

The Effect of Depressotypic Attributions on Marital Satisfaction as Mediated by Spousal Support and Moderated by Length of Marriage in Mothers of Children with Autism Spectrum Disorders

by

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Abstract

Mothers of children with Autism Spectrum Disorders (ASD) face unique stressors in caring for their child(ren) with a disability which often spill over into other areas of their lives, including their marriages. The present study seeks to better understand how marital satisfaction is related to depressotypic attribution style, spousal support, and length of marriage in mothers of children with an ASD. Spousal support was tested as a mediator of depressotypic attribution style and marital satisfaction. Length of marriage was tested as a moderator between depressotypic attribution style and spousal support as well as between spousal support and marital satisfaction. Mother's education, family income, outside support, child's challenging behaviors, and child's autistic behaviors were controlled for in the analyses. This study is the first of its kind to investigate the role that depressotypic attributions, spousal support, and length of marriage play in mothers of children with ASD.

The analytic sample for the study included 110 married mothers of children with ASD from the continental United States. The participants completed self-report measures as well as a demographic questionnaire. These data were collected by Jennifer Lynne Koenig Nelson from 2003-2004.

Using path analysis, findings from this study indicate that depressotypic attributions and spousal support predict marital satisfaction in mother's of children with ASD. Spousal support was found to mediate the relationship between depressotypic attributions and marital satisfaction. A significant moderation by length of marriage was not found in predicting marital satisfaction.

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List of Abbreviations

ASD Autism Spectrum Disorders

Introduction

Statement of the Problem

As the prevalence of diagnosed Autism Spectrum Disorder (ASD) increases exponentially in the United States, a growing need exists to assess means to provide support to children with autism through identifying protective factors in their caregivers' lives (CDC, 2007). Because caregivers of ASD children are most often parents, and in particular, mothers, research is needed to understand better how mothers can effectively cope with the stresses that they experience raising children with an ASD. A solid body of research already exists documenting the stress that parents of children with disabilities encounter; and marital satisfaction has been documented as being affected by children who have disabilities as well as providing a means of support for caregivers (Keller & Hoing, 2004; Kersh et al., 2006; McCarthy et al., 2006; Olsson & Hwang, 2006). While methods of coping both within families and with outside social support have been studied, marital satisfaction within the couple relationship has been shown to be related to better coping with the stress of having children with disabilities (Glidden, Billings, & Jobe, 2006; Grant & Whittell, 2000; Tway, Connolly, & Novak, 2007). Additionally, parents of children with disabilities who have high marital satisfaction may be buffered from some of the intense stress that they face (Higgins, Bailey, & Pearce, 2005; Kersh et al., 2006; Koegel et al., 1983; Risdal & Singer, 2004). Attributional style and spousal support also are related to marital satisfaction in couples (Bradbury & Fincham, 1990;

Coyne & Anderson, 1999; Cutrona, Suhr, & MacFarlane, 1990; Fincham & Bradbury, 1992; Holicky & Charlifue, 1999), but they have yet to be studied in mothers of children with ASD. In fact, marital satisfaction itself has yet to be studied in the context of mothers of children with ASD. Additionally, little is known about how marital satisfaction is related to attributional style and spousal support. In this study, we are interested in investigating how, in couples with children with ASD, mothers' attributional style, perceptions of spousal support, and length of marriage relate to their marital satisfaction. We will control for SES, level of education completed, outside social support received, and severity of child challenging behaviors and autistic behaviors in the analyses. The data were collected by Jennifer Lynne Koenig Nelson between 2003-2004 for a study that examined negative attribution, spousal support, and marital satisfaction in parents of children with ASD (Koenig-Nelson, 2004). Dr. Koenig Nelson personally funded data collection and completed her study to fulfill partial of requirements for the degree of Doctor of Philosophy.

Significance of the Problem

The prevalence of children diagnosed with Autism Spectrum Disorders (ASD) in American society has exploded over the last few years, with the Centers for Disease Control citing that as many as 1 in 150 eight-year old children in the United States having an ASD (CDC, 2007). ASD, a pervasive developmental disorder, is characterized by significant deficits in social interactions, play, and communication. Individuals with ASD have difficulty understanding and using language and therefore have trouble mastering basic human interpersonal behaviors (APA, 2002). Depending on the severity of the disorder, individuals with ASD require varying levels of life-long support. While

the reasons for this dramatic increase in ASD diagnoses have yet to be established, the demands that caring for a child with ASD place on families are often high. Because of both the prevalence and severity of the disorder, American society is becoming more concerned with the long-term care that people with ASD require. Long-term care is often carried out by family members who exist in a larger family context as marital partners.

At this point, few studies have been conducted to determine how caring for a child with an ASD relates to parents' marital satisfaction (Higgins, Bailey, & Pearce, 2005; Kersh et al., 2006; Koegel et al., 1983; Risdal & Singer, 2004). One of the most often replicated findings from research on marital satisfaction in childless couples or couples with typically developing children has been the role of attribution styles on marital satisfaction. One attribution style in particular, a depressotypic attribution style, has been found to relate to individual depression and lower marital satisfaction in couples (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992; McNulty & Karney, 2001; Sweeney, Anderson, & Bailey, 1986). A depressotypic attributional style can be thought of as a risk factor for marital discord which when combined with the additional stress facing couples of children with ASD, the combination of risk factors and family stress might uniquely set these couples up for marital discord. Research is needed to determine the role that depressotypic attributions might play in marital satisfaction in these families. Additionally, gaps remain when looking at how perceived spousal support is related to parental marital satisfaction. Findings suggest that perceived spousal support is more closely associated with wellbeing than actual support in spouses (Wethington & Kessler, 1985). Whereas spousal support has been found to be a positive factor with childless couples and with couples who have typically-developing children (Coyne & Anderson,

1999; Cutrona, Suhr, & MacFarlane, 1990; Julien & Markman, 1991; Leatham & Duck, 1990; Wethington & Kessler, 1985), the association between spousal support and marital satisfaction has yet to be studied in couples who face the additional family stress of raising a child with an ASD.

Finally, research on length of marriage and marital satisfaction has generally shown that couples experience a gradual decrease in satisfaction over time, with some studies indicating that satisfaction tends to increase as typically-developing children launch (Burr, 1970; Belsky, Spanier, & Rovine, 1983; Vaillant & Vaillant, 1993). No research has been conducted on how the additional stress of raising a child with ASD relates to couple marital satisfaction as moderated by the length of marriage.

The present study seeks to better understand how marital satisfaction is related to attributional style and spousal support in mothers of children with an ASD. This study utilizes self-report measures to document wives' marital satisfaction, attributions of negative events within a marriage, perceived spousal support from husbands, the length of marriage, child diagnosis, child characteristics, and demographic information. A path analysis will be used to evaluate the relationships among marital satisfaction, attributions of negative events within a marriage, and perceived spousal support. In addition, we will investigate if these relationships are moderated by the length of marriage and if the effect of attributions on marital satisfaction is mediated by perceived spousal support from spouses.

The wives' SES, level of education completed, outside social support received, and severity of challenging and autistic behaviors by child with ASD will be controlled in

the analyses. Challenging behaviors, including temper tantrums, trouble sleeping, and aggressive behaviors such as hitting are common in individuals with ASD (Dunlap, Robbins, & Darrow, 1994). Dunlap and colleagues (1994) surveyed 78 parents of children with ASD about their children's challenging behaviors, which were defined as any aggressive or destructive behavior that frequently occurs more than once a day. Parents also indicated their use of currently available resources and outside support for managing these behaviors. They found that parents see family, teachers, written materials, and a contingency management strategy as most helpful in managing challenge behaviors.

Gray and Holden (1992) investigated the presence of challenging behaviors in individuals with ASD and their impact on parental well-being and family relationships. They surveyed 172 parents of children with ASD for demographic information on the health and treatment status of the child including the presence of challenging behaviors as well as parental depression, anxiety, and anger. They found that these and other behaviors associated with ASD (self-stimulation behaviors, echolalia, problems with language, and self destructive actions) can increase parental anger, depression, and anxiety, often making parental and sibling interactions more difficult and impacting family life. The level of anger and anxiety that these behaviors are linked to is related to certain demographic factors including spousal support, sex of the parent, and family size. Fathers, parents who received high spousal support, and smaller families reported lower depression, anger and anxiety (Gray & Holden, 1992). These findings demonstrate the role that challenging behaviors can play in parental well-being, therefore the present

study will control for the presence of these challenging behaviors to focus on factors within the marital relationship that may influence marital satisfaction in these families.

Review of the Literature

This review of the literature explores what we already know about marital satisfaction, depressotypic attributions, perceived spousal support, and length of marriage in marriages in which there is a child with an ASD. The first topic to explore is the extant research on the impact of having a child with an Autism Spectrum Disorder on marital satisfaction.

Marital Satisfaction in Parents of Children with ASD

According to The National Institute of Mental Health, Autism Spectrum Disorders include the two most common disorders: Autism and Asperger's syndrome as well as the much more rare disorders Rett Syndrome and Childhood Disintegrative Disorder (NIMH, 2007). ASDs are characterized by varying degrees of impairment in communication skills, social interactions, and restricted, repetitive and stereotyped patterns of behavior (APA, 2002). They can be detected reliably at 3 years, but sometimes as early as 18 months.

According to the DSM-IV-TR (APA, 2002), autism is a disorder characterized by impairment in social interactions which include marked impairment in use of multiple non-verbal behaviors such as eye-to-eye gaze, failure to develop peer relationships, and lack of social reciprocity. Autism also results in impaired communication which causes a delay or complete lack of spoken language. Around 50% of people with autism are nonverbal. Impaired communication in individuals with autism is linked with lack of

attempts to compensate through alternative modes of communication (e.g. gesture, mime), the stereotyped/repetitive use of language, a lack of developmentally appropriate play, and inability to sustain a conversation with others (APA, 2002). Finally, autism is characterized by restricted patterns of behavior, interest, and activities. This can include an encompassing preoccupation with stereotyped and restricted patterns of interest, inflexible adherence to routines, repetitive motor mannerisms including self-stimulation behaviors, and a preoccupation with parts of speech (APA, 2002). Children (especially between 18 months and three years) are in the age group most likely to be diagnosed with an ASD (2002). Caregiving responsibilities for the child with ASD usually fall on parents, and due to current gender roles the main caregiver is usually the child's mother. As researchers began to realize the intense demands these mothers face, interest has grown in understanding factors related to mothers' well-being. These mothers exist in a complex social network, which often includes a relationship with a marital partner.

Research on marital satisfaction as it relates to caring for a child with disabilities has been previously studied through two separate avenues. Some research has focused on the impact that caring for a child with a disability has on marital satisfaction, while the other body of work is interested in how the marital relationship can buffer the often stressful experience of raising a child with a disability. Several studies found that marital satisfaction for parents of children with ASD or other disabilities is slightly lower than satisfaction for similar parents who had been married the same amount of time but had typically developing children (Higgins, Bailey, & Pearce, 2005, Kersh et al., 2006). Higgins and colleagues (2005) studied fifty-two caregivers of children with an ASD in

Victoria, Australia. Ninety-seven percent of primary caregivers were mothers and 76% of caregivers had never been divorced and were in intact marriages. Of the remaining 24% of participants, 17% had divorced after the birth of the child with an ASD, 2% were widowed pre-diagnosis, and 4% divorced before the birth of the child. Fifty-nine percent of the children had been diagnosed as having a high-functioning ASD, and 29% were diagnosed as having a low-functioning ASD. Fifty percent of the children attended public schools and 28% attended schools dedicated to children with disabilities. Most of the children with an ASD were male and first or second born (Higgins, Bailey, & Pearce, 2005). Parents completed surveys of parent and child behaviors and attitudes. Marital quality was assessed using the Quality Marital Index (QMI, Norton, 1983) which consists of 10 items and a five-point Likert type scale. The QMI was developed based on a sample of 407 American couples who were found to have a mean marital satisfaction of 7.7. Higgins et al. (2005) found that overall marital quality of primary caregivers was 6.1, which is lower than the group in Norton's 1983 study. They also found family adaptability and cohesion scores to be lower than those in the normed group. In addition, 41% of caregivers reported some form of physical, emotional, financial, or marital stress. These families exhibited less flexibility and a lack of warmth when compared to families with typically developing children.

Kersh et al. (2006) studied 67 families with children with developmental disabilities who were already participating in the Early Intervention Collaborative Study in the northeastern United States. Only biological parents who had been married to one another since the birth of child were included. Parents had a slightly lower poverty rate than the general population and a higher rate of European American ethnicity. The

children with developmental disabilities had an average age of 10 years and disabilities included Down's syndrome, motor impairment, and developmental delay. Within a month of the child's 10th birthday, parents met with researchers and completed several measures. Parenting stress was measured using the PSI (Abidin, 1995), and parental depressive symptomology was measured with the Center for Epidemiological Studies Depression scale (CES-D; Radloff, 1977), a 20-item measure which describes a range of behaviors and emotions. Marital quality was measured using the Dyadic Adjustment Scale (DAS; Spanier, 1976), a 32-item measure which uses a Likert-type scale to examine marital satisfaction, cohesion, consensus and affectional expression. Kersh and his colleagues found that parents with children with disabilities are more likely to label their marital relationships as "distressed" than parents of typically developing children (2006). Their scores were compared with a comparison group of parents of children with normal development; however, no additional information on the comparison group was included in the study.

In contrast, some early research found that parents of children with ASD are similar in marital satisfaction to a demographically comparable married group and much higher in satisfaction than a demographically comparable divorced group (Koegel et al., 1983). Koegel et al. studied 49 parents of children diagnosed with autism representing 26 families from southern California, who were recruited and studied between 1977 and 1979. The children ranged in age from 2 to 7 years old with a mean age of 5.75 years old. All of the children had severe language disabilities and were either non-verbal or echolalic. Most displayed frequent tantrums and self-stimulating behaviors. Seventy-eight percent of the parents were married, 6% were divorced or separated and not

remarried, and 16% were step parents. Over half of the fathers had college degrees and most mothers had at least graduated from high school. A comparison group was formed who was also from southern California and was similar to the control group in SES, years of parental education, child age range, and number of siblings. This study found that parents of children with autism displayed the same level of marital happiness as the group of happily married parents and higher marital adjustment than the group of divorced couples. They also found that no higher level of general stress existed for parents of autistic children compared to other parents. These findings were shown as evidence of the lack of psychopathology of parents of children of autism. When the article was published, parental psychopathology was seen as a possible origin in the development of child autism. This belief has not been supported and is no longer widely accepted.

It seems that findings generally indicate that caring for a child with a disability is related to lower marital satisfaction; some findings suggest that caring for a child with an ASD can have an even more negative impact on marital satisfaction than caring for a child with another disability. Rodrigue, Morgan, and Geffken (1990) found that mothers of children with ASD reported lower levels of marital satisfaction when compared to mothers of children with Down's syndrome and developmentally normal children. This study looked at 60 mothers of children with disabilities including 20 with ASD, 20 with Down's syndrome, and 20 typically developing children. These mothers were matched on demographic characteristics including sex of the children, number of children in the family, and marital status. Families were predominantly white and middle upper class. This study found that mothers of children with autism reported less parenting competence, marital satisfaction, less family adaptability, but more family cohesion than

the mothers of children with other disabilities (Rodrigue et al., 1990). These results indicate that raising a child with an ASD can be especially detrimental to marital satisfaction as compared to raising a child with another disability or a developmentally normal child. These findings indicate the need for more information on the impact not just on raising a child with a developmental disability but the effects on marital satisfaction of raising an ASD child.

Marital satisfaction is a factor of particular interest because it has been found to impact parents' levels of well-being (Kersh et al., 2006). Mothers with high marital satisfaction have reported lower levels of depression (CES-D; Radloff, 1977), reduced stress related to parenting role (PSI; Abidin, 1995), and greater parenting efficacy as measured through a subscale of the Family Experiences Questionnaire (FEQ; Frank et al., 1986, unpublished manuscript). For fathers, high marital quality is associated with low depressive symptomology and parenting stress (Kersh et al., 2006). While more research is needed to understand the impact that the marital relationship has on parental well-being and stress levels in families of children with disabilities, it seems clear that marital satisfaction is negatively related to having a child with an ASD.

These overall findings indicate, on average, that parents of children with ASD have lower marital satisfaction than parents of developmentally normal children and that lower marital satisfaction is in general related to higher levels of depression, increased parenting stress, and decreased parenting efficacy. With these findings, one could assume that lower marital satisfaction might negatively impact parental wellbeing and parenting in all families, but including families facing the additional stress of raising a

child with an ASD. Research is needed to better understand factors that impact marital satisfaction in these families.

Depressotypic Attributions

A topic of great interest in recent years has been relationship attributions and their role in couple marital satisfaction and individual partner depression (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992). The cognitive attribution and mediation model proposes that partners bring certain beliefs to the relationship about one's self, relationships, and one's partner that moderate their perceptions of interactions with their partners. These beliefs are referred to as attributions. Attributions determine the nature and meaning of interactions with one's partner, in turn affecting emotional and behavioral reactions to himself/herself and his/her partner (DeBord et al., 1996). Those who hold more realistic beliefs or attributions are more likely to exhibit adaptable emotional responses and show functional and appropriate ways of feeling and behaving (Ellis, 1962). Relationship conflicts often arise when one places irrational demands on the relationship. Over time, this relationship might become characterized by intense, negative emotions including anxiety, depression, rage, and guilt that in turn result in maladaptive interactional behaviors (DiGiuseppe & Zee, 1986). According to this cognitive attribution and mediation model, perceptions of interactions are more significant than the actual interaction itself in determining behavior (DeBord et al., 1996)

Each individual entering a relationship brings his/her own attributional style, which is a somewhat stable foundation the individual utilizes in the meaning-making process. In previous studies, attributional style often has been dichotomized into optimist and pessimistic styles (Seligman, 1990), which rely on the three subscales of causal

attributions: internal/external, stable/unstable, and global/specific. According to this theory, events occurring in the environment are categorized by individuals as being internal or external to the person, stable or unstable, and global or specific. These factors have been used to describe causal attributions. Internal versus external factors refer to whether the attributed cause of an event is seen by the individual as a characteristic of some person (internal) or the environment (external). Stable versus unstable factors refer to attributed cause of an event being unlikely to change (stable) or flexible and fluctuating (unstable). Global versus specific factors refer to attributed causes being likely to influence other areas of one's life (global) or being unique to this particular circumstance (specific) (Abramson et al., 1987). Those with optimistic attribution styles attribute the cause and meaning of negative life events (including their partner's actions) to external, unstable, and specific factors, whereas those with negative attribution styles attribute the cause and meaning of negative life events to internal, stable, and global factors. When an event is perceived as internal, this means that the spouse attributes the cause of the negative event to their partner's personality flaw, not the environmental circumstances. This is the opposite of seeing the cause of the negative event as external, meaning the cause rests outside of the partner in the environment or circumstances, so the partner is not seen as personally at fault. When the cause of the event is stable, this means that the wronged partner assumes that the negative event which occurred between him/her and his/her partner is something which is not likely to change and that the negative outcome of the situation will always occur in future situations. The opposite of a stable attribution would be an unstable attribution where the wronged partner attributes the outcome of the negative event as changeable in the future. This means that he/she

might expect a different outcome from his/her partner in a future similar situation. Finally, when a spouse makes a global attribution regarding their partner's role in a negative event, then he/she believe the negative event will occur not just in this situation, but in all situations. The negativity from this one event then bleeds over into other aspects of the relationship. A specific attribution style, the opposite of a global attribution style, means that the spouse believes that this experience was limited to the current situation, so the negativity does not spill over into other areas of the relationship or other circumstances. The combination of internal, stable, and global attribution style forms an overall pessimistic attribution style which makes it difficult for one spouse to redeem himself/herself in the eyes of the wronged spouse. This process of meaning making becomes a self-fulfilling prophesy such that a spouse's pessimistic attributional styles leads to relationship distress. A distressed spouse then is more likely to make attributions for negative events that accentuate negative perceptions of one's partner (Fincham & Bradbury, 1992). This increases dissatisfaction within the relationship, which in conjunction with future negative attributions leads to a downward spiral of dissatisfaction. On the other hand, a non-distressed spouse makes attributions that minimize the impact of negative events on his/her perceptions of his/her partner. By making attributions that are external, unstable, and specific a spouse avoids seeing his partner as personally responsible. A more optimistic attributional style decreases the chances of relational distress so that when negative events occur, a spouse makes attributions that continue to decrease the chances of relational distress (Fincham & Bradbury, 1992).

The concept of a pessimistic attributional style evolved into a more specific concept of the depressotypic attributional style, which is characterized by attributing *negative* events to internal, stable, and global factors. People with a depressotypic attribution style are more likely to rate *positive* outcomes as external, unstable, and specific (Seligman et al., 1979). This type of attribution style is seen as particularly debilitating because it allows for the integration of bad but not good outcomes in the structure of beliefs about the self (Seligman et al., 1979). In contrast, a non-depressotypic style is characterized by conceptualizing negative events as external, unstable, and specific. This means that the partner's negative behavior is explained by factors outside of the individual, so there is not something personally wrong with him or her. Additionally, the outcome of the event is not likely to occur again and the importance of the event does not carry over into other areas of the relationship. A non-depressotypic attributional style would conceptualize positive events as internal, stable, and global. This means that the outcome of the positive event is attributed to something innate about the partner, it is likely to stay the same over time, and the positive outcome spills over into other areas of the relationship. Sweeney, Anderson, and Bailey (1986) conducted meta-analyses of 104 studies with almost 15,000 participants examining the relation between attribution styles and depression. Studies were selected based on the presence of an attribution measure which was given after subjects experienced a success or failure outcome of any kind. This included real and imagined outcomes, recalled and recently experienced outcomes, and laboratory test outcomes. The articles were published between 1978 and 1986. The meta-analysis examined the three dimensional components of causal attributions: external-internal, unstable-stable, and specific-global. They found

that if attributions for a negative outcome were more internal, stable, and global, indicative of a depressotypic attributional style, depression was also high. They found that attributions for a positive outcome which were internal, stable, and global were negatively correlated with depression. The scores also indicated that this non-depressotypic attribution style for positive events was negatively correlated with depression (Sweeney et al., 1986).

Little is known about depressotypic attributional styles in parents of children with ASD. Since findings suggest that parents of children with ASD experience greater parenting stress and depression than parents of typically developing children, research is needed to indicate the contributing factors. While attribution style may not be the most important factor in the development of depression in these caregivers, it might contribute and help produce a spill-over effect where mothers of children with ASD who have depressotypic attribution styles are at an even greater risk for depression than other mothers of children with ASD who do not share this attribution style.

Depressotypic Attributions and Marital Satisfaction

Based on these findings, it comes as no surprise that researchers have linked couples' relationship satisfaction to attributional styles (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992). In a review article of studies about the impact of relational attributions on marital satisfaction, Bradbury and Fincham (1990) found that spousal attributions influence marital satisfaction. Their review indicated that couples in distressed marriages tend to make attributions that minimize their partner's positive

behaviors (by perceiving the causes as unstable, specific, and external) and enhance their partner's negative behaviors (by perceiving the causes as global, stable, and internal). They reviewed 23 studies in which marital satisfaction was assessed in a sample of spouses and then correlated with attributions made in response to marriage-relevant stimuli. There was variety across studies in the assessment of marital satisfaction, the size and composition of samples, the stimuli used to elicit attributions, and the dependent variables that were also investigated.

McNulty and Karney (2001) found that spouses who make negative marital attributions are less likely to maintain marital quality when faced with negative aspects of the relationship. The subjects were 82 newlywed couples with an average age of 25 for males and 23 for females who had an average combined income of less than \$20,000 per year. They were individually interviewed then given the following assessments to complete every day for seven days. Relationship attributions were measured using the Relationship Attribution Measure (RAM; Fincham & Bradbury, 1992) and global relational satisfaction was measured using a modified version of the Kansas Marital Satisfaction Scale (KMSS; Schumm et al., 1986). Specific evaluations of the relationship were measured using a Likert-like scale ranging from very satisfied to very unsatisfied for rating daily impressions of certain aspects of their partner and the relationship (i.e. their sex life, their partner's physical appearance, partner's social skills, partner's help on household tasks, interactions with their partner, etc.). They found that husbands' and wives' causal or depressotypic attributional styles were correlated with one another (McNulty & Karney, 2001). They found that global positive attributions act as a cognitive buffer to eliminate the effects of specific negative events or experiences of

one's spouse. Additionally, satisfied partners' positive global attributions tended to remain fairly stable throughout the study and were not easily influenced by specific negative experiences. This is thought to help couples stay happier longer because they are less affected by individual negative events. The opposite was also found to be true in that partners with more negative global attributions experienced greater fluctuations in satisfaction based on specific events. This finding indicated that couples with more negative attribution styles might be at greater risk for marital dissatisfaction because their global feelings about the relationship are largely dependent upon specific events which are frequently not positive.

These findings that husbands' and wives' causal or depressotypic attributional styles were correlated with one another and that global positive attributions act as a cognitive buffer to eliminate the effects of specific negative events support Karney and Bradbury's (2000) finding that positive attributions help spouses to maintain their global satisfaction the face of specific negative events. Using growth curve analysis, the authors analyzed 8 waves of longitudinal data from a sample of newlywed couples. The partners were both in their first marriages, with an average age of 25 for males and 24 for females, had been married an average of 12 weeks, and 70% had cohabitated prior to marriage. These data were designed to indicate the trajectory of marital satisfaction over the first four years of marriage as indicated by an intercept of initial satisfaction and a slope of the rate of change in satisfaction over time. Relationship attributions style was studied for its ability to predict the trajectory of marital satisfaction over time. Spouses completed measures of marital satisfaction (MAT; Locke & Wallace, 1959) and attributions (Fincham & Bradbury, 1992). They found that attribution style may not be a trait-like

quality which is internal to the individual and remains stable over time, but instead attributional style seems to change as marital satisfaction changes (Karney & Bradbury, 2000). Attributional style may reflect learning from ongoing experiences in the relationship, not a stable attributional tendency. At the same time, it seems that attributions may play a causal role in current and future relationship satisfaction. They found a significant negative association between attributional changes and changes in marital satisfaction such that satisfaction declines as spouses' attributions become more negative. Additionally, they found that especially maladaptive attributions made early in the marriage can have profound effects on how marital satisfaction changes over time, but initial marital satisfaction does not seem to predict attributional style over time. Based on these findings, it seems that attributions better predict changes in marital satisfaction than marital satisfaction predicts changes in attributions. This finding further indicates the importance of understanding the role of relationship attributions on marital satisfaction.

The previously mentioned findings indicate such a connection between relationship attributions and marital satisfaction that the relationship between these constructs has been called, “possibly the most robust, replicable phenomenon in the study of marriage” (Fincham, 2001 p. 7). Despite the strong indications that attributions are a major part of understanding in couples' marital satisfaction, no research has been conducted on the role of relationship attribution style in the marital satisfaction of parents of children with an ASD.

While no current research on the role of relationship attributional style in determining marital satisfaction levels in parents of children with an ASD exists, Graham

and Conoley (2006) examined the role of attributions in moderating the relationship between life stressors and marital quality. Graham and Conoley studied 58 married couples, 40% were from central Texas, and the other 60% lived nationwide. The sample was mostly Caucasian (93%) and highly educated (98% had at least attended some college). They were married for an average of 16 years and had an average of 1 child. Life stressors were measured using the Family Inventory of Life Events and Changes (FILE; McCubbin, Patterson, & Wilson, 1983). Marital quality was assessed using the Dyadic Adjustment Scale (DAS, Spanier, 1976), and attributions were measured using the RAM (Fincham & Bradbury, 1992) which measures causal, responsibility, and blame attributions. Using a pooled regression method, they found that attributions moderated the relationship between marital quality and accumulated life stressors (Graham & Conoley, 2006). This means that the level of stress experienced by the couple was related to marital quality but this relationship was in part dependent upon the types of marital attributions made by the couple. Higher stress overall was related to lower marital satisfaction but couples who made negative marital attributions experienced lower marital satisfaction when faced with accumulated life stressors. Couples who had positive marital attributions did not experience low levels of marital satisfaction when faced with accumulated life stressors. It seems that negative marital attributions increase vulnerability to life stressors. No research has currently been conducted to determine whether a relationship exists between attributional style and marital satisfaction in parents who are facing life stressor in the form of caring for a child with an ASD. Based on the robust findings linking attribution style and marital satisfaction, and the findings that parents of children with ASD have lower marital satisfaction than parents of

typically developing children, identifying cognitive factors, such as attribution style, might lead to points of intervention in these families.

Spousal Support

Spousal support is a factor thought to help protect mothers of children with an ASD. Leatham and Duck (1990) conceptualize spousal support as including the number or quality of support behaviors in relationships (actual support) as well as the perceived availability of quality support (perceived support). Actual spousal support has been measured by using behavioral observations, while perceived spousal support is primarily measured through self-report. Both types of support have been found to be helpful in relationships as partners who report greater actual and perceived support from their spouses are more satisfied with their marriages (Julien & Markman, 1991). Leatham and Duck (1990), in their review of the literature on spousal support, contend that the perception of spousal support grows from individuals' everyday encounters in marriages, including conversations and shared memories. These shared experiences form the context for feelings of spousal support. The unique rules and rituals in relationships determine how spousal support is interpreted and reacted to.

Julien and Markman (1991) studied 87 couples married for an average of 11 years (SD=11.06). Spouses were given a measure of marital adjustment, the Marital Adjustment Test (MAT; Locke & Wallace, 1959) and a measure of psychological symptoms, the Symptom Checklist 90-R (SCL-90-R; Derogatis, 1977). They were also given Brown's Scale of Stress Inducing Events (Brown, 1978) as a measure of extra-marital stress on which they checked the occurrence of life events and role-related

problems and the associated distress that was ranked on a 6-point scale. Finally, the couples took part in a standardized interview, the Northern California Community Study Interview Schedule (NCCS; McCallister & Fischer, 1978), designed to determine supportive behaviors in the partner's social networks (with whom the respondent socialized within the last month; to whom he or she usually confides in when bothered by personal problems). They found that extra-marital stress and marital distress were positively correlated with greater psychological symptoms for both spouses. Higher exposure to extramarital stress was not found to be associated with higher involvement of spouses or outsiders for support. Higher marital distress was related to higher mobilization of extra-marital support and companionship. Interesting, they found that higher mobilization of outside social support for marital distress was related to higher presence of psychological symptoms. They interpreted this to mean that extra-marital social support can have a negative impact on marital satisfaction if the support is used to exclude the spouse from social interactions. When looking at spousal support and marital adjustment, they found that higher overlap between husbands' and wives' social networks was positively associated with marital adjustment. This finding was mediated by husbands' companionship with outsiders. They also found that higher husband support behaviors were associated with higher marital adjustment in wives. These findings indicate that husbands' support may relate to marital adjustment more than wives' spousal support. Overall, the results support the role of perceived and actual spousal support on marital satisfaction.

Wethington and Kessler (1985) found evidence that perceived spousal support is more closely related to well-being than actual spousal support. Using cross-sectional

data from the Survey Research Center at the University of Michigan, they focused on 1,269 married respondents ages 21-65. Participants were asked about negative life events occurring during the last year which 29% indicated had occurred. They were then assessed for perceived support availability based on their ratings of the statement, “These days I really don’t know who I can count on for help.” which they rated as very true, pretty true, not very true, or not true at all (Wethington & Kessler, 1985). Participants were also asked about received support, which described up to 8 individuals who help them cope as well as types of support received. Psychological distress was measured using a 20-item scale of statements about bodily feelings (Gurien et al., 1960). They found that the stress-buffering effect of spousal support is more strongly linked to the perception that support is available than to the effects of actual supportive behaviors. The authors interpreted this to mean that the belief that one’s networks including marital relationship are ready to mobilize in response to needs is more important than that members of the support network displaying actually supportive behaviors (Gurien et al., 1960).

Cutrona et al. (1990) in a review of the literature found that high perceived spousal support was more helpful to the spouse than support from non-partner friendships. Using observational coding schemas of support-related transactions between married couples and close friends, spouses were found to be more effective than close friends in helping their spouse use emotion-focused coping (Cutrona et al., 1990). Because spouses seem uniquely able to help one another cope, the spousal support given from one partner to another in parents of children with ASD could be essential in providing a protective factor against the stressors these families face.

Length of Marriage and Marital Satisfaction

Length of marriage is defined simply as the number of years a couple has been married. Length of marriage and marital satisfaction has been most frequently studied using cross-sectional and retrospective data. The studies, in general, found a U-shaped pattern for marital satisfaction over the lifespan (Burr, 1970). The U-shaped pattern indicates that marital satisfaction begins at initial high levels which begin dropping, indicating lower satisfaction levels, after the couple is married. Satisfaction levels continue to drop as the first child is born and fall to their lowest levels as the children in the family are in their adolescent life phases. As the children in the family launch out of the home into adult roles, marital satisfaction begins to increase, and continues to rise, indicating higher rates of satisfaction, as the couple ages and moves into retirement.

Burr (1970) studied 116 married couples. Couple diversity was studied from the perspective of the family life cycle which conceptualized couples as falling into certain categories including pre-child, young-children, school-age children, adolescent-children, launching-children, post-parental, and retired. The mean age for husbands was 48, and the mean age for wives was 46. Husbands and wives were interviewed separately and both given lengthy self report assessments (Burr, 1970). Each self report measure contained three items rating satisfaction regarding each of the following domains within the relationship: finances, social activities, tasks, companionship, sex, and children. They found that satisfaction is at its lowest levels, on average, during the school-age-children phase, and that satisfaction with children is also low for couples during the adolescent-children stage. Beginning in the adolescent stage, satisfaction in all other domains is generally higher and continues to be higher through to retirement (Burr, 1970). These

findings have been challenged by more recent longitudinal researchers who have found that marital satisfaction tends to decline in the early stages of marriage, even when no children are present (Belsky, Spanier, & Rovine, 1983). These studies seem to point to a gradual decline in marital satisfaction over the life span, which starts soon after the couple's marriage and continues throughout. Belsky and colleagues (1983) studied 72 couples from their last trimester of pregnancy through the ninth postpartum month for either their first or second child's birth. Each couple participated in an interview, were observed, and completed questionnaires on household division of labor, joint leisure activities, and marital adjustment as measured by the Dyadic Adjustment Scale (Spanier, 1976) beginning during the last trimester of pregnancy and continuing at one, three, and nine months postpartum. They found a small but significant decline at each time of measurement in self-reported marital adjustment across the studied period. Positive interactions, baby-related interactions, and overall marital engagement declined significantly between 1-3 months postpartum. Couples with more than one child experienced lower marital quality than couples having their first child. These findings indicate that marital adjustment declines with the birth of each child into the family. Despite this overall decline, the rankings of marital quality in individuals over time remains relatively unchanged with the birth of a baby into the family. This indicates that while there was a universal decline in satisfaction for couples, spouses ranked as having higher marital quality during their last trimester tended to remain higher on marital quality throughout the subsequent assessments than spouses who ranked lower on marital quality during their last trimester (Belsky et al., 1983).

Findings from Vaillant and Vaillant's (1993) 40-year longitudinal study support the previous findings that marital satisfaction gradually declines over the life span. Using both prospective and retrospective data, Vaillant and Vaillant (1993) studied 268 male college students and their wives from 1943-1989. These men were selected based upon their freshman physical exams which revealed no mental or physical health problems. They were included in the data for this study only if they were considered long-married, which was defined as a first marriage of 25 years or more or a later marriage of 20 years or more. All of the men were Caucasian, 99% were college graduates with a mean peak income of \$90,000 per year. Ninety-five percent of the wives attended college and 71% graduated. Only 18% of the wives maintained a full-time professional or business career. The couples had an average of 3 children. The Grant Study Marital Adjustment Scale (GSMAS; Vaillant, 1978) was used prospectively by husbands in 1954, 1967, 1972, 1983, and 1989. Wives were also given this measure of marital adjustment (solutions to disagreements, stability, sexual adjustment, and considering separation and divorce) in 1967, 1975, and 1987. Retrospective reports of marital satisfaction from ages 20 through 60 (grouped into seven 5-year periods) were measured using a life chart. Husbands and wives ranked each 5 year period from their marriage on a 1-5 Likert type scale where scores ranged from very enjoyable (1) to divorce considered (5). One hundred and thirteen husbands and 71 wives, with a total of 52 matched couples completed the life chart.

Results from the prospective data indicate no evidence for a u-shaped curve of marital satisfaction (Vaillant & Vaillant, 1993). They found that mean marital adjustment scores gradually decline over time for both husbands and wives. The mean

marital adjustment scores appeared relatively high over time because some of the marriages with poor scores had terminated in divorce. From 16-30 years married, marital adjustment in husbands and wives is not significantly different and remains stable for men from 31-45 years married. In contrast, the mean for wives' marital adjustment is significantly lower than the husbands' mean during the 31-45 years married period. When examining stability of marriage and consideration of divorce they found no significant differences between husbands and wives or with marital duration. Based on this prospective data, they found no significant differences between husbands and wives in marital satisfaction. Next, they examined the retrospective data from the marital life chart and found a curvilinear pattern for marital satisfaction where marital satisfaction was slightly lower at 6-10 years married and continues to decline in wives with 11-15 and 16-20 years married. Marital satisfaction is higher at 21-25 years married and continues to rise at 26-30 and 31-35 years married for both husbands and wives. They found a small but significant lower overall marital enjoyment for wives than husbands. This study found that the prospective data on marital satisfaction indicates gradual declines over years married, where as the retrospective data on marital satisfaction shows the more common curvilinear pattern of marital satisfaction commonly found in cross-sectional and other retrospective studies.

So far, the research on marital satisfaction and length of marriage has focused on the trajectory for marital satisfaction over the length of marriage. While researchers may disagree as to the trajectory for marital satisfaction after children launch, researchers from both the U-shaped curve school as well as the gradual decline school of thought seem to agree that marital satisfaction generally reaches a new low as the first child is

born. It seems that on average marital satisfaction tends to drop as a result of the demands of caring for and raising a developmentally normal child. So far, no studies have been conducted looking at the length of marriage and its impact on couple marital satisfaction in couples who have a child with an ASD. While these families are all around the same place developmentally from a life course perspective (raising children or adolescents), the impact of varying years married is unknown. It seems plausible that a couple raising a child with an ASD who has been married for 2 years might have a very different experience than a couple who has been married for 20 years and is also raising a child with an ASD.

Length of Marriage and Depressotypic Attributions

No research currently exists about the links between depressotypic attributions and the length of marriage. Since findings suggest that a depressotypic attributional style is negatively related with marital satisfaction and that marital satisfaction tends to decline over years married, one would hypothesize that the combination of a depressotypic attributional style and increasing years married would be additionally negatively related to marital satisfaction. Additionally, the impact of a spouse's depressotypic attributional style may increase over years married when satisfaction begins to decrease, leading to even lower marital satisfaction. If we combine the findings that marital satisfaction tends to decline over time and the negative impact of depressotypic attributions with the additional stress that mothers of children with ASD often face, then one would think that this would even more negatively impact marital satisfaction.

Length of Marriage and Spousal Support

No research currently exists about the relationship between the length of marriage and spousal support, especially for mothers of children with ASD. Based on what we know about marital satisfaction declining over married life and spousal support being linked to marital satisfaction, we could predict that spousal support would also decline over years married. The additional stress of caring for a child with an ASD might increase the need for spousal support within the marital relationship. Additionally, as the number of years married increases, spousal support is thought to decrease along with marital satisfaction.

Research Questions

In the context of having a child with Autism Spectrum Disorders (Figure 1 & Figure 2):

1. Does wives' attribution style (depressotypic or non-depressotypic) affect their perception of the availability of spousal support that ultimately affects their marital satisfaction? (Figure 1, paths a and b)
2. Does a direct relationship between attribution style and marital satisfaction exist for wives? (Figure 1, path c)
3. Does perceived availability of spousal support mediate the affect of depressotypic attributions on marital satisfaction? (Figure 1)
4. Does length of marriage moderate all three relationships (Figure 2): (a) the direct relationship between depressotypic attribution style and marital satisfaction (path a), (b) the relationship between depressotypic attribution style and perceived availability of spousal support affecting marital satisfaction (path b), and (c) the relationship between perceived availability of spousal support and marital satisfaction (path c)?

Figure 1. Proposed paths and mediation for depressotypic attribution style, perceived availability of spousal support, and marital satisfaction.

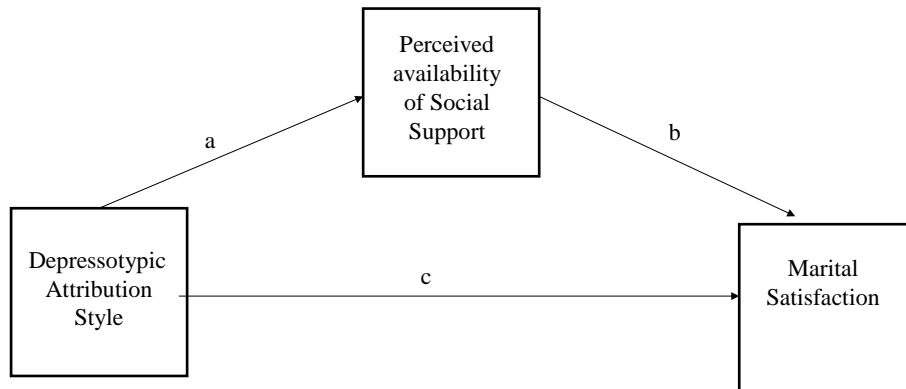
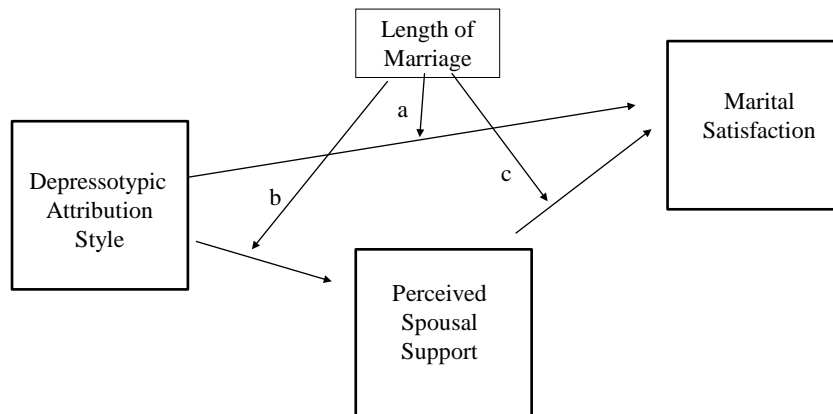


Figure 2. Proposed moderation paths for depressotypic attributions, spousal support, and marital satisfaction by length of marriage.



Methods

Participants

The sample used for this study is a secondary data set composed of 110 married women from the United States collected by Jennifer Lynne Koenig Nelson from 2003-2004. She examined negative attribution, spousal support, and marital satisfaction in parents of children with ASD within the context of Hill's (1949) ABC-X Family Stress Model to fulfill part of the requirements for her Doctor of Philosophy Degree (Koenig-Nelson, 2004).

Participants were selected for inclusion if they were currently married and had at least one child who had been diagnosed with an ASD. Participants were recruited through local autism support chapters, state autism support groups, and internet support groups (Appendix A). Both hard copy surveys and website survey links were distributed along with information on the purpose of the study (Appendix B). Participants completed either a pencil-and-paper format or an online version of a set of self report measures including demographic information (Appendix C), the Relationship Attribution Measure (RAM; Fincham & Bradbury, 1992; Appendix D), a resources and support questionnaire (Foa & Foa, 1974; Appendix E), and the Kansas Marital Satisfaction Scale (KMSS; Schumm, Milliken, Poresky, Bollman, & Jurich, 1983; Appendix F). Twenty-one pencil-and-paper surveys were returned which was a 16% return rate. One hundred and four surveys were completed online but 16 of the surveys were incomplete or did not meet study requirements. One hundred and ten participants were included in the analyses.

Participants filled out demographic information including their state of residence, child's age, child's diagnosis (Table 1), mother's highest level of education (Table 2), family's yearly income (Table 3), presence of child challenging and autistic behaviors (Table 4), and the types of support the mothers receive on a regular basis from sources outside their marriage (Table 5).

In looking at participants' demographic information on state of residence, it appears that the largest number of participants were from the Northeastern ($N=52$ out of 110) and Southern states ($N=26$). Fewer participants were from Southwestern ($N=18$) and Northwestern states ($N=12$). No participants lived outside the continental United States.

Participants' children ranged in age from 2-24 years old with a mean of 9 years ($SD=4.30$). The participants' children were grouped by diagnosis into four categories: autism spectrum disorder, Asperger's syndrome, high functioning autism, and autism (Table 1). The greatest majority of participants, accounting for 45% of children, indicated that their child had been diagnosed with autism ($N=51$). The second most common diagnosis was autism spectrum disorder ($N=24$) representing 23% of participants' children's diagnoses. Asperger's syndrome was also quite common, ($N=22$) representing 20% of participants' children's diagnoses. Overall, the sample represented a number of spectrum diagnoses.

Table 1

Child's diagnosis (N = 110).

Diagnosis Reported	Frequency	Percentage
Autism Spectrum Disorder	24	23
Asperger's Syndrome	22	20
High-Functioning Autism	10	9
Autism	51	45
Missing	3	3
Total	107	100

When indicating their highest level of education, the 88% ($N = 97$) of the participants indicated that they had completed at least some college (Table 2). Sixty-one percent were college graduates or had attended graduate or professional school. This indicates that overall the participants in the sample were highly educated.

Table 2

Highest Level of Education of Participants (N = 110).

Education Level	Frequency	Percentage
Some High School	1	1
High School Graduate or	9	8
GED	0	0
Some College	30	27
College Graduate	42	38
Graduate School or Post- College Professional Training	25	23
Missing	3	3
Total	110	100

When participants were asked about their family’s yearly income range, 68% ($N = 75$) indicated that their family had an income of over \$50,000 a year (Table 3). The second most frequent income range was \$40,000 to \$49,999, which 12% ($N = 13$) of participants indicated best fit their family. Overall, participants had fairly large household incomes.

Table 3

Income range for Participants (N = 110).

Income Range	Frequency	Percentage
Under \$5000	4	4
\$5000 to \$9999	0	0
\$10,000 to \$19,999	2	2
\$20,000 to \$29,999	7	6
\$30,000 to \$39,999	9	8
\$40,000 to \$49,999	13	12
\$50,000 and over	75	68
Total	110	100

When mothers were asked about their children's challenging behaviors, temper tantrums were the most frequently reported behavior, which was present "Always" or "Sometimes" in 73% ($N = 78$) of the children (Table 4). Trouble sleeping was the second most frequently reported child challenging behavior, occurring "Always" or "Sometimes" in 67% ($N = 71$) of the children. Finally, hitting others was somewhat less frequent, occurring "Always" or "Sometimes" in 42% ($N = 46$) of the children. Overall,

participants' children displayed a not especially high or low frequency of challenging behaviors.

When mothers were asked about their children's autistic behaviors, 83% ($N=93$) indicated that their child "Always" or "Sometimes" displayed symptoms of sensory sensitivity, while 80% ($N = 85$) indicated that their child "Always" or "Sometimes" participated in self stimulation behaviors (Table 4). Fewer mothers (57%, $N = 61$) indicated that their children displayed ecolalia on an "Always" or "Sometimes" basis. Overall, the children were somewhere in the middle on frequency of autistic behaviors.

Table 4

Frequency of Child Behaviors (N = 110).

	Always	Sometimes	Rarely	Never
	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>
	(%)	(%)	(%)	(%)
Presence of challenging behavior:				
Temper Tantrums	14	64	25	4
	(13)	(60)	(23)	(4)
Trouble Sleeping	21	50	21	15
	(20)	(47)	(20)	(13)
Hitting Others	5	41	41	20
	(5)	(38)	(38)	(19)
Presence of autistic behavior:				
Self-stimulation	32	53	16	6
	(30)	(50)	(15)	(5)
Echolalia	20	41	19	27
	(19)	(38)	(18)	(25)
Sensory Sensitivity	40	53	13	1
	(37)	(50)	(12)	(1)

Seventy-five ($N = 80$) of participants indicated that they received social support from professionals including teachers and therapists (Table 5). Other popular sources of support included school/day care (54%, $N = 58$), parents/spouses' parents (55%, $N = 59$),

relatives (37%, $N = 40$), and friends (49%, $N = 52$). Overall, the mothers were fairly well supported.

Table 5

Types of Support Participants Received on a Regular Basis ($N = 110$).

Types of Support	Frequency	Percentage
Parents/Spouse's Parents	59	55
Relatives	40	37
Friends	52	49
Other Parents of Children with Disabilities	53	50
Respite Care	23	22
Professionals (Teachers, Therapists, etc.)	80	75
School/Day-Care Center	58	54
Church	20	18
Other	14	13
Missing	3	3

Measures

Demographic Questionnaire

The questionnaire included information on marital status, length of marriage, level of education, yearly income range, types of support the wife receives outside of marriage, number of children in the home, and whether participants are the primary caregiver of their child with an ASD. Additionally, the women reported information about the child's diagnosis, other diagnoses, age at diagnosis, level of functioning, typically autistic behaviors, challenging behaviors, living arrangement, and services s/he receives (See Appendix C). Mother's education, family income, outside social support, the child's challenging behaviors (temper tantrums, trouble sleeping, hitting others), and the child's autistic behaviors (ecolalia, self stimulation, sensory sensitivity) were all controlled for in the analyses.

Depressotypic Attribution Style

Attributional style was measured with the Relationship Attribution Measure (RAM; Fincham & Bradbury, 1992). This measure is designed to measure attributions related specifically to relationships (Fincham & Bradbury, 1992). For this scale, wives are asked to rate, on a 6-point scale, the extent to which they agreed or disagreed with attributional statements made about each of the eight negative partner behaviors (e.g., "Your partner begins to spend less time with you"). Jennifer Lynne Koenig Nelson added an additional child blame item to each of these negative partner behaviors. Fincham and Bradbury (1992) established the reliability of the scale, reporting alpha's from .75 to .90. The RAM is broken down into 3 subscales: causal attributions,

responsibility attributions, and blame attributions. The causal attribution subscale includes 3 items for each of the 8 negative partner behaviors measuring whether the wives interpret their husband's negative behaviors as internal (e.g., "My spouse's behavior was due to something about him), stable (e.g., "The reason my spouse criticized me is not likely to change"), and/or global (e.g., "The reason my spouse criticized me is something that affects other areas of our marriage"). The more strongly the wives agree with these statements, the higher their scores will be, and the more likely they are to be categorized as having a depressotypic attributional style. While no critical scores have been established, previous studies found that childfree wives and mothers of typically developing children with similar socio-economic status tend to on average score about a 3 on the scale. Graham and Conoley (2006) found a mean of 3.42 (SD = .73) while McNulty and Karney (2001) found a mean of 3.31 (SD = 1.03) in the wives and mothers of typically developing children they studied.

Spousal Support Questionnaire

Perceived spousal support was measured using an 18-item measure of spousal support (Goodman, 1999). Respondents were asked to rate their spouse's contribution to the marriage over the last 6 months. A 7-point Likert scale was used for each item with scores ranging from extremely positive to extremely negative. Each group of items address a category of resource exchange developed by Foa and Foa (1974): love and intimacy (9 items), respect (5 items), and service (4 items). The love and intimacy category included items on commitment, sexual involvement, understanding, expressed affection, listening to feelings, open communication, comfort provided, respect for independence, and companionship. The respect category included items on acceptance,

respect, confidence in abilities, valuing of opinion, and expressing appreciation. Service items included care when sick, extra tasks, unexpected errands, and contributions to household tasks.

Kansas Marital Satisfaction Scale

The Kansas Marital Satisfaction Scale (KMSS; Schumm, Milliken, Poresky, Bollman, & Jurich, 1983) was used to measure marital satisfaction. The KMSS is a three-item questionnaire that asks participants, “How satisfied are you with... your marriage? Your relationship with your spouse? With your partner as a spouse (Schumm et al., 1983)?” Each question is scored on a 7-point Likert scale ranging from extremely dissatisfied to extremely satisfied. Participants’ total scores could range from 3-21. The criterion score for the KMSS is 17, where individuals scoring 17 and over have higher marital satisfaction and those scoring 17 or lower report less satisfaction with their marriages (Crane, Middleton, & Bean, 2000). This criterion score is based on the scores of both husbands and wives. The KMSS has a coefficient alpha of .96, and the test-retest reliability has been reported at .71 (Michell et al., 1983), and the score correlates with both the Dyadic Adjustment Scale and Quality Marital Index (Schumm et al., 1985; Schumm et al., 1986).

Analysis

In order to predict the probable effects of depressotypic attributions on marital satisfaction and the possibility that the effects are mediated by spousal support as or all effects are moderated by length of marriage in mothers of children with autism spectrum disorders, path analysis was the chosen method of analysis. This form of analysis will

allow the opportunity to test the effects of each independent variable while controlling for the effects of all of the other independent variables in each model. In addition, mediation and moderation hypotheses will be tested within the framework of path analysis.

Results

Univariate Analysis

Table 7 provides definitions of the predictor variables, control variables, and the outcome variable. The univariate statistics were analyzed using SAS, and the control variables are displayed in Table 7. The univariate statistics for the predictor variables and outcome variable are displayed in Table 8. All predictor variables and the outcome variable were normally distributed in their associated histograms and schematic plots, so no variable transformations were conducted.

Table 6

Description of variables.

Variable	Description	Values
Kansas (composite)	Respondent's level of marital satisfaction in present relationship	Low score=lower marital satisfaction, High score=higher marital satisfaction
SP Sup (composite)	Respondent's perceived spousal support in the domains of love and intimacy, respect, and service	Low score=lower perceived spousal support, high score=higher perceived spousal support
Dep Att (composite)	Respondent's tendency to make depressotypic attributions regarding their spouse's behavior	Low score=lower depressotypic attribution style, high score=higher depressotypic attribution style

LOCUS (composite)	Subscale of Dep Att: Respondent's tendency to see their partner's negative behavior as resulting from a character trait	Low score=lower tendency to see negative partner behavior as resulting from a character trait, high score=tendency to see negative partner behavior as resulting from a character trait
STABLE (composite)	Subscale of Dep Att: Respondent's tendency to see their partner's negative behavior as stable and unlikely to change	Low score= view negative partner behavior likely to change, high score= more likely to see negative partner behavior as stable
GLOBAL (composite)	Subscale of Dep Att: Respondent's tendency to see their partner's negative behavior as impacting multiple areas of their life	Low score=lower tendency to see negative partner behavior as global, high score= see negative partner behavior specific to the current situation
YRSMAR (non-composited)	Years married to current spouse	Score indicates years married (ex: 3= 3 years married)
O Sup (composite)	Respondent's perceived support from outside the spousal relationship received on a regular basis from parents/spouse's parents, relatives, friends, other parents of children with disabilities, respite care, professionals (therapists, teachers, etc.), school/day-care center, and church	Score indicates the number of type of individuals through whom support is sought outside the spousal relationship (ex: 3 could indicate that the respondent receives support from professionals, relatives, and friends on a regular basis)
Aut Beh (composite)	Child's frequency of typically autistic behaviors including self-stimulation, echolalia, and sensory sensitivity	Low score=lower frequency of typically autistic behaviors, High Score=higher frequency of typically autistic behaviors

Chal Beh (composite)	Child's frequency of challenging behaviors including temper tantrums, trouble sleeping, and hitting others	Low score=lower frequency of challenging behaviors, High Score=higher frequency of typically challenging behaviors
SchComp	Respondent's highest level of schooling completed	1= some high school 2= high school graduate or GED 3= some college 4= college graduate 5= graduate school or post-college professional training
Income	Respondent's yearly household income range	1= under \$5000 2= \$5000 to \$9999 3=\$10,000 to \$19,999 4=\$20,000 to \$29,999 5=\$30,000 to \$39,999 6= \$40,000 to \$49,999 7=\$50,000 and over

I conducted a principal component analysis (PCA) to determine if just one overall composite could be used to summarize the information in each scale. The results are displayed in Table 7 for the control variables and in Table 8 for the predictor variables and outcome variables. For each scale, only 1 eigenvalue was greater than 1 indicating that a single construct existed. I estimated Cronbach's alpha for the scales that were to be created, and they were all relatively high, with the noted exceptions of outside support (O Sup; $\alpha = 0.45$), child autistic behaviors (Aut Beh; $\alpha = 0.45$), and child challenging behaviors (Chal Beh; $\alpha = 0.38$). The alphas for outside support, child autistic behaviors, and child challenging behaviors were all low, limiting the validity of these measures.

Next, I created an average scale score for each measure by summing the items from each scale, then dividing by the total number of items. The univariate statistics for these control variables are displayed in Table 7. The univariate statistics for the control variables indicate that on average, the women in the sample received social support from 4 sources ($M = 0.41$), indicating that they were fairly well supported outside of their marriages. Additionally, mothers on average ranked the presence of autistic behaviors (self stimulation, echolalia, and sensory sensitivity) as occurring “sometimes” ($M = 2.91$), indicating that the children with ASD were on average, somewhat symptomatic. Similarly, the mothers on average ranked their children’s challenging behaviors (temper tantrums, trouble sleeping, hitting others) as occurring between “rarely” and “sometimes” ($M = 2.61$), indicating that these children on average sometimes displayed challenging behaviors. The univariate statistics indicate that on average the moms were well educated; they had completed at least some college and many were college graduates ($M = 3.75$). Finally, univariate statistics indicate that on average the families had a fairly high household income ($M = 6.24$ out of 7) which ranged on average from \$40,000 to \$49,999 per year.

Table 7

Univariate statistics for control variables.

	O Sup	Aut Beh	Chal Beh	Sch Comp	Income
N	110	107	109	109	110
Mean	0.41	2.91	2.61	3.75	6.24
SD	0.22	0.61	0.55	0.93	1.43
Range	0-10	1.67-4	1.00-3.67	1-5	1-7
Eigenvalue	2.15	1.44	1.42	--	--
Alpha	0.45	0.45	0.38	--	--

The univariate statistics for the outcome variable, marital satisfaction (Kansas), indicate that on average, the women in the sample were somewhat satisfied in their marriages; a mean of nearly 5 out of a total of a 7 point scale (Table 8). This score falls slightly below the criterion score established by Crane et al. (2000) for husbands and wives, indicating that the women in the sample have somewhat lower marital satisfaction than a sample of both childfree couples and parents of typically developing children. In addition, most wives in the present sample were highly satisfied with their spouses (M = 4.88 out of 7). On average, the women in the sample believed that their spouses' support (SP Sup) was mixed or slightly positive (M=4.78 out of 7) in the domains of love and intimacy, respect, and informational assistance. I was unable to find any samples of child free couples or mothers of typically developing children to compare these findings with. The women scored a mean of 4.02 out of 7 for depressotypic attributions (Dep Att) indicating that on average the women did not have either strong depressotypic or non-

depressotypic attribution styles. These women on average were slightly more likely to have a depressotypic attribution when compared to childfree wives and mothers of typically developing children ($M = 3.42$; Graham & Conoley, 2006). The women were on average married (YRSMAR) for a little less than 12 ½ years ($M = 12.39$ years), but there was considerable variability in length of time married which ranged from 3 to 32 years with a standard deviation of 5.42.

Table 8

Univariate statistics for predictor and outcome variables.

	Kansas	SP Sup	Dep ATT	LOCUS	STABL E	GLOBA L	YRS MAR
N	110	110	108	108	108	108	110
Mean	4.88	4.78	4.02	4.27	4.08	3.70	12.39
SD	1.74	1.24	1.11	1.07	1.38	1.21	5.42
Range	1-7	1.32-6.96	1.25-7.00	1.50-7.00	1-7	1.25-7.00	3-32
Eigenvalue	2.83	12.65	11.29	3.82	4.62	5.23	--
Alpha	0.97	0.96	0.95	0.84	0.89	0.92	--

Bivariate Analysis

A bivariate analysis was conducted to determine the relationships between variables. Pearson correlations were calculated between variables and are displayed in Table 9. While correlations cannot infer causality, they are useful in indicating the relationships between variables (Light, Singer, & Willett, 1990). Two participants were excluded from bivariate analysis due to missing data, bringing the sample size to ($N =$

108). Twenty-five significant relationships were found between the study variables (Table 9). The strongest relationships include those between marital satisfaction (Kansas) and perceived spousal support (SP Sup; $r = .90, p < .001$), depressotypic attributions (Dep ATT) and perceived spousal support (SP Sup; $r = -.73, p < .001$), and marital satisfaction (Kansas) and depressotypic attributions (Dep ATT; $r = -.65, p < .001$). It was expected that marital satisfaction and perceived spousal support would be highly positively correlated as past research has suggested that these two variables are highly related (Julien & Markman, 1991; Wethington & Kessler, 1985).

The subscales for the depressotypic attribution measure (Dep ATT) were highly positively correlated with one another: LOCUS and STABLE ($r = .73, p < .001$), LOCUS and GLOBAL ($r = .68, p < .001$), STABLE and GLOBAL ($r = .77, p < .001$). All three subscales of the depressotypic attribution measure (Dep ATT) were significantly negatively correlated with marital satisfaction (Kansas) including Kansas and LOCUS ($r = -.45, p < .001$), Kansas and STABLE ($r = -.64, p < .001$), and Kansas and GLOBAL ($r = -.65, p < .001$). It was expected that depressotypic attributions would be highly negatively correlated with marital satisfaction in mothers of children with ASD given that previous research has demonstrated that these variables are related in parents of typically developing children (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992; McNulty & Karney, 2001). Length of marriage (YRSMAR) was only significantly correlated with the depressotypic attribution style subscale of stability (STABLE, $r = .16, p < .10$) indicating that women married longer had slightly elevated depressotypic attributions concerning the stability of a spouses' negative behavior.

The control variable, outside support (O Sup) was significantly correlated with marital satisfaction (Kansas, $r = .30$, $p < .01$), spousal support (SP Sup, $r = .32$, $p < .001$), as well as depressotypic attribution style (Dep ATT, $r = -.23$, $p < .05$) and its subscales (LOCUS, $r = -.17$, $p < .10$; STABLE, $r = -.23$, $p < .05$; GLOBAL $r = -.22$, $p < .05$).

A second control variable, child autistic behavior (Aut Beh) was significantly negatively correlated with marital satisfaction (Kansas, $r = -.20$, $p < .05$), spousal support (SP Sup, $r = -.16$, $p < .10$), and significantly positively correlated with the globality subscale (GLOBAL, $r = .16$, $p < .10$) of the depressotypic attribution style measure. Child challenging behavior (Chal Beh), a third control variable, was significantly negatively correlated only with marital satisfaction (Kansas, $r = -.18$, $p < .10$). Interestingly, the final two control variables, mother's education (Sch Comp) and family income (Income) were not significantly correlated with any study variables.

These preliminary correlations suggest that marital satisfaction will be highly positively related to perceived spousal support and highly negatively related to depressotypic attributions and that depressotypic attributions will be negatively related to perceived spousal support. Length of marriage may be slightly related to depressotypic attribution styles. When considering the control variables, these correlations suggest that outside support will be positively related to marital satisfaction and spousal support and negatively related to a depressotypic attribution style. Child autistic behaviors will be negatively related to marital satisfaction and spousal support. Child challenging behaviors might be slightly negatively related to marital satisfaction. These hypotheses will be tested through fitting path analyses to the proposed models.

Table 9
Pearson correlation coefficients: matrix for variables (N=108).

	1	2	3	4	5	6	7	8	9	10	11	12
1. Kansas	--											
2. SP Sup	0.90***	--										
3. Dep Att	-0.65***	-0.73***	--									
4. LOCUS	-0.45***	-0.52***	0.87***	--								
5. STABLE	-0.64***	-0.72***	0.93***	0.73***	--							
6. GLOBAL	-0.65***	-0.72***	0.91***	0.68***	0.77***	--						
7. YRSMAR	-0.02	0.05	-0.12	-0.12	0.16~	-0.03	--					
8. O Sup	0.30**	0.32***	-0.23*	-0.17~	-0.23*	-0.22*	-0.03	--				
9. Aut Beh	-0.20*	-0.16~	0.16	0.13	0.14	0.16~	0.01	0.05	--			
10. Chal Beh	-0.18~	-0.16	0.00	0.00	0.00	0.00	-0.15	-0.05	0.31***	--		
11. Sch Comp	0.04	0.07	0.05	0.07	0.05	0.01	0.02	0.13	-0.12	-0.09	--	
12. Income	0.07	0.10	0.03	0.09	-0.03	0.03	0.05	0.13	0.12	0.04	0.13	--

~ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Multivariate Analyses

Using Mplus software, a series of path models was fit to address the research questions of this study. In the model that I used to address my first research question (marital satisfaction regressed on perceived spousal support, and spousal support regressed on depressotypic attributions), I first individually regressed depressotypic attribution style on each of my control variables: family income, level of education completed, outside social support received, and severity of child challenging and autistic behavior. For each of these variables, I then fit a second model constraining the path from the control variable to depressotypic attribution style to zero. Their importance to the first and subsequent models was determined by conducting the $\Delta\chi^2$ test.

When depressotypic attributions were regressed on outside social support, the $\Delta\chi^2$ test ($\Delta\chi^2 = 6.07$, Crit $\chi^2 = 5.99$, $\alpha = .05$) indicated it was significant. Since outside social support was significant, it was retained in all of the subsequent models. Next, depressotypic attributions were regressed on family income, and the $\Delta\chi^2$ test ($\Delta\chi^2 = 0.05$, Crit $\chi^2 = 3.84$, $\alpha = .05$) indicated the regression was not significant; consequently, family income was not retained in the later models. Depressotypic attributions were then regressed on mother's education, and the $\Delta\chi^2$ test ($\Delta\chi^2 = 0.16$, Crit $\chi^2 = 3.84$, $\alpha = .05$) indicated it was not significant. Since mother's education was not significant, it was not retained in the later models. When depressotypic attributions were regressed on child challenging behavior, the $\Delta\chi^2$ test ($\Delta\chi^2 = 0.01$, Crit $\chi^2 = 3.84$, $\alpha = .05$) indicated it was not significant. Because child challenging behavior was not significant, it was not retained in the later models. Finally, depressotypic attributions were regressed on child's autistic behavior; the $\Delta\chi^2$ test ($\Delta\chi^2 = 6.36$, Crit $\chi^2 = 5.99$, $\alpha = .05$) indicated it was significant.

Since child autistic behavior was significant, it was retained in the later models. In summary, only outside social support and child autistic behavior were significant in the model and retained in the subsequent models. In the model that addresses my second research question, marital satisfaction was regressed on depressotypic attributions. In the mediation model that addresses my third research question, marital satisfaction was first regressed on depressotypic attributions. Next, marital satisfaction was regressed on spousal support and depressotypic attributions to determine if the path between marital satisfaction and depressotypic attributions was significant when the mediator was in the model. The elimination of this path would indicate that spousal support mediates the effect of depressotypic attributions on marital satisfaction. Finally, in the moderation model that addressed my fourth research question, first, a multiplicative interaction term was added to the regression equation as marital satisfaction was regressed on spousal support, length of marriage, and the interaction term (spousal support*length of marriage). Spousal support was then regressed on depressotypic attributions. Then, in a second moderation model for the same research question, marital satisfaction was regressed on spousal support and depressotypic attributions, then spousal support was regressed on depressotypic attribution style, length of marriage and the interaction term (depressotypic*length of marriage) to detect possible moderation of the paths. Before examining the results for each model, I examined the fit indices including Chi square (χ^2) with its associated degrees of freedom (df) and *p*-value (see Table 10).

Table 10

Fit statistics for models of regressions fit in MPlus organized by research question (RQ) number. (N=110).

Model	N	χ^2	Df (p-value)
Preliminary Analyses of control Variables:			
Depressotypic attributions on family income	110	3.22	3 (p=.36)
Depressotypic attributions on mother's education	110	2.80	3 (p=.42)
Depressotypic attributions on outside social support	110	5.93	3 (p=.12)
Depressotypic attributions on child challenging behaviors	110	5.95	3 (p=.11)
Depressotypic attributions on child autistic behaviors	110	2.60	3 (p=.46)
RQ1: Marital satisfaction on spousal support, spousal support on depressotypic attributions	110	8.96	5 (p=.11)
RQ2: Marital satisfaction on depressotypic attributions	110	7.19	2 (p=.03)
RQ3:Mediation: Marital satisfaction on spousal support, spousal support on depressotypic attributions; Marital satisfaction on depressotypic attributions, check for spousal support mediation	110	8.84	4 (p=.07)
RQ4a: Moderation: Marital satisfaction regressed on spousal support, length of marriage, and interaction term (spousal support*length of marriage); spousal support regressed on depressotypic attributions	110	207.39	8 (p=.00)

RQ4b: Moderation: marital satisfaction regressed on spousal support and depressotypic attributions, spousal support regressed on depressotypic attribution style, length of marriage and the interaction term (depressotypic*length of marriage)	110	191.41	8 ($p=.00$)
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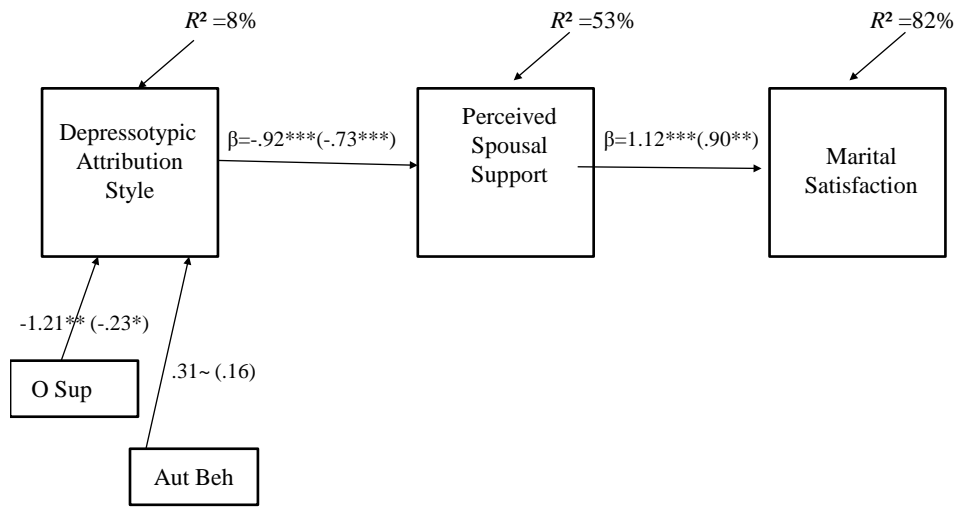
Research Question 1: In the context of having a child with ASD: Does wives' attribution style (depressotypic or non-depressotypic) affect their perception of the availability of spousal support that ultimately affects their marital satisfaction?

In the model that addressed my first research question, marital satisfaction was regressed on perceived spousal support, and spousal support was regressed on depressotypic attributions (See Figure 3). Depressotypic attributions were regressed on outside social support and child autistic behaviors. Outside support was significantly negatively related to depressotypic attributions ($\beta = -1.21, p < .01$) indicating that on average, mothers with higher depressotypic attribution styles reported fewer sources of outside support and vice versa. The child's typically autistic behaviors were significantly positively related to maternal depressotypic attribution style ($\beta = .31, p < .10$), indicating that mothers with higher depressotypic attribution styles also reported greater frequency of their child's autistic behaviors (sensory sensitivity, self stimulation, and ecolalia) and vice-versa. These findings indicate that for every 1 point higher score on depressotypic attributions, there is a negative 1.21 difference in spousal support and a positive .31 increase in child autistic behaviors, when controlling for all other variables in the model. Together, child autistic behaviors and outside support account for 8% of the variance in the model, controlling for everything else $R^2 = .083$). Outside spousal support and child's autistic behaviors were retained in all future models.

The results indicate that marital satisfaction has a significant positive relationship with spousal support ($\beta = 1.12, p < .001$) and that spousal support has a significant negative relationship with depressotypic attributions ($\beta = -.92, p < .001$). These findings indicate that for every 1 point higher score on spousal support, there is a positive 1.12

difference in marital satisfaction and that for every one point higher score on depressotypic attributions, there is a negative .92 difference in spousal support, when controlling for all other variables in the model. Therefore, at higher level of spousal support there were higher levels of marital satisfaction and vice-versa. Additionally, at higher levels of depressotypic attributions, there were lower levels of spousal support and vice versa. Overall, spousal support explains 82% of the variance in marital satisfaction ($R^2 = .819$) and depressotypic attributions explain 53% of the variance in spousal support ($R^2 = .529$).

Figure 3: Path model for depressotypic attribution style, perceived availability of spousal support, and marital satisfaction (standardized coefficients in parentheses).

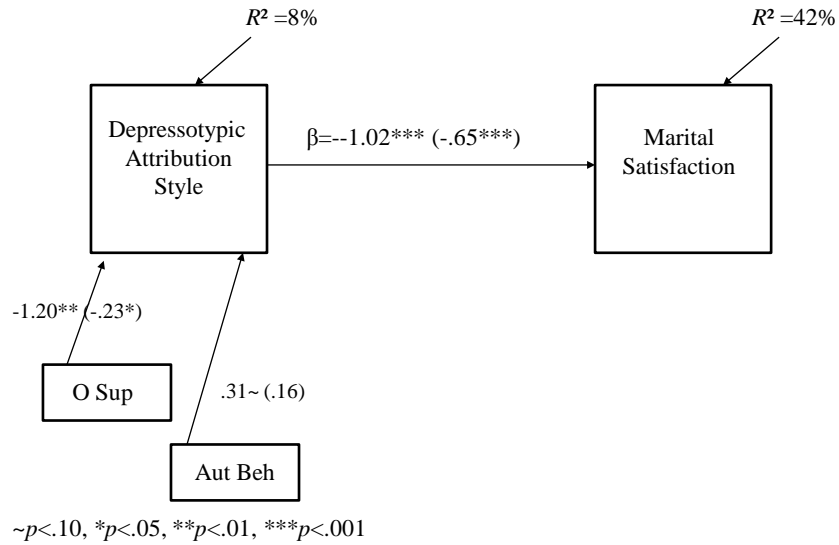


$\sim p < .10$, $*p < .05$, $**p < .01$, $***p < .001$

Research Question 2: Does a direct relationship between attribution style and marital satisfaction exist for wives?

In model 2, marital satisfaction was regressed on depressotypic attribution style (see Figure 4). The results indicate that marital satisfaction has a significant negative relationship with depressotypic attribution style ($\beta = -1.02, p < .001$). These findings indicate that for every 1 point higher score on depressotypic attribution style, there is a negative 1.02 difference in marital satisfaction when controlling for everything else in the model. This finding indicates that at high levels of depressotypic attribution style there are lower levels of marital satisfaction and vice versa. Overall, depressotypic attribution style explains 42% ($R^2 = .42$) of the variance in marital satisfaction.

Figure 4: Path model for direct path between depressotypic attribution style and marital satisfaction (standardized coefficients in parentheses).

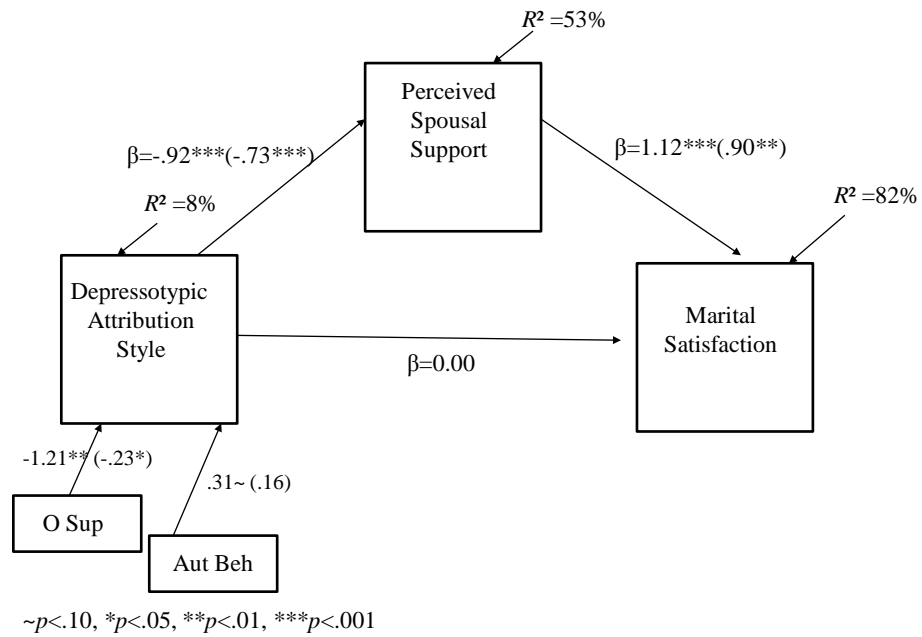


Research Question 3: Does perceived availability of spousal support mediate the affect of depressotypic attributions on marital satisfaction?

The models for my first two research questions found statistically significant paths among depressotypic attributions, spousal support, and marital satisfaction along with a direct path between depressotypic attributions and marital satisfaction. Model 3 tests for the presence of mediation by spousal support of the path between depressotypic attributions and marital satisfaction. Marital satisfaction was regressed on spousal support and spousal support was regressed on depressotypic attributions. Then, marital satisfaction was regressed on depressotypic attributions. To test if mediation existed, the path from depressotypic attributions to marital satisfaction was set to zero (see Figure 5). The $\Delta\chi^2$ test ($\Delta\chi^2 = .13$, Crit $\chi^2 = 3.84$, $\alpha = .05$) indicates that mediation is present. The results indicate that when spousal support is added to the model, the effects of depressotypic attributions on marital satisfaction are reduced to zero. The slopes and associated R^2 are identical to those in the model that answered the first research question indicating that marital satisfaction has a significant positive relationship with spousal support ($\beta = 1.12$, $p < .001$) and that spousal support has a significant negative relationship with depressotypic attributions ($\beta = -.92$, $p < .001$). These findings indicate that for every 1 point higher score on spousal support, there is a positive 1.12 difference in marital satisfaction and that for every one point higher score on depressotypic attributions, there is a negative .92 difference in spousal support, when controlling for all other variables in the model. Therefore, at higher level of spousal support there were higher levels of marital satisfaction and vice-versa. Additionally, at higher levels of depressotypic attributions, there were lower levels of spousal support and vice versa.

Overall, spousal support explains 82% of the variance in marital satisfaction ($R^2 = .819$) and depressotypic attributions explain 53% of the variance in spousal support ($R^2 = .529$).

Figure 5: Path model for mediation of relationship between depressotypic attribution style and marital satisfaction by spousal support (standardized coefficients in parentheses).



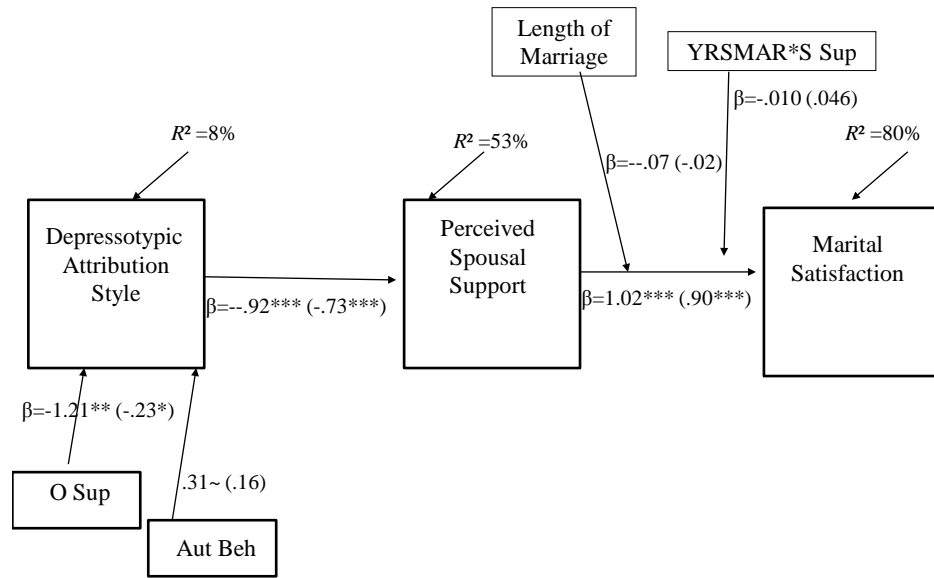
Research Question 4: Does length of marriage moderate all three relationships: (a) the direct relationship between depressotypic attribution style and marital satisfaction, (b) the relationship between depressotypic attribution style and perceived availability of spousal support affecting marital satisfaction, and (c) the relationship between perceived availability of spousal support and marital satisfaction?

Since mediation in the model that answered research question 3 eliminated the relationship between depressotypic attributions and marital satisfaction, the two models fit to answer the final research question used multiplicative interaction terms to investigate whether length of marriage moderates (a) the relationship between depressotypic attribution style and perceived availability of spousal support affecting marital satisfaction (see Figure 6) and (b) the relationship between availability of spousal support and marital satisfaction (see Figure 7). For path A, marital satisfaction was regressed on spousal support, length of marriage, and the interaction term (spousal support*length of marriage). Spousal support was then regressed on depressotypic attributions. The results for this model indicate that a significant moderation between the variables in either of these relationships was not found; the Chi-square statistic, associated *p*-value and degrees of freedom ($\chi^2 = 207.39$, *df* = 8, *p* < .001) indicated poor model fit (see Table 11).

In a second moderation model for the same research question, marital satisfaction was regressed on spousal support and depressotypic attributions, then spousal support was regressed on depressotypic attribution style, length of marriage and the interaction term (depressotypic*length of marriage) to detect possible moderation of the paths. The

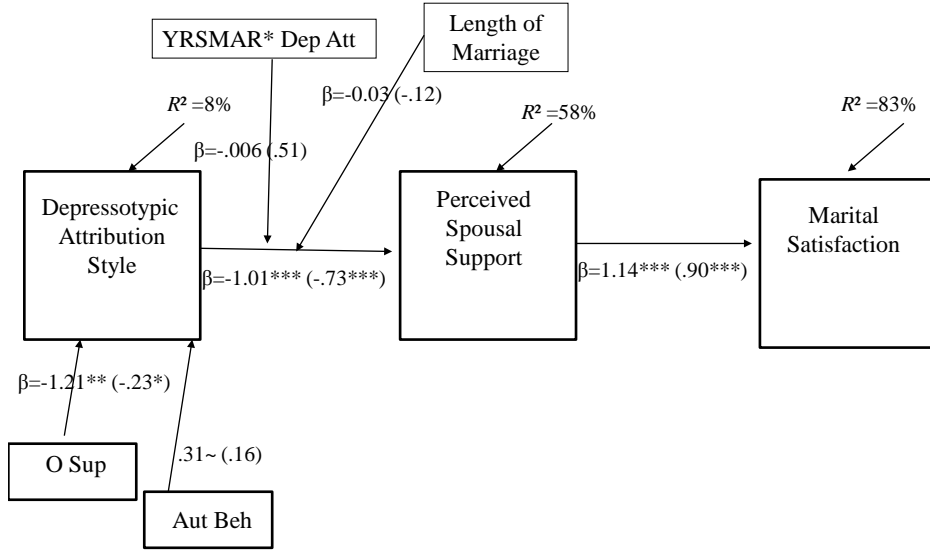
results indicate that no significant moderation between the variables in either of these relationships is present; the Chi-square statistic, associated p-value and degrees of freedom ($\chi^2 = 191.41$, $df = 8$, $p < .001$) indicated poor model fit (see Table 11).

Figure 6: Moderation Path A: model for marital satisfaction regressed on spousal support, length of marriage, and interaction term (spousal support*length of marriage); then spousal support regressed on depressotypic attributions (standardized coefficients in parentheses).



~ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 7: Moderation Path B: model for marital satisfaction regressed on spousal support and depressotypic attributions, spousal support regressed on depressotypic attribution style, length of marriage and the interaction term (depressotypic*length of marriage) (standardized coefficients in parentheses).



~ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Summary of Findings

Research Question 1: In the context of having a child with ASD: Does wives' attribution style (depressotypic or non-depressotypic) affect their perception of the availability of spousal support that ultimately affects their marital satisfaction?

Results from this model indicate that a depressotypic attribution style is negatively related to the perception of spousal support and that spousal support is positively related to marital satisfaction. This indicates that on average, a mother with a highly depressotypic attribution style would have low perceived spousal support and low marital satisfaction. In contrast, a mother with a non-depressotypic attribution style would report higher perceived spousal support and marital satisfaction. A large portion of the variance in depressotypic attributions was accounted for through spousal support (53%). Eighty-two percent of the variance in marital satisfaction was accounted for through spousal support (82%), making these findings extremely powerful.

The finding that a depressotypic attribution style is highly negatively related to perceived spousal support may be explained in a number of ways. Mothers with a depressotypic attribution style are more likely to make negative attributions about their partners in a global way, such that these negative attributions spill over into multiple areas of the relationship, potentially including the mother's perceptions of spousal support. This negative perception of spousal support might be related to overall lower marital satisfaction. These findings suggest that a mother with a depressotypic attribution

style is much more likely to perceive less support from her husband, which is highly related to her feeling less satisfied overall with their relationship. A depressotypic attribution style could then be thought of as factor which sets the mother up to see her spouse in a much more negative light, and consequently be less satisfied with the relationship.

These findings are consistent with the findings of Fincham and Bradbury (1992) who concluded that a depressotypic attribution style of negative events accentuates negative perceptions of a partner in a global manner, impacting many areas of the relationship. It seems that wives' perception of spousal support could be strongly influenced by their attribution style. The perception of spousal support then affects marital satisfaction, which supports Julien and Markman's (1991) conclusion that high perceived and actual spousal support behaviors, particularly by husbands are related to higher marital satisfaction for their wives. Therefore, optimistic or non-depressotypic attribution styles might lead mothers of children with ASD to focus on the positive aspects of their husbands' support, ultimately leading to their own higher marital satisfaction. Conversely, mothers of children with ASD who have pessimistic or depressotypic attribution style might feel compelled to focus on the negative aspects of their relationships with their husbands, including the support that their husbands provide. Over time, these accumulated negative perceptions of spousal support maybe related to a downward spiral in marital satisfaction.

Research Question 2: Does a direct relationship between attribution style and marital satisfaction exist for wives? Results from this model suggest that a depressotypic attribution style is directly negatively related to marital satisfaction. This

indicates that, on average, a mother with a highly depressotypic attribution style would have low marital satisfaction. In contrast, a mother with a non-depressotypic attribution style would report higher marital satisfaction. As in the model in which marital satisfaction was predicted by spousal support and indirectly by depressotypic attribution styles, a fairly large percentage of the variance in marital satisfaction was explained by depressotypic attribution style alone ($R^2=.42$). While these constructs have never been studied with this population, this finding is not surprising because previous research with childfree couples and parents of typically developing children suggests that depressotypic attribution styles are related to lower marital satisfaction (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992). We had no control group, therefore we are unable to compare the findings with those from parents of typically developing children to determine if a depressotypic attribution style might have an even greater detrimental impact on marital satisfaction in mothers of children with ASD.

Research Question 3: Does perceived availability of spousal support mediate the affect of depressotypic attributions on marital satisfaction? Results from the mediation analysis indicate that spousal support mediates the affect of depressotypic attributions on marital satisfaction. This means that the effect of depressotypic attributions on marital satisfaction can be accounted for by spousal support, a finding that represents a major conceptual change from the extant literature on attribution styles and spousal support. No other study to date has found that attributions do not have a direct effect on marital satisfaction when filtered through perceived spousal support. This finding has significant implications for the existing literature because it provides a clear departure from the previous research, which regarded attribution style and spousal

support as two distinct constructs. Perceived spousal support from husbands seems to be an important mechanism that helps explain more of the variance in marital satisfaction.

At the same time, reciprocal effects such that depressotypic attributions mediate the relationship between spousal support and marital satisfaction are equally possible. Because the data are not longitudinal, we are unable to predict causality. Additionally, any measure of perceived spousal support is by its nature influenced by the participant's attribution style which colors how they perceive spousal support in the relationship.

Research Question 4: Does length of marriage moderate all three relationships: (a) the direct relationship between depressotypic attribution style and marital satisfaction, (b) the relationship between depressotypic attribution style and perceived availability of spousal support affecting marital satisfaction, and (c) the relationship between perceived availability of spousal support and marital satisfaction? There was no support for this hypothesis. Therefore, length of marriage had no impact on spousal support or marital satisfaction by itself or in interaction with other variables. Other studies that examined length of marriage and marital satisfaction found that either marital satisfaction tends to decrease over number of years married or that marital satisfaction tends to decrease until children launch (which often does not happen in families with children with ASD) (Belsky et al., 1983; Burr, 1970; Vaillant & Vaillant, 1993). No previous studies have examined the constructs of length of marriage, depressotypic attribution styles, and spousal support, so I cannot compare this finding to any other one. Additionally, this is the first study to look at length of marriage in mothers of children with ASD. The findings suggest that length of marriage had no

influence on the relationships among depressotypic attributions, spousal support, and marital satisfaction in mothers of children with ASD.

Control Variables: Family income, mother's education, outside social support, child's challenging behaviors, and child's autistic behaviors were all controlled for in the path models. Interestingly, when depressotypic attribution style was regressed on each control variable individually, only outside social support and child's typically autistic behaviors were found significant in the models. Outside support was significantly negatively related to depressotypic attributions indicating that on average, mothers with higher depressotypic attribution styles reported fewer sources of outside support and vice versa. Although beyond the scope of this thesis, one might postulate that individuals with depressotypic attribution styles might be less likely to perceive outside social support or those mothers with few outside supports might be more likely to have depressotypic attribution styles. The child's typically autistic behaviors were significantly positively related to maternal depressotypic attribution style indicating that mothers with higher depressotypic attribution styles also reported greater frequency of their child's autistic behaviors (sensory sensitivity, self stimulation, and ecolalia) and vice-versa. Based on previous research, I would have predicted that both the child's challenging and typically autistic behaviors would be related to higher maternal depressotypic attribution styles. I was surprised that child challenging behaviors were not related to maternal depressotypic attribution styles, especially since previous research has suggested that child challenging behaviors are often related to parental depression, anger, and anxiety (Gray & Holden, 1992).

Conclusions

In conclusion, more knowledge was gained in regard to the factors that affect marital satisfaction in mothers of children with ASD. Both spousal support and depressotypic attribution style were found to be strongly related to marital satisfaction in this sample. This mimics findings in previous studies which looked at these factors in the context of childfree couples and parents of typically developing children. The findings from the mediation model are extremely important as they suggest that the effect of depressotypic attributions on marital satisfaction can be accounted for by spousal support. No other study to date has used these constructs in a mediation model, making this the first study to use a mediation model and find mediation when investigating these constructs. The findings from the mediation model are groundbreaking not only because they represent a clear shift in how we conceptualize relationship attributions, spousal support, and marital satisfaction, but also because they have yet to be found in samples from any other populations, including frequently studied childfree couples and parents of typically developing children. These findings suggest that the effect of depressotypic attributions can be mediated by spousal support, indicating that the inclusion of spousal support may better explain the relationship between depressotypic attributions and marital satisfaction. While this study found that attributions do not have a direct effect on marital satisfaction when filtered through perceived spousal support, future research is needed to determine whether depressotypic attributions mediate the relationship between spousal support and marital satisfaction in this and other populations. Surprisingly, length of marriage was not related to spousal support or marital satisfaction, a finding contrary to results from previous studies with childfree couples or parents of typically developing

children. Additionally, both outside support and the child's autistic behaviors were important in understanding the paths between these variables, but mother's education, family income, and the child's challenging behaviors were not. This study helped to shed light on this previously infrequently studied, but quickly growing population that is often in need of support from professionals.

Implications of Research Findings

Parenting a child with a disability such as ASD can be an extremely challenging endeavor for even the most devoted parents (Keller & Hoing, 2004; Kersh et al., 2006). Additionally, parents of children with ASD have been found to experience lower marital satisfaction than parents of typically developing children or children with other disabilities (Rodrigue, Morgan, & Geffken, 1990). Considering previous findings that suggest that marital satisfaction is strongly related to parenting efficacy and personal wellbeing, the findings from this study help shed light on factors, including attribution style and spousal support, that impact maternal marital satisfaction in these families. Both depressotypic attributions and spousal support were relevant in helping explain much of the variance in marital satisfaction.

The findings from the mediation model take this a step further to show for the first time in any population that attributions do not have a direct effect on marital satisfaction but rather operate through perceived spousal support. The implications of this finding include a new way of conceptualizing the role of spousal support and depressotypic attributions on marital satisfaction. As we gain a better understanding of the ways that these constructs interact we will be able to assist more couples and families

in maintaining marital satisfaction the face of additional stressors, including caring for a child with an ASD.

Strengths

Notable strengths from this study include the large percentages of variance explained by the predictors in the path models. For example, in the model in which marital satisfaction was predicted by spousal support and indirectly by depressotypic attribution styles, spousal support explains 82% of the variance in marital satisfaction and depressotypic attributions explain 52% of the variance in spousal support. These large R^2 values are present in all of my significant models and provide solid support for the hypotheses. Another strength is that this study controlled for a number of demographic variables including family income, mother's education, outside support, and the child's autistic and challenging behaviors. Controlling for these variables increases our ability to rule out extraneous factors that otherwise might make generalizing results more difficult.

I believe that the greatest strength from this study is the finding that mother's attributions do not have a direct effect on marital satisfaction when filtered through perceived spousal support in this population. Finding strong evidence of mediation with this population opens up a new area for research in studying the relationships among depressotypic attributions, spousal support, and marital satisfaction in this and other populations. This finding could have numerous implications for clinical treatment when working with couples trying to maintain their marital satisfaction when faced with the additional stress of raising a child with an ASD.

Limitations

One notable limitation from this study is that there is no comparison group of mothers of typically developing children with whom to compare the findings about mothers of children with ASD. Without this comparison group, we can only note the ways that the relationships among depressotypic attribution style, spousal support, length of marriage, and marital satisfaction are different or similar to those with mothers of typically developing children. A comparison group would be useful in determining how the strength of these relationships compares to those in mothers of typically developing children.

A second major limitation from this study is that the sample was entirely female. This means that we were only able to investigate our predictors and outcome with mothers of children with ASD, and consequently do not have a better understanding of these constructs for fathers of children with ASD. An area for future research would be investigating depressotypic attributions, spousal support, and marital satisfaction in fathers of children with ASD.

Finally, several measurement limitations reduce our ability to generalize findings. Alphas for several control variables including child's challenging behaviors, autistic behaviors, and outside support were extremely low limiting our ability to predict how the factors might impact our predictors and outcome. As previously mentioned, we cannot predict causal effects of variables in our sample. This means that it is equally possible for depressotypic attributions to mediate the relationship between spousal support and marital satisfaction and we have no way of knowing if these constructs are causally

linked. Additionally, utilizing a single source of data means that variables always correlated.

Future Research

Future research is needed to examine whether the mediation found with this population is present with other populations including childfree couples and parents of typically developing children. If these findings are replicated with other populations then it could lead to a different conceptualization of how the relationships between the spousal support, depressotypic attributions, and marital satisfaction are understood; this might ultimately lead to changes in theories about these constructs. Additionally, future research is needed to determine if this finding is replicated with other mothers of children with ASD, so that we can have a better understanding of whether these findings are unique to this population or present in other populations as well. This research can lead to a deeper understanding of factors that impact marital satisfaction in the larger population of childfree couples and parents of typically developing children as well as any unique factors impacting marital satisfaction in the much smaller population of mothers of children with ASD which may lead to specialized interventions for families in need. Additionally, future research should investigate whether depressotypic attributions mediate the relationship between spousal support and marital satisfaction which would help us better understand how these constructs are related.

Future research on relationships among depressotypic attributions, spousal support, length of marriage and marital satisfaction in mothers of children with ASD needs to also address the limitations of previously used sampling methods. For example,

future samples would need to include a comparison group of mothers of typically developing children matched for age of the child and length of marriage. A longitudinal design would allow for assessing if and how these relationships might change over time in this population.

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APPENDIX A

Contacts for Data Collection

Local Autism Support Chapters - Indiana

Elkhart Indiana Chapter of the Autism Society of America
Columbus Parent Support Group
Parent Support Group – Kokomo, IN
Central Indiana Chapter of the Autism Society of America
Mother’s of Children with Autism – Fishers, IN
Autism Society of Kentuckiana
East Central Indiana Chapter of the Autism Society of America
Wabash Chapter of the Autism Society of America
Asperger/Autism Parent Network (AAPN) Group – Carmel, IN
MSD Warren Township Parent Support Group
Families United for Support and Encouragement – Greenfield, IN
Parents Autism Support Group – Oldenburg, IN
Old National Trail Parent Support Group
Northeast Indiana Autism Parent Support Group
Autism Society of Southwestern Indiana
Hammond Parent Support Group

State Autism Support Groups – Autism Society of America Chapters

Alabama Chapter
Alaska Chapter
Arizona Chapter
Arkansas Chapter
California Chapter
Colorado Chapter
Autism Society of Connecticut
Delaware Chapter
District of Columbia Chapter
Florida Chapter
Greater Georgia Chapter
Hawaii Chapter
Idaho Chapter
Autism Society of Illinois
Autism Society of Indiana
Autism Society of Iowa
Autism Society of Kansas
Autism Society of Western Kentucky
Bluegrass Chapter - Kentucky
Purchase Area Chapter - Kentucky
Louisiana State Autism Chapter
Maine Chapter
Maryland Chapter

State Autism Support Groups – Autism Society of America Chapters contd.

Massachusetts Chapter

Autism Society of Michigan
Minnesota Chapter
Mississippi Chapter
Central Missouri Chapter
Western Missouri Chapter
Montana Chapter
Nebraska Chapter
Nevada Chapter
New Hampshire Chapter
New Jersey Chapter
New Mexico Chapter
New York Chapter
North Carolina Chapter
North Dakota Chapter
Autism Society of Ohio
Oklahoma Chapter
Oregon Chapter
Pennsylvania Chapter
Rhode Island Chapter
South Carolina Chapter
Black Hills Autism Society
Central South Dakota Autism Society
East Tennessee Chapter
Memphis Chapter
Middle Tennessee Chapter

Texas Chapter

Utah Chapter

Vermont Chapter

Virginia Chapter

Washington Chapter

West Virginia State Chapter

Wisconsin Chapter

Wyoming Chapter

Internet Support Groups

Yahoo Groups – autism.org

APPENDIX B

Purpose of the Study

The purpose of this study is to examine how children with Autism Spectrum Disorders impact their parents' marriages. Unfortunately, we still know little about which specific areas in marriages must be strengthened to best serve couples who have a child with an Autism Spectrum Disorder. Therefore, these and other questions are important to ask to identify what couples are currently doing to strengthen their marriages as well as what they could improve upon. I thank you for your willingness to participate in this important study. This survey should take you about 15 minutes to complete. The survey will be anonymous. When you are done I would deeply appreciate your mailing it back in the self-addressed stamped envelope. Should you wish you may log on to my website to complete this study if this is more convenient for you. The address is: www.critics.com/nelson/jen/. The results of the study will be posted in an upcoming newsletter. Should you have any questions or comments please feel free to contact me at (574) 257-3490 or at my e-mail address: nelsonj1@bethelcollege.edu. Thank you again for your time.

APPENDIX C

Demographic Questionnaire

Please answer the following questions.

1. Your child's date of birth: _____ (Month/Day/Year)

2. Your zip code: _____

3. What do you consider your child's primary diagnosis? _____

4. Does your child have any other diagnoses or medical conditions? Yes ____ No ____

If yes, please describe _____

_____.

5. How old was your child at the time of diagnosis? _____

6. When did you first know about your child's special needs? _____

7. At the time your child was diagnosed, were you given a current level of functioning?
Yes ____ No ____

If yes, use the following scale to rate what you were told at the time of diagnosis:

Mild 1 2 3 4 5 Severe

8. Has the level of your child's functioning changed since the time of diagnosis?

Yes ___ No ___

If yes, use the following scale to rate your child's current level of functioning:

Mild 1 2 3 4 5 Severe

9. Presence of challenging behavior: (Please circle the one that applies)

Temper tantrums	Always	Sometimes	Rarely	Never
Trouble sleeping	Always	Sometimes	Rarely	Never
Hitting others	Always	Sometimes	Rarely	Never

10. How frequently does your child display these stereotypical behaviors: (Please circle the one that applies)

Self-stimulation	Always	Sometimes	Rarely	Never
Echolalia	Always	Sometimes	Rarely	Never
Sensory Sensitivity	Always	Sometimes	Rarely	Never

11. Does your child currently live in your home? Yes _____ No _____

If no, where does he/she currently live? _____

12. Where is your child currently receiving services?

- _____ Home
- _____ Public School
- _____ Private School
- _____ Residential School

13. What is your marital status? (Please check the one that applies to you)

- _____ Never married
- _____ Not married/living together
- _____ Married
- _____ Divorced/Separated
- _____ Remarried
- _____ Widowed

If married, how many years have you been married? _____

If married, how many years were you married prior to your child being diagnosed? _____

16. Do you have any other children living in the home?

Yes _____ No _____

If you answered yes, please indicate their ages and gender:

Gender

Age

17. Have any of your other children been diagnosed with a disability? Yes _____ No _____

If so, which one(s) of your children? _____

18. Are you the primary caregiver in your family? Yes _____ No _____

19. What is the highest level of schooling you have completed?

_____ Some high school

_____ High school graduate or GED

_____ Some college

_____ College graduate

_____ Graduate school or post-college professional training

20. Please check the range that applies to your family:

- Under \$5000
- \$5000 to \$9999
- \$10,000 to \$19,999
- \$20,000 to \$29,999
- \$30,000 to \$39,999
- \$40,000 to \$49,999
- \$50,000 and over

21. Please check the types of support that you receive on a regular basis:

- Parents/Spouse's parents
- Relatives
- Friends
- Other parents of children with disabilities
- Respite care
- Professionals (therapists, teachers, etc.)
- School/Day-care center
- Church

APPENDIX D

Relationship Attribution Measure

This questionnaire describes several things that your spouse might do. Imagine your spouse performing each behavior and then read the statements that follow it. Please circle the number that indicates how much you agree or disagree with each statement, using the rating scale below:

1	2	3	4	5	6
Disagree Strongly	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Agree Strongly

Your Spouse Criticizes Something You Say:

- 1 2 3 4 5 6 My spouse's behavior was due to something about him/her
(e.g., the type of person s/he is, the mood s/he was in)
- 1 2 3 4 5 6 The reason my spouse criticized me is **not** likely to change
- 1 2 3 4 5 6 The reason my spouse criticized me is something that affects
other areas of our marriage
- 1 2 3 4 5 6 My spouse criticized me on purpose rather than unintentionally
- 1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than
unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for criticizing me

1 2 3 4 5 6 The reason my spouse criticized me has to do with our child's disability

Your Spouse Begins to Spend Less Time With You:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse spent less time with me criticized me is **not** likely to change

1 2 3 4 5 6 The reason my spouse spent less time with me is something that affects other areas of our marriage

1 2 3 4 5 6 My spouse spent less time with me on purpose rather than unintentionally

1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for spending less time with me

1 2 3 4 5 6 The reason my spouse spends less time with me has to do with our child's disability

Your Spouse Does Not Pay Attention To What You are Saying:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse does not pay to what I am saying is **not** likely to change

1 2 3 4 5 6 The reason my spouse does not pay attention to what I am saying is something that affect other areas of our marriage

1 2 3 4 5 6 My spouse does not pay attention to what I am saying on purpose rather than unintentionally

1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for not paying attention to what I am saying

1 2 3 4 5 6 The reason my spouse does not pay attention to what I am saying has to do with our child's disability

Your Spouse Is Cool and Distant:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse is cool and distant is **not** likely to change

1 2 3 4 5 6 The reason my spouse is cool and distant is something that affects other areas of our marriage

1 2 3 4 5 6 My spouse is cool and distant me on purpose rather than unintentionally

1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for being cool and distant

1 2 3 4 5 6 The reason my spouse is cool and distant has to do with our child's disability

Your Spouse Doesn't Complete Their Chores:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse doesn't complete their chores is **not** likely to change

1 2 3 4 5 6 The reason my spouse doesn't complete their chores is something that affects other areas of our marriage

1 2 3 4 5 6 My spouse doesn't complete their chores on purpose rather than unintentionally

1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for not completing their chores

1 2 3 4 5 6 The reason my spouse doesn't complete chores has to do with our child's disability

Your Spouse Makes An Important Decision That Will Affect The Two Of You Without Asking For Your Opinion:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse made an important decision that will affect the two of us without asking for my opinion is **not** likely to change

1 2 3 4 5 6 The reason my spouse made an important decision that will affect the two of us without asking for my opinion is something that affects other areas of our marriage

1 2 3 4 5 6 My spouse made an important decision that will affect the two of us without asking for my opinion on purpose rather than unintentionally

1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns

1 2 3 4 5 6 My spouse deserves to be blamed for making an important decision that will affect the two of us without asking for my opinion

1 2 3 4 5 6 The reason my spouse made an important decision that will affect the two of us without asking my opinion has to do with our child's disability

Your Spouse Doesn't Give You The Support You Need:

1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)

1 2 3 4 5 6 The reason my spouse doesn't give me the support I need is **not** likely to change

1 2 3 4 5 6 The reason my spouse doesn't give me the support I need is something that affects other areas of our marriage

- 1 2 3 4 5 6 My spouse doesn't give me the support I need on purpose rather than unintentionally
- 1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns
- 1 2 3 4 5 6 My spouse deserves to be blamed for not giving me the support I need
- 1 2 3 4 5 6 The reason my spouse doesn't give me the support I need has to do with our child's disability

Your Spouse Is Intolerant of Something You Do:

- 1 2 3 4 5 6 My spouse's behavior was due to something about him/her (e.g., the type of person s/he is, the mood s/he was in)
- 1 2 3 4 5 6 The reason my spouse is intolerant of something I do is **not** likely to change
- 1 2 3 4 5 6 The reason my spouse is intolerant of something I do is something that affects other areas of our marriage
- 1 2 3 4 5 6 My spouse is intolerant of something I do on purpose rather than unintentionally
- 1 2 3 4 5 6 My spouse's behavior was motivated by selfish rather than unselfish concerns
- 1 2 3 4 5 6 My spouse deserves to be blamed for being intolerant of something I do
- 1 2 3 4 5 6 The reason my spouse is intolerant of something that I do has to do with our child's disability

APPENDIX E

Resources and Support Questionnaire

Please carefully rate your spouse's contribution to the relationship recently – over the past 6 months. How positive or negative are your spouse support and resources provided to you?

	7	6	5	4	3	2	1
	Extremely Positive	Quite Positive	Slightly Positive	Mixed	Slightly Negative	Quite Negative	Extremely Negative

Spouse's Relationship Qualities: Love and Intimacy Toward You

		7	6	5	4	3	2	1
1. Commitment to you		7	6	5	4	3	2	1
2. Sexual involvement		7	6	5	4	3	2	1
3. Understanding of you		7	6	5	4	3	2	1
4. Affectionate toward you		7	6	5	4	3	2	1
5. Listening to your feelings		7	6	5	4	3	2	1
6. Open communication		7	6	5	4	3	2	1
7. Comforting you		7	6	5	4	3	2	1
8. Respectful of independence		7	6	5	4	3	2	1
9. Companionship given you		7	6	5	4	3	2	1

Spouse's Relationship Qualities: Respect for You

		7	6	5	4	3	2	1
10. Acceptance of you		7	6	5	4	3	2	1
11. Respect for you		7	6	5	4	3	2	1
12. Confidence in your abilities		7	6	5	4	3	2	1
13. Valuing your opinion		7	6	5	4	3	2	1
14. Expressing appreciation		7	6	5	4	3	2	1

Spouse's Support: Informational Assistance Given to You

15. Suggestions for avoiding mistakes	7	6	5	4	3	2	1
16. Constructive decision making	7	6	5	4	3	2	1
17. Good ideas for problem solving	7	6	5	4	3	2	1
18. Knows how to find out	7	6	5	4	3	2	1

APPENDIX F

Kansas Marital Satisfaction Scale

	Extremely Dissatisfied	Very Dissatisfied	Somewhat Dissatisfied	Mixed	Somewhat Satisfied	Very Satisfied	Extremely Satisfied
1. How satisfied are you with your marriage?	1	2	3	4	5	6	7
2. How satisfied are you with your husband as a spouse?	1	2	3	4	5	6	7
3. How satisfied are you with your relationship with your husband?	1	2	3	4	5	6	7

