). Social inclusion of employees who are blind or low vision. *Disability & Society*, 26(4), 389-403.
- Navran, L. (1967). Communication and adjustment in marriage. *Family Process*, 6(2), 173-184.
- Oddy, J. G. M. (1999). Rearranged marriages: Marital relationships after head injury. *Brain injury*, 13(10), 785-796.
- Omvig, J. H. (2002). Freedom for the blind: The secret is empowerment. Region VI Rehabilitation Continuing Education Program, University of Ark.
- Parker, R. M., Schaller, J., & Hansmann, S. (2003). Catastrophe, chaos, and complexity models and psychosocial adjustment to disability. *Rehabilitation Counseling Bulletin*, 46(4), 234-241.
- Peterson, Y. (1979). The impact of physical disability on marital adjustment: A literature review. *Family Coordinator*, 47-51.
- Ponzetti Jr, J. J., Zvonkovic, A., Cate, R. M., & Huston, T. L. (1992). Reasons for divorce: A comparison between former partners. *Journal of divorce & remarriage*, 17(3-4), 183-201.
- Pruchno, R. A., & Resch, N. L. (1989). Aberrant behaviors and Alzheimer's disease: mental health effects on spouse caregivers. *Journal of Gerontology*, 44(5), S177-S182.
- Quigley, H. A., & Broman, A. T. (2006). The number of people with glaucoma worldwide in 2010 and 2020. *British Journal of Ophthalmology*, 90(3), 262-267.

- Ramloll, R., Yu, W., Brewster, S., Riedel, B., Burton, M., & Dimigen, G. (2000, November). Constructing sonified haptic line graphs for the blind student: first steps. In Proceedings of the *fourth international ACM conference on Assistive technologies* (pp. 17-25). ACM.
- Rapoport, L. (1970). Crisis intervention as a mode of brief treatment. *Theories of social casework*, 265-312.
- Read, L. F. (1989). An examination of the social skills of blind kindergarten children. *Education of the Visually Handicapped*, 20(4), 142-155.
- Reeves, B. C., Harper, R. A., & Russell, W. B. (2004). Enhanced low vision rehabilitation for people with age related macular degeneration: a randomized controlled trial. *British Journal of Ophthalmology*, 88(11), 1443-1449.
- Rolland, J. S. (1994). IN SICKNESS AND IN HEALTH: THE IMPACT OF ILLNESS ON COUPLES' RELATIONSHIPS. *Journal of Marital and Family Therapy*, 20(4), 327-347.
- Rose, A. (1997). "Who Causes the Blind to See": Disability and quality of religious life. *Disability & Society*, 12(3), 395-405.
- Russell, D. (2009). Living arrangements, social integration, and loneliness in later life: the case of physical disability. *Journal of health and social behavior*, 50(4), 460-475.
- Sacks, S. Z., Kekelis, L. S., & Gaylord-Ross, R. J. (Eds.). (1992). *The development of social skills by blind and visually impaired students: Exploratory studies and strategies*. AFB Press.
- Salive, M. E., Guralnik, J., Glynn, R. J., & Christen, W. (1994). Association of visual impairment with mobility and physical function. *Journal of the American Geriatrics Society*, 42(3), 287-292.)
- Sandhu, N. K., Kemp, C. L., Ball, M. M., Burgess, E. O., & Perkins, M. M. (2013). Coming together and pulling apart: Exploring the influence of functional status on co-resident relationships in assisted living. *Journal of Aging Studies*, 27(4), 317-329.
- Scarinci, N., Worrall, L., & Hickson, L. (2008). The effect of hearing impairment in older people on the spouse. *International journal of audiology*, 47(3), 141-151.
- Seddon, J., Fong, D., West, S. K., & Valmadrid, C. T. (1995). Epidemiology of risk factors for age-related cataract. *Survey of Ophthalmology*, 39(4), 323-334.
- Sillars, A. L., & Wilmot, W. W. (1989). Marital communication across the life span. *Life-span communication: Normative processes*, 225-253.

- Singleton, P. (2012). Insult to Injury Disability, Earnings, and Divorce. *Journal of Human Resources*, 47(4), 972-990.
- South, S. J., & Spitze, G. (1986). Determinants of divorce over the marital life course. *American Sociological Review*, 583-590.
- Spitze, G., & South, S. J. (1985). Women's employment, time expenditure, and divorce. *Journal of Family Issues*, 6(3), 307-329.
- Stevenson, B., & Wolfers, J. (2007). Marriage and divorce: Changes and their driving forces (No. w12944). National Bureau of Economic Research.
- Strawbridge, W. J., Wallhagen, M. I., & Shema, S. J. (2007). Impact of spouse vision impairment on partner health and well-being: A longitudinal analysis of couples. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 62(5), S315-S322.
- Stromer, W. F. (1983). Disability and interpersonal communication. *Communication Education*, 32(4), 425-427.
- Subramani, R. (2010). Insight through Body Language and Non-verbal Communication References In Tirukkural. *Language in India*, 10(2), 261-271.
- Teitelman, J., & Copolillo, A. (2005). Psychosocial issues in older adults' adjustment to vision loss: Findings from qualitative interviews and focus groups. *The American journal of occupational therapy*, 59(4), 409-417.
- Terman, L. M., Bittenwieser, P., Ferguson, L. W., Johnson, W. B., & Wilson, D. P. (1938). *Psychological factors in marital happiness*. New York, NY: McGraw-Hill.
- Thompson, T. L. (1981). The impact of a physical handicap on communicative characteristics of the marital dyad. *Western Journal of Communication (includes Communication Reports)*, 45(3), 227-240.
- Thompson, T. L. (1982). Gaze toward and avoidance of the handicapped: A field experiment. *Journal of Nonverbal Behavior*, 6(3), 188-196.
- Thurnher, M., Fenn, C. B., Melichar, J., & Chiriboga, D. A. (1983). Sociodemographic perspectives on reasons for divorce. *Journal of Divorce*, 6(4), 25-35.
- Ulrich, I., & Borenstein, J. (2001). The GuideCane-applying mobile robot technologies to assist the visually impaired. *Systems, Man and Cybernetics, Part A: Systems and Humans, IEEE Transactions on*, 31(2), 131-136.
- Vangelisti, A. L., & Huston, T. L. (1994). Maintaining marital satisfaction and love. In D.J. Canary & L. Canary (Eds). *Communication and relational maintenance* (pp. 165-186) . San Diego, CA: Academic Press.

- Vitale, S., Cotch, M. F., & Sperduto, R. D. (2006). Prevalence of visual impairment in the United States. *Jama*, 295(18), 2158-2163.
- Waite, L. J., & Lehrer, E. L. (2003). The benefits from marriage and religion in the United States: A comparative analysis. *Population and Development Review*, 29(2), 255-275.
- Walsh, J. D., Blanchard, E. B., Kremer, J. M., & Blanchard, C. G. (1999). The psychosocial effects of rheumatoid arthritis on the patient and the well partner. *Behaviour Research and Therapy*, 37(3), 259-271.
- Warner, D. F., & Kelley-Moore, J. (2012). The Social Context of Disablement among Older Adults Does Marital Quality Matter for Loneliness?. *Journal of health and social behavior*, 53(1), 50-66.
- Weigel, D. J., Bennett, K. K., & Ballard-Reisch, D. S. (2006). Influence strategies in marriage: Self and partner links between equity, strategy use, and marital satisfaction and commitment. *The Journal of Family Communication*, 6(1), 77-95.
- Westbrook, M. T., Legge, V., & Pennay, M. (1993). Attitudes towards disabilities in a multicultural society. *Social science & medicine*, 36(5), 615-623.
- Wiley, A. R. (2006). Connecting as a couple: Communication skills for healthy relationships. *Family Life Specialist, University of Illinois*.
- Winberg, F., & Bowers, J. (2004, November). Assembling the senses: towards the design of cooperative interfaces for visually impaired users. In *Proceedings of the 2004 ACM conference on Computer supported cooperative work* (pp. 332-341). ACM.
- World Health Organization. (2002). World sight day: 10 October. Retrieved from <http://www.who.int/mediacentre/news/releases/pr79/en/>
- World Health Organization. (2013). Visual impairment and blindness. Retrieved from <http://www.who.int/mediacentre/factsheets/fs282/en/>
- Wright, L. K. (1991). The impact of Alzheimer's disease on the marital relationship. *The Gerontologist*, 31(2), 224-237.
- Yorgason, J. B., Booth, A., & Johnson, D. (2008). Health, disability, and marital quality is the association different for younger versus older cohorts?. *Research on Aging*, 30(6), 623-648.
- Yu, W., Kuber, R., Murphy, E., Strain, P., & McAllister, G. (2006). A novel multimodal interface for improving visually impaired people's web accessibility. *Virtual Reality*, 9(2-3), 133-148.