

Can emotional accessibility mitigate the risk of sexual challenges to relationship happiness  
among older adult couples?

by

Sally Jane Hodges

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Approved by:

Major Professor  
Dr. Jared A. Durtschi

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## **Abstract**

Much of the literature in sexuality and aging focuses on the physical aspects of the sexual relationship such as dysfunction and decline in frequency. In doing so, aging is viewed in a negative light because of its implied connection to dull sexuality and poor sexual satisfaction. However, despite potential age related sexual changes, many couples remain happy later in life in their relationships. Using data from 3,005 adults over the age of 57 from the National Social Life, Health and Aging Project data, we tested hypotheses using three different age groups: Newly Old (57-64), Young-Old (65-74), and Old (75-85). The results indicated that across each age group physical pleasure was linked with relationship happiness and emotional satisfaction. However, sexual frequency was not linked with relationship happiness or emotional satisfaction. In several cases, emotional accessibility moderated—served as a protective factor—in the associations between the nature of the sexual relationship and the nature of the quality of the romantic relationship. Clinical implications include identifying a clinically modifiable factor—emotional accessibility—that may mitigate the potential risk of changing sexuality to overall relationship happiness within older adult couples.

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## **Dedication**

I would like to dedicate this work to each of my older adult clients, and to every older adult committed to life-long growth. Far too long we have overlooked older adults, even though we are each on our own journey of aging. Far too long we have stopped including aging in the conversation or held inaccurate beliefs or stereotypes. I started this journey to learn about more ways to help and I have gained so much more than I ever expected. When we know better, we do better, and I want to do better for you.

## **Chapter 1 - Introduction**

Over the next 40 years the 65 and older population will rise from the current 15% to nearly 24% of the United States population (Mather, 2016). In the U.S. among individuals 65 years old, 1 out of 4 is expected to live past age 90, and 1 out of 10 is expected to live past the age of 95 (APA, 2017). Western society is living decades longer than the generations before them. A natural consequence of living longer is adjusting as a couple to many developmental changes, including changes to their sexual relationship. There is robust research linking couples' sexual frequency and sexual satisfaction with couples' relationship satisfaction within younger and middle age couples (Brody, Costa, 2009; Karney & Bradbury, 1995; Yeh, Lorenz, Wichrama, Conger, & Elder, 2006). However, there is less research that examines the nature of the sexual relationship and its effects on relationships within older adults. Perhaps even more importantly, research has yet to identify what can be done to counter-balance any potential negative sexual changes that may allow older couples to remain highly satisfied in their relationships (Lindau et al., 2007). I propose that emotional accessibility—openness and relying on a partner—may be a protective factor against potential sexual stressors to relationship happiness (Knapp et al., 2016). Unanswered but important questions remain in the areas of sexuality and aging that may be helpful in identifying relational contexts most conducive to couples in their twilight years remaining highly satisfied and stable.

The primary goal of this study was to test to what extent emotional accessibility moderates the link of sexual frequency and sexual pleasure with couples' relationship happiness and emotional satisfaction with the relationship. This will expand the existing literature by identifying a clinically modifiable relationship enhancer that may elevate relationship happiness in older couples, even in the context of lower sexual frequency or lower sexual pleasure that may

be due to age related health concerns. We propose that heightened emotional accessibility between partners will mitigate the expected negative ramifications of sexual changes on relationship happiness. This study will also extend the existing literature by using a large, national, longitudinal data set of older adults who were community living and had a diverse range of racial backgrounds and education. Over 3,005 participants aged 57 and older from the National Social Life, Health, and Aging Project were analyzed in this study uniquely within three age groups, 57-64, 65-74, and 75-85. The results of this study have important clinical implications for people in the helping profession working with older adults.

## **Chapter 2 - Theory and Literature Review**

### **Vulnerability-Stress-Adaptation Model of Marriage**

The vulnerability-stress-adaptation (VSA) model suggests three factors that play a meaningful role in determining the overall quality of a couple's relationship (Karney & Bradbury, 1995). These factors are enduring vulnerabilities, stressful events, and adaptive processes. The VSA model suggests that extenuating circumstances from a relationship can impact a partner's ability to adapt. The stable characteristics of enduring vulnerabilities can also impact stressful events to cause more hardship and chaos for the couple. In this study, older age is considered as an enduring vulnerability as it puts strain on the relationship and can also otherwise exacerbate stressful life events when physical bodies begin to have more physical health challenges (Fisher, 2010). Stressful events are the challenges intrinsic to a couple's daily routines. In our study, sexual challenges, such as decreased sexual frequency and sexual dysfunction are conceptualized as the stressful events. The ability for a couple to cope with these stressful events is theoretically described as the adaptive process. The adaptive processes are behaviors the couple can take to mitigate or ameliorate challenges faced by the couple from the enduring vulnerabilities and stress to the relationship. The adaptive process in our model is operationalized as emotional accessibility, that is, the ability for someone to open up and confide in a partner, and to trust and rely on a partner. It is believed that these behaviors, opening-up, relying upon, confiding, and trusting in one's partner strengthens the relationship may even counteract negative impacts of the sexual relationship.

When sexual intimacy begins to change in a relationship, couples may start to make negative attributions about their partner for why these changes are occurring. For example, a couple might misinterpret problems with erection or lubrication as decreased interest in sex or

lose of attraction. Low sexual desire could be taken as a lack of love for the partner. Perhaps when partners are more open with each other and confide their genuine feelings and concerns, they are better able to understand each other. This emotional accessibility is theorized to help couples attune to each other and not ascribe negative intent when it was not present. In doing so, couples may become more resilient to the stressors and transitions of relationships in older age.

### **Sexuality Changes and Challenges in Older Adults**

Sexual changes such as erectile dysfunction, lack of vaginal lubrication, or inability to orgasm for older adults may pose a challenge to their maintenance of a satisfying relationship. Prevalence rates on sexual dysfunction in both men and woman, along with levels of distress from this sexual dysfunction were reported on by Lindau and colleagues (2007) using the National Social Life, Health and Aging Project. Among males aged 57-85, 37% of them reported difficulty achieving or maintaining an erection and 90% of that group reported this bothered them. In the same group of males, 28% reported a lack of interest in sex and 65% of that group reported that this bothered them. Next, 28% of the male participants reported climaxing too early, and among those, 71% reported it bothered them. Anxiety about performance was a dysfunction for 27%, and among them, 75% reported this anxiety bothered them. Lastly, 20% of the male participants reported an inability to climax, and among them, 73% said this bothered them. Similarly, sexual problems and their corresponding impact were recorded for women. Among women aged 57-85, 43% reported a lack of interest in sex, and among those women, 61% shared that lacking interest bothered them. In the same sample, 39% of women stated difficulty with lubrication, and 68% of the respondents said this dysfunction bothered them. Next, 34% of the female participants reported an inability to climax and among them, 59% were bothered by it. Not finding sex pleasurable was reported by 23% of women, and 64% from

among those women reported it bothered them. Lastly, 17% reported pain at the vagina during entry, and this bothered 97% of those who experienced this dysfunction (Lindau et al., 2007). The need for intervention among older adults can be seen by the impact these sexual problems have on so many older adults. Relationship satisfaction among older adults is associated with having fewer sexual dysfunctions (Laumann, Das, & Waite, 2008). However, the dysfunctions are prevalent resulting in a potential need to intervene with some older adults who are adjusting to new sexual challenges and changes.

### **Sexual Behaviors Among Older Adults**

Sexual behavior changes in many ways over the life span. In a national probability sample of men and women aged 14 to 94, Herbenick and colleagues (2010) examined sexual behaviors of participants over the past month, the past year, and in their life time. Masturbating alone followed by vaginal intercourse, were the most frequent sexual behavior for men and woman in the last year. Men and women over the age of 50 in the past year also frequently masturbated alone, where men masturbated alone more frequently (72% of 50 to 59 year olds, and 46% of those 70 and over) than women (54% of 50 to 59 year olds, and 32% of those 70 and over). Vaginal intercourse was also common among men and woman over the past year. Similarly, men reported the behavior more frequently (58% of 50 to 59 year olds, and 43% of those 70 and over) and woman (51% of 50 to 59 year olds, and 22% of those in the age group of 70; Herbenick et al., 2010). These percentages can be compared to participants of younger age categories from the same study. For women in the age group of 25-29, 72% reported they had masturbated alone and 76% reported having vaginal intercourse in the past year. For men in the age group of 25-29, 84% reported they had masturbated alone and 86% reported having vaginal intercourse in the past year (Herbenick et al., 2010). In reviewing these statistics,

the quantity of sexual behavior tends to decline with age, however, sexual behaviors themselves do not disappear from older adults' sexual repertoire. The sexual repertoire expands as couples age, in part due to an increase in sexual wisdom that comes with experience (Forbes, Eaton, & Krueger, 2016). For example, penetrative intercourse may become less of the primary focus, whereas other intimate and sexual behaviors are incorporated. Couples often become more flexible in how they define a satisfying sexual encounter, including additional intimate acts.

### **Sexual Frequency and Relationship Happiness**

Many older adults report sexual desire and sexual interest and choose to remain sexually active well through late life because of the satisfying emotional and physical needs that are met through sexual intimacy (Lindau et al., 2007). A common assumption of sexual frequency and relationship happiness is that habituation to a partner coupled with longevity of marriage predicts the decrease in sexual frequency (Call, Sprecher, & Schwartz, 1995). However, the decrease in sexual frequency due to habituation of partner is predominantly seen in the first two years of marriage rather than later in life (Call et al., 1995). This information supports the current literature that sexual frequency decline as an individual ages is usually due to age related health changes (Chao et al., 2011; Lindau et al., 2007). Declines in sexual frequency beg the question, what role does the quantity of the sexual relationship play in relationship satisfaction for older adults? Sexual activity includes a wide array of sexual activity, such as penile-vaginal intercourse (PVI), same-sex sexual intercourse, and any other form of sexual touching, including masturbation.

From a closer look at older adult sex frequency it was found that synchronicity is an important variable to consider in frequency (Gillespie, 2017). Individuals reported that asynchronicity (i.e., lack of compatible schedules or interference in some way) of a sexual

encounter prevented a couple from having more frequent sex. These findings were moderated by older adults reporting more frequent conversations about their sexual synchronicity and frequency. Thus, more open and regular communication about sexuality may enhance sexual frequency within older adults (Gillespie, 2017).

The associations between sexual frequency and relationship happiness can be mediated and bidirectional. In a longitudinal panel study design, initial levels of sexual satisfaction were positively associated with frequency of sex; initial levels of sexual frequency were also positively associated with later sexual satisfaction (McNulty, Wenner, & Fisher, 2016). Thus, the link between sex satisfaction and sex frequency is bidirectional and predictive in nature. Sex frequency has been positively associated with relationship satisfaction as well as sexual satisfaction (Laumann et al, 1994; Peplau, Fingerhut, & Beals, 2004). For older adults, these findings remain true: Sex frequency was identified as the most important variable predicting sexual satisfaction (Fisher, 2010). In the same study, sexuality in later life was also associated with a more positive outlook on life. A decade review on sexual activity found that sexual frequency was a strong predictor of marital satisfaction (Christopher & Sprecher, 2000). However, less is known regarding to what extent sexual frequency is linked with relationship happiness for older adults. However, sexual frequency tends to be lower for older adult couples in comparison with younger adult couples (Lindau et al., 2007).

### **The Association between Physical Pleasure and Relationship Happiness**

Physical pleasure was defined in this study as the extent to which sexual engagement in any form was physically pleasurable. Because there is limited literature with the variable of physical pleasure, we reviewed the literature of sexual satisfaction. This is because our study defined physical pleasure as the extent to which the sexual engagement was physically pleasure



pleasurable. In a meta-analysis, sexual satisfaction was one of the strongest predictors of later relationship satisfaction (Karney & Bradbury, 1995). Similarly, when individual husbands and wives reported higher satisfaction in their sexual relationship, they tended to report more happiness in their relationship (Yeh, Lorenz, Wichrama, Conger, & Elder, 2006). These findings were supported in other literature on sexual satisfaction and marital satisfaction (Young, Denny, & Luquis, 1998). Sexual satisfaction in the relationship was found to have the highest correlation to overall satisfaction with the marriage.

The importance of sexual satisfaction in relationship satisfaction cannot be overstated (Sprecher, 1998). A study focusing on the interpersonal exchange model, the relationship between sexual satisfaction and relationship satisfaction was supported by bidirectional pathways suggesting that sexual satisfaction and relationship satisfaction predict each other (Lawrance & Byers, 1995). This relationship was also found to be supported in the way variables of marital satisfaction and sexual satisfaction interact. Yucel and Gassanov (2009) found sexual satisfaction and relationship satisfaction act as a reward system for each other. Thus, when sexual satisfaction increases marital satisfaction tends to increase.

The potential impacts of sexual satisfaction on relationship satisfaction in long-term relationships among older couples have also been examined, but to a lesser extent. A longitudinal study among couples aged 21-65 also supported the association between sexual satisfaction and relationship happiness (Fallis, Rehman, Woody, & Purdon, 2016). Additionally, in the same study, for both men and women, sexual satisfaction earlier in the relationship predicted relationship satisfaction later in the relationship. However, less is known about the extent to which the sexual nature of the relationship continues to be a significant factor for older adults.

## **Can Emotional Accessibility Moderate the Association Between the Sexual Relationship and Relationship Outcomes?**

Although much is known about the importance of sexual frequency and physical pleasure in a romantic relationship, there is limited understanding of what older couples can do to maintain high relationship happiness in the context of what may be lower sexual frequency and reduced sexual pleasure. Some of the physical changes and challenges couples face due to age related decline are unmodifiable and have a resulting impact on their romantic relationship. However, we propose that even in a relationship with less frequent sex and less satisfying sex the relationship is not necessarily destined for decline. Rather, we propose that if a couple feels a strong sense of emotional accessibility in the relationship (i.e., confiding to a partner about feelings and comfortable to trust and rely on the partner), this may buffer the otherwise expected negative outcomes from decreased frequency or less pleasurable sex. A study from Knapp and colleagues (2016) suggested it is reasonable to expect that emotional accessibility can alleviate or even fully counteract the negative impact of reduced sex in a couple relationship because of the strong association between emotional accessibility and relationship quality.

There is a limited amount of literature in the topic of emotional accessibility. However, this term has many qualities in common with emotional intimacy, such as communication and spousal support (Patrick, Sells, Giordano, & Tollerud, 2007; Yoo, Bartle-Haring, Day, & Gangamma, 2014). Thus, given the literature on emotional intimacy, it is reasonable to postulate that emotional accessibility is important for individual and couple well-being. Couples often seek therapy for an absence of emotional intimacy as this absence creates discord in attitudes and behaviors (Doss, Simpson, & Christensen, 2004). In a path analysis, communication, emotional intimacy, sexual satisfaction and relationship satisfaction were shown to be positively associated

for the couple relationship (Yoo et al., 2014). However, the same study also found that emotional intimacy did not have a direct link with sexual satisfaction. However, this existing literature generally included participants below the age of 60. Thus, there is a need for further study in sexuality among older adults, and what can be done to enhance these relationships.

### **The Present Study**

The purpose of this study was to conduct research that can be usefully applied to couple's therapy for older adult couples. Given the unique challenges to sexual functioning in older couples that are not always treatable, we tested to what extent couples who have a high degree of emotional accessibility to one another may mitigate the risk posed by sexual challenges to relationship happiness and emotional satisfaction. Based on the vulnerability-stress-adaption model, and guided by existing literature, we aimed to test to what extent emotional accessibility can moderate the link between sexual frequency and sexual satisfaction with relationship happiness and emotional satisfaction among couples age 57-85.

*Hypothesis 1.* Uniquely tested within three distinct age groups (e.g., 57-64, 65-74, 75-85) higher scores on sexual frequency will be associated with higher scores on relationship happiness and emotional satisfaction within older adults

*Hypothesis 2.* Uniquely tested within three distinct age groups (e.g., 57-64, 65-74, 75-85) higher scores on physical pleasure will be associated with higher scores on relationship happiness and emotional satisfaction within older adults

*Hypothesis 3.* Uniquely tested within three distinct age groups (e.g., 57-64, 65-74, 75-85) the associations between sexual frequency and sexual pleasure with relationship happiness and emotional satisfaction will be moderated by emotional accessibility.

In an effort to reduce extraneous variation due to confounding variables and to increase confidence in the results, these hypotheses were tested while controlling for the following variables: age (Heiman, Long, Smith, Fisher, Sand, & Rosen, 2009; DeLamater & Moorman, 2007), level of education (Fisher, 2010), race (Fisher, 2010), sexual interest, frequency of sexual thoughts (DeLamater & Moorman, 2007), sexual dysfunction (Lindau et. al, 2007; Fisher, Rosen, Eardley, Sand, & Goldstein, 2005), how critical their partner was (Swann, Rentfrow, & Gosling, 2003), physical health (Lindau et al., 2007), and mental health (Fisher, 2010).

## Chapter 3 - Method

### Procedure and Sample

**Procedure.** These hypotheses were tested using data from the National Social Life, Health and Aging Project (NSHAP). The initial assessment, Wave 1, of NSHAP was conducted in 2005 and 2006 by the National Opinion Research Center (NORC) and the Principal Investigators from the University of Chicago. NORC is housed at the University of Chicago as a non-partisan research institute dedicated to guiding policy and business decisions through data analysis. Informed consent was completed before each interview. All data collection was administered in accordance to the NSHAP IRB protocol. A multi-stage area probability sample of adults born between 1920 and 1947 who were community residing was used for the NSHAP Wave 1. Hispanic and African American minority populations were oversampled for the aim of getting a large and diverse sample. The Health and Retirement Study (HRS) collaborated with NSHAP and together they identified households from the HRS that fit the NSHAP eligibility population. A sample of 4,400 individuals was chosen from the identified households. NSHAP made a selection of one participant per house with 92% of the individuals selected for the NSHAP interview being eligible. In the Wave 1 interview, 3,005 adult participants age 57 to 85 completed the first assessment between July 2005 and March 2006. The collective response rate of Wave 1 was 75.5%.

**Data collection.** The data collection for the NSHAP consisted of three components aimed at studying multiple features of the participants. The in-person questionnaire included topics such as: 1) demographic characteristics, 2) social networks and social network change, 3) social and cultural activity, 4) physical and mental health which included cognitive awareness, 5) well-being, 6) illness, 7) utilization of healthcare and medications, and 8) history of sexual and

intimate partnerships. Biological measures were collected but not used for the present study. Lastly, participants were given a leave behind questionnaire that they completed by paper and pencil and then returned to NSHAP by mailing it in. In Wave 1 there was approximately 84% of respondents who returned their supplemental questionnaire.

**Sample characteristics.** In the Wave 1 interview, 3,005 adult participants age 57 to 85 completed the first assessment between July 2005 and March 2006. Reporting on the overall statistics for the entire sample, female participants made up 51% of the sample. Of the participants 21% of them held a bachelor's level of degree or higher. The racial identity of the participants were self-reported as White (70%), Black (17%), Hispanic (10%), and Other or Bi-racial (2%). The average age of respondents was 69 years old. The participants reported the following sexual challenges: No Interest in sex (32%), painful sex (8%), unable to climax (27%), erectile dysfunction for males (36%), and trouble with vaginal lubrication for females (40%). The collective response for household income was 70% of participants reporting they made less than \$50,000 in the past year.

## **Measures**

The current study used measures of five key variables: sexual frequency and sexual pleasure as predictor variables; emotional accessibility as a moderating variable; and relationship happiness and emotional satisfaction as the outcome variables. Each of the following variables was assessed at a single time point, from just one partner.

**Sexual frequency.** Sexual frequency was assessed with a single question item, "During the last 12 months, about how often did you have sex with your partner?" Sex was not defined for the participants in this question. Responses were on a scale from 1 (*once a month or less*) to 5 (*once a day or more*). Higher scores indicated greater sexual frequency.

**Physical pleasure (e.g., sexual pleasure).** Physical pleasure was assessed with a single question item in reference to their sexual relationship, “How physically pleasurable did/do you find your relationship with your partner to be?” Responses were on a scale from 0 (*not at all*) to 4 (*extremely*). Higher scores indicated greater sexual pleasure in the relationship.

**Emotional accessibility.** Two items were used to measure emotional accessibility. These items included “How often can you open up to your partner if you need to talk about your worries?” and “How often can you rely on your partner for help if you have a problem?” Both items were on a scale from 1 (*hardly ever*) to 3 (*often*). The measure was computed by taking the mean of these two items. A higher score corresponded to a higher score on emotional accessibility. Internal reliability was acceptable,  $\alpha = .60$ . This  $\alpha$  is lower in part due to only two items being included in this measure, where alpha scores are downward adjusted when there are fewer items in a measure.

**Relationship happiness.** Relationship happiness was assessed with a single question item, “Taking all things together, how would you describe your marriage/relationship with your partner?” Responses were on a scale from 1 (*very unhappy*) to 7 (*very happy*). A higher score indicated greater relationship happiness.

**Emotional satisfaction.** Emotional satisfaction was assessed with a single question item, “How emotionally satisfying did/do you find your relationship with [him/her] to be?” Responses were on a scale from 0 (*not at all*) to 4 (*extremely*). A higher score indicated more emotional satisfaction in the relationship.

**Control variables.** Age was measured in years. Education level was assessed on a scale from 0 (*no college education*) to 1 (*college education*). Race was measured by creating dummy variables with the variables: White (reference group), Black or African-American, Hispanic, or

Other. The importance of sex was assessed from 1 (*not important at all*) to 5 (*extremely important*). Next, sexual thoughts were assessed with “How often do you think about sex?” 1 (*less than once a month*) to 5 (*several times a day*). Total sexual dysfunction was assessed by summing question items asked of the respondent, and the respondent’s reports about the partner regarding a number of sexual challenges faced by the couple, such as with erections, trouble lubricating, physical pain during intercourse, inability to climax, or early climax. Responses to these sexual challenges were scaled as 0 (*no*) and 1 (*yes*). A one-unit increase on couple-level sexual dysfunction indicated one more sexual challenge faced by one or both partners. Level of criticism was assessed by asking, “How often does [partners name] criticize you?” 1 (*hardly ever*) to 3 (*often*). Physical health was assessed by asking, “Would you say your health is...” with responses ranging from 1 (*poor*) to 5 (*excellent*). Mental health was assessed by asking, “What about your emotional or mental health; Is it...” with responses ranging from 1 (*poor*) to 5 (*excellent*).

### **Analytic Strategy**

These data were used to test our primary research question: To what extent does emotional accessibility moderate the associations between sexual frequency and sexual pleasure with relationship happiness and emotional satisfaction within three distinct age groups of older adults. We used a multiple-sample path analysis in MPlus 7.3 (Muthén, & Muthén, 2016), testing each of the main effects and interaction effects described below uniquely in three samples of age groups (e.g., 57-64, 65-74, 75-85) tested simultaneously. We tested the main effects of sexual frequency and physical pleasure to our outcome variables, relationship happiness and emotional satisfaction. We also tested interaction effects of emotional accessibility×sexual pleasure and emotional accessibility×sexual frequency to test for moderation. These interaction effects were



computed after standardizing sexual frequency, sexual pleasure, and emotional accessibility and computing the interaction terms from the standardized variables. Significant interaction terms were then plotted on an interaction figure plotted as one standard deviation (SD) high and low on emotional accessibility, sexual pleasure, and sexual frequency when considering the outcome variables. Our interaction figures were interpreted to provide an explanation of those moderation results. Lastly, chi-square difference tests were used to examine potential differences in the magnitude of these main effects and interaction effects between these three different samples of age groups. Unstandardized and standardized betas, along with r-squared values were interpreted.

## Chapter 4 - Results

Mean differences on the two outcome variables were explored with the newly old (57-64) young old (65-74), and old (75-85) age groups. There were significant differences between the means by age group on relationship happiness [ $F(2, 2877) = 3.65, p < .05$ ]. The old participants ( $M = 6.06, SD = 1.51$ ) had significantly higher relationship happiness than the young old participants ( $M = 5.87, SD = 1.60; p < .05$ ). There were no significant differences between age groups on reported emotional satisfaction. We refer the reader to Tables 2,3, and 4 for the correlations among primary variables in these three samples. In general, all variables of primary interest were significantly linked in the expected direction, except that sexual frequency was not linked with relationship happiness or emotional accessibility.

### Multiple-Sample Path Analysis

Our model was tested with the two outcomes, relationship happiness and emotional satisfaction, including several control variables and our primary predictor variables of sexual frequency and sexual pleasure, the main effect of our moderating variable emotional accessibility, and two interaction terms of emotional accessibility $\times$ physical pleasure and emotional accessibility $\times$ sexual frequency. This model was tested with three samples simultaneously with the newly old (57-64), young old (65-74) and old (75-85). The error variances of the two outcomes variables were correlated which resulted in a just identified model, meaning there were no model indices to report due to no misfit between the specified model and the covariance matrix.

**Newly old (age 57-64).** Several predictor and control variables were significantly linked with relationship happiness. Higher scores on physical pleasure were significantly associated with higher scores on relationship happiness ( $b = .37, p < .001, \beta = .31$ ). Higher scores on

emotional accessibility were also significantly associated with higher scores on relationship happiness ( $b = .34, p < .001, \beta = .28$ ). Participants who self-identified as African American were significantly lower on relationship happiness than other participants ( $b = -.35, p < .01, \beta = -.10$ ). Participants who identified their partner to be more critical of them were significantly associated with lower relationship happiness ( $b = -.24, p < .001, \beta = -.13$ ). Participants who self-reported more favorable mental/emotional health were associated with significantly higher scores on relationship happiness ( $b = .15, p < .01, \beta = .12$ ). None of the other control variables were significantly linked with relationship happiness. The predictors in this model explained 30% of the variation in relationship happiness.

In addition, several predictor and control variables were also significantly linked with emotional satisfaction in the relationship among the newly old participants. Higher scores on physical pleasure were strongly associated with higher scores on emotional satisfaction ( $b = .62, p < .001, \beta = .71$ ). Higher scores on emotional accessibility were significantly associated with a higher score on emotional satisfaction ( $b = .23, p < .001, \beta = .26$ ). Like relationship happiness, participants who identified their partner to be more critical of them were significantly associated with a lower score on emotional accessibility ( $b = -.10, p < .01, \beta = -.07$ ). Participants who self-reported higher mental/emotional health were associated with significantly higher scores on emotional accessibility ( $b = .08, p < .01, \beta = .09$ ). The predictors in this model explained 57% of the variation in emotional satisfaction.

**Young old (age 65-74).** Next, these same associations were tested, but within the sample of participants identified as young olds, between the ages of 65 and 74. Higher scores on physical pleasure were significantly linked with higher scores on relationship happiness ( $b = .28, p < .001, \beta = .25$ ). Higher scores on emotional accessibility were significantly associated with

higher scores on relationship happiness ( $b = .36, p < .001, \beta = .31$ ). Emotional accessibility significantly moderated the association between physical pleasure and relationship happiness ( $b = -.19, p < .001, \beta = -.17$ ). This interaction is plotted in Figure 1, where we see that even in the contexts of very low (i.e., 1 SD low) physical pleasure, when older adults reported high emotional accessibility (i.e., 1 SD high) they tended to report high relationship happiness. Perhaps surprisingly, couples with very low physical pleasure but with high emotional happiness reported marginally higher relationship happiness than couples with very high physical pleasure but low in emotional accessibility. Participants who self-identified as African American were associated with a significantly lower score on relationship happiness than other participants ( $b = -.67, p < .001, \beta = -.19$ ). Participants who identified their partner to be more critical of them were associated with a significantly lower score on relationship happiness ( $b = -.29, p < .001, \beta = -.17$ ). Participants who self-reported better physical health were significantly associated with a lower score on relationship happiness ( $b = -.10, p < .05, \beta = -.09$ ). The predictors in this model explained 31% of the variation in relationship happiness.

Considering the outcome of emotional satisfaction, higher scores on physical pleasure were significantly associated with higher scores on emotional satisfaction ( $b = .47, p < .001, \beta = .60$ ). Higher scores on emotional accessibility were significantly associated with higher scores on emotional satisfaction ( $b = .23, p < .001, \beta = .29$ ). Emotional accessibility significantly moderated the association between sexual frequency and emotional satisfaction ( $b = -.07, p < .01, \beta = -.09$ ). Interestingly, as seen in Figure 2, the condition where emotional satisfaction was highest was when couples experienced very low sexual frequency and experienced very high emotional accessibility. Regardless of levels of sexual frequency, when partners were more emotionally accessible, they were higher in emotional satisfaction in their relationships.

Participants who reported sexual intercourse to be more important were significantly associated with higher scores on emotional satisfaction ( $b = .09, p < .05, \beta = .11$ ). Participants who identified their partner to be more critical of them were associated with significantly lower scores on emotional satisfaction ( $b = -.12, p < .05, \beta = -.10$ ). Participants who self-reported higher mental/emotional health were significantly associated with higher scores on emotional accessibility ( $b = .11, p < .001, \beta = .13$ ). Participants who self-reported as more physically healthy were significantly associated with lower scores on emotional satisfaction ( $b = -.06, p < .05, \beta = -.08$ ). The predictors in this model explained 52% of the variation in emotional satisfaction.

**Old (age 75-85).** Among the old participants, higher scores on physical pleasure were associated with higher scores on relationship happiness ( $b = .38, p < .001, \beta = .41$ ). Participants who reported higher scores on emotional accessibility were significantly associated with higher scores on relationship happiness ( $b = .19, p < .05, \beta = .22$ ). For this age group, two control variables were significant. Participants who reported their partner to be more critical of them were significantly lower in relationship happiness ( $b = -.34, p < .01, \beta = -.23$ ). Participants who reported having more sexual challenges were significantly lower in relationship happiness ( $b = -.11, p < .05, \beta = -.15$ ). The predictors in this model explained 31% of the variation in relationship happiness.

Considering the outcome emotional satisfaction, higher scores on physical pleasure were associated with higher scores on emotional satisfaction ( $b = .31, p < .001, \beta = .41$ ). Higher scores on emotional accessibility were significantly associated with higher scores on emotional satisfaction ( $b = .16, p < .05, \beta = .21$ ). Emotional accessibility significantly moderated the association between physical pleasure and emotional satisfaction ( $b = .15, p < .05, \beta = .20$ ). As

seen in Figure 3, in the context of very low physical pleasure, there were almost identical scores on emotional satisfaction, regardless of emotional accessibility. However, in the contexts of high physical pleasure, couples were notably higher in emotional satisfaction when partners were high in emotional accessibility. Thus, within old adults (age 75-85), emotional accessibility is only a protective factor for relationships in the contexts of high physical pleasure, and was not substantively linked with higher emotional satisfaction in the contexts of low physical pleasure. The only control variable that was significant was participants who reported their partner to be more critical of them were significantly lower in emotional satisfaction ( $b = -.25, p < .01, \beta = -.20$ ). The predictors in this model explained 37% of the variation in emotional satisfaction.

**Chi-square difference test.** All associations between variables of interest in this model were tested for differences in the magnitude of the associations between the three different age groups. Most were not significantly different in magnitude by age group, but five notable paths did significantly vary (e.g., were moderated by) age group. First, the association between physical pleasure and emotional satisfaction was significantly larger for the newly old age group compared to the old age group.  $\Delta\chi^2(1) = 19.00, p < .05$ . Second, the association between physical pleasure and emotional satisfaction was significantly larger for the newly old age group compared to the young old age group  $\Delta\chi^2(1) = 7.72, p < .05$ . Third, the association between physical pleasure and emotional satisfaction was significantly larger for the young old age group compared to the old age group  $\Delta\chi^2(1) = 6.32, p < .05$ . Fourth, in what can be conceptualized as a three-way-interaction, emotional accessibility significantly moderated the association between sexual frequency and emotional satisfaction to a greater extent for the newly old than the young old  $\Delta\chi^2(1) = 7.45, p < .05$ . Fifth, another three-way-interaction, emotional accessibility significantly moderated the effect between physical pleasure and relationship happiness to a

greater extent for the old than the young old  $\Delta\chi^2(1) = 4.52, p < .05$ . All other main effects did not significantly vary in magnitude in age groups.

## Chapter 5 - Discussion

This study sought to define to what extent the emotional quality of a relationship might moderate the impact that the sexual nature of the relationship has on relationship outcomes for older adults. This was tested simultaneously within three separate age groups: the newly old (57-64), young old (65-74) and old (75-85). Across each age group, greater physical pleasure in the relationship was consistently linked with higher relationship happiness and emotional satisfaction—consistent with our hypotheses. Across each age group, greater emotional accessibility of each partner was also consistently linked with higher relationship happiness and emotional satisfaction—consistent with our expectation. Contrary to expectations, sexual frequency was not linked with relationship happiness or emotional satisfaction for any age group, while controlling for several aspects of the nature of the sexual and emotional climate of the relationship. In several cases, emotional accessibility of a partner significantly moderated the associations between the sexual nature of the relationship and the quality of those relationships, meaning that even in the context of sexual challenges, if a partner was more emotionally accessible their relationship quality remained high. In general, the majority of these tested associations did not differ in magnitude by age group; however, where differences did occur the general direction of effects was for younger couples to have a stronger association between physical pleasure and emotional satisfaction compared to older couples, and for the moderating effects of emotional accessibility to likewise be stronger for younger couples than older couples.

This study used the vulnerability-stress-adaptation model to hypothesize how emotional accessibility could improve the relationship outcomes for older adults. In our study, vulnerability was conceptualized as the challenges associated with aging, whereas stress was conceptualized as challenges and changes in the sexual relationship that may be manifested as physical pleasure



and sexual frequency, whereas adaptation was conceptualized as emotional accessibility. Our results indicated that emotional accessibility—the ability to rely upon and be open with one’s partner—did moderate the impact (i.e., serve as an effective adaptation) of lower physical pleasure and sexual frequency on relationship happiness and emotional satisfaction.

Physical pleasure among older adults was consistently and closely connected to relationship happiness and emotional satisfaction. This adds onto the existing literature in that these outcomes are found among older adults. We speculate that potential reasons physical pleasure may be so important for relationships is that as we age we care more about the quality of the sexual interaction versus the frequency of sex as an indicator of how connected the relationship is. What physical pleasure means for a 65 year old, 75 year old, and 85 year old may be slightly different, but what was consistent across age groups was physical pleasure was closely related to both outcomes of relationship happiness and emotional accessibility. Theoretically, physical pleasure appears to be an important way couples adapt to stressors of life and aging.

Emotional accessibility was also consistently and closely connected to relationship happiness and emotional satisfaction. This is similar with existing research with younger couples which has found that the emotional intimacy and accessibility in the relationship predicted relationship happiness (Yoo et al., 2014; Knapp et al., 2016). Additionally, it is consistent with research that has shown the emotional quality of the relationship is linked with lower depression and anxiety in the context of higher levels of functional disability (Mancini & Bonanno, 2006). Carstensen, Gottman, & Levenson (1995) found that older couples expressed less negativity towards each other and more affection when resolving conflict than their younger counter parts. This improved emotional climate during conflict likely contributes to higher emotional

satisfaction and relationship happiness within older adults. The current study expands what is known about emotional accessibility in older couples by highlighting the degree to which accessibility can change the impact the sexual nature has on the relationship outcomes. We speculate that emotional accessibility may be important for older couples by serving as a way for couples to improve their relationship and connection despite experiencing change in the sexual intimacy of the relationship.

Interestingly, in several cases, emotional accessibility also served as a moderator, or in other words, a protective factor that significantly reduced the risk of sexual challenges to relationship quality when couples were more emotionally accessible to one another. This is relevant because for some older adults they may have a change in the perception of the relationship due to physical decline or sexual dysfunction. However, this suggests that even in the context of reduced sexual activity or quality, a strong sense of emotional accessibility between partners can counteract the expected negative effect on couple relationships.

It is interesting to note that sexual frequency was not linked with relationship outcomes in older adults, while taking into account physical pleasure, emotional accessibility, and hostile criticism. This is contrary to substantial existing literature that has found that sexual frequency is linked with relationship happiness in younger couples (Fisher, 2010; Gillespie, 2017; Peplau, Fingerhut, & Beals, 2004). Potential reasons for this difference in older adults may be that in younger ages sexual frequency is used to maintain feelings of connection in the relationship and possibly reduce anxiety (Schnarch, 2009). Whereas, in older years, couples may feel more secure in their relationship and a satisfying sex life may be more focused more on the quality of the sexual experience opposed to the frequency of sexual experience.

## **Clinical Implications**

Marriage and family therapists have an important role to play in helping older adults in their relationships. Adults over the age of 50 are getting divorced at twice the rate they were in 1990 (Stepler, 2017). Mental health professionals need to be well-trained in working with older adults, and particularly in the area of sex and sexuality within older couples. In the U.S., sexual health among older adults has often been dismissed due to sociocultural values that associate youth with sexuality (Kane, 2008). When sexuality and sexual behaviors in older adults are addressed, often it is from a dysfunction or biomedical approach. This lens limits how physical and mental health providers intervene with older adults. Couple therapists should be comfortable in assessing and discussing changes to their sexual relationship, and clinically working with the cognitions, attributions, emotions, and behaviors involved in the cycles of older couples' patterns of interaction.

Based on our results, several clinical implications are relevant for marriage and family therapists. First, physical pleasure should be assessed and discussed in therapy to address any changes the clients have recently experienced and how they make sense of those changes. By doing so the therapist can gain an understanding of how internalized the client feels the problem is. For example, the therapist could assess for what the client believes it says about them and what they believe it says about the relationship. Second, emotional accessibility should be a focus of treatment because it is linked with higher relationship quality and can also act as a counter-balance to challenges in the sexual relationship. Emotional accessibility is a modifiable factor in therapy (Schnarch, 2009). This means a client who might worry about the impact on the relationship from a change in their sex life can feel more confident knowing there are other outlets for connection, through emotional accessibility. For many couples sex is about

connecting. Some couples use sex as an indicator for how connected and secure they are. For these couples, age related decline and challenges might be particularly difficulty to cope with. In this case, using emotional accessibility as a tool for staying connected and happy in the relationship has the potential to be very important.

I suggest the first strategy for increasing emotional accessibility is to assess for how open the couple can be with each other and if they feel like they can rely on each other. To address for openness, a therapist could ask about how much the partners are able to share with each other and why that is. For relying, I suggest talking with the client about how supported they feel by each other. In some cases, this might be both physical and emotional support. This suggestion comes from the questions used as the measurements of accessibility in our study. One challenge to this suggestion is that heavily focusing on the emotional piece of the relationship might be new and at times uncomfortable to the couple. I believe there is room for growth and change well in to late life. Thus, I suggest validating with client that this new approach to connection might feel difficult but it has the potential for great outcomes and newness in the relationship.

Lastly, I would like to note the importance of knowing the foundations of gerontology when working with older adults. Like any underserved population, it is critical that the therapist is well versed on common problem felt by the population and common misconceptions by the lay public. While it is not necessary to know all research, it is important to be sufficiently aware that a lapse in knowledge does not impact the clients feeling understood.

### **Strengths and Limitations**

These results provide a unique contribution to the current literature on sexuality and aging. Strengths of this study include the large diverse sample, tested uniquely within different older couple age groups, and the key finding that emotional accessibility can buffer the effects of

aging on the sexual relationship. Much of the current literature around older adult's sexuality dispels the myth that older adults are asexual or significantly less sexually active (Forbes, Eaton, & Krueger, 2016; Herbenick et al., 2010; Lindau et al., 2007). However, existing literature is less clear on the salience of physical pleasure, and sexual frequency in older adults, and what couples can do to improve their relationships even in the contexts of sexual challenges. Our study clarifies these factors. We found that physical pleasure is highly salient and relevant to understanding relationship quality among older adults, sexual frequency is not salient when also considering physical pleasure, and that emotional accessibility of a partner can counteract potential detrimental effects from sexual challenges in the relationship. Although sexual quality of life tends to decline with age, this decline can be modified through changes in routine, behaviors, and types of sexual intimacy (Forbes et al., 2016). Our results support this and Forbes and colleague's (2016) theory of sexual wisdom which proposes that as we age, we become more sexually wise due to accumulation of skill and knowledge on how to get important needs met. Using sexual wisdom and other modifiable tools such as emotional accessibility, the overall quality of the relationship can still be improved. This study contributes to the literature that the physical pleasure felt while being intimate is more important than the frequency of sexual behavior. By focusing more on the enjoyment of the sexual experience, it is possible that the age-related sexual declines a couple may experience can have less of an impact on their relationship outcomes. Based off my results I also believe it is important for therapists to pay attention to how critical partners are of each other in these older years. Across each age group, participants who reported their partner to be more critical of them also reported much lower relationship happiness and emotional satisfaction. These results expand on Peterson and Smith's (2010) results that one partner's criticism was strongly related to the other partner showing depressive symptoms. Our

results expand on how partner criticism can have an impact on not only an intrapersonal level, but also the relationship outcomes.

Several important limitations of this study should be addressed. Methodological limitations include only using data from only one partner, at single time point, and relying wholly on self-report. Masturbation is a common sexual expression throughout the lifespan and is shown to be frequently used as partnered sexual intimacy in older age (Herbenick et al., 2010). In our sample, sexual frequency was assessed using self-reports of the number of time the participant “had sex” in the past 12 months. This type of language typically implies penetrative sexual intercourse. This is limiting because many older adults use partnered masturbation as a sexual act, but these results are not inclusive of those behaviors, thus limiting our measurement precision on sexual frequency. Next, our sample of participants consisted of primarily heterosexual relationships. Due to this limitation, these results are not generalizable to people who hold a minority sexual orientation status. Additional limitations of these results include that lack of long-term care or assisted living participants. In assisted living or long-term care there can be additional restriction such as lack of privacy or autonomy that could have a potential impact on intimate relationships. All of the participants were single family home dwelling and thus it is not clear to what extent these results can be generalized to older adults who are living in more communal care facilities. Finally, an important factor that was not included in this study was the duration of the committed relationship. Future research should address to what extent these findings apply to older adults who have recently entered into a new relationship in comparison with couples in long-term relationships.

## **Conclusion**

Studying and helping older adult couples is important because although we may get older and wiser, relational problems do still exist. Important implications from this study include addressing the emotional closeness in the relationship as a front line approach for older adult couples who are experiencing changes in their sexual relationship. The sex life for older adults is important: Older adults are not asexual or without sexual desire. Many older adults hope to stay physically and emotionally connected through intimacy throughout their entire life. Our results suggest this can be done despite the changes in the sexual relationship that might occur. It is important that both older adults and health professionals alike know that although the sexual relationship may change, it is often important for older adults to be physically and sexually active as an important piece of their relationship happiness.

## References

- Brody, S., & Costa, R. M. (2009). Satisfaction (sexual, life, relationship, and mental health) is associated directly with penile-vaginal intercourse, but inversely with other sexual behavior frequencies. *Journal of Sexual Medicine, 6*(7), 1947-1954.  
doi:<http://dx.doi.org.er.lib.k-state.edu/10.1111/j.1743-6109.2009.01303.x>
- Call, V., Sprecher, S., & Schwartz, P. (1995). The incidence and frequency of marital sex in a national sample. *Journal of Marriage and the Family, 57*, 639-650.
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging, 10*(1), 140-149. <http://dx.doi.org.er.lib.k-state.edu/10.1037/0882-7974.10.1.140> Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/614350614?accountid=11789>
- Chao, J., Lin, Y., Ma, M., Lai, C., Ku, Y., Kuo, W., & Chao, I. (2011). Relationship among sexual desire, sexual satisfaction, and quality of life in middle-aged and older adults. *Journal of Sex & Marital Therapy, 37*(5), 386-403. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1080/0092623X.2011.607051>
- Christopher, F. S., & Sprecher, S. (2000). Sexuality in Marriage, Dating, and Other Relationships: A Decade Review. *Journal of Marriage and Family, 62*(4), 999-1017.  
doi:[10.1111/j.1741-3737.2000.00999.x](http://dx.doi.org.er.lib.k-state.edu/10.1111/j.1741-3737.2000.00999.x)
- DeLamater, J., & Moorman, S. M. (2007). Sexual behavior in later life. *Journal of Aging and Health, 19*(6), 921-945. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1177/0898264307308342>



- Doss, B. D., Simpson, L. E., & Christensen, A. (2004). Why do couples seek marital therapy? *Professional Psychology: Research and Practice*, 35(6), 608-614.  
doi:<http://dx.doi.org.er.lib.k-state.edu/10.1037/0735-7028.35.6.608>
- Fallis, E. E., Rehman, U. S., Woody, E. Z., & Purdon, C. (2016). The longitudinal association of relationship satisfaction and sexual satisfaction in long-term relationships. *Journal of Family Psychology*, 30(7), 822-831. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1037/fam0000205>
- Fisher, W. A., Rosen, R. C., Eardley, I., Sand, M., & Goldstein, I. (2005). Sexual experience of female partners of men with erectile dysfunction: The female experience of men's attitudes to life events and sexuality (FEMALES) study. *Journal of Sexual Medicine*, 2(5), 675-684. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1111/j.1743-6109.2005.00118.x>
- Fisher L. Washington: American Association of Retired Persons; 2010. [cited 2017 Sept 20].  
Sex, romance, and relationships: AARP survey of midlife and older adults. Also available from: URL: [http://www.aarp.org/relationships/love-sex/info-05-2010/srr\\_09.html](http://www.aarp.org/relationships/love-sex/info-05-2010/srr_09.html).
- Forbes, M. K., Eaton, N. R., & Krueger, R. F. (2016). Sexual Quality of Life and Aging: A Prospective Study of a Nationally Representative Sample. *The Journal of Sex Research*, 54(2), 137-148. doi:10.1080/00224499.2016.1233315
- Gillespie, B. J. (2017). Sexual synchronicity and communication among partnered older adults. *Journal of Sex & Marital Therapy*, 43(5), 441-455. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1080/0092623X.2016.1182826>
- Heiman, J. R., Long, J. S., Smith, S. N., Fisher, W. A., Sand, M. S., & Rosen, R. C. (2011). Sexual satisfaction and relationship happiness in midlife and older couples in five

- countries. *Archives of Sexual Behavior*, 40(4), 741-753. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1007/s10508-010-9703-3>
- Herbenick, D., Reece, M., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Sexual behavior in the united states: Results from a national probability sample of men and women ages 14-94. *Journal of Sexual Medicine*, 7, 255-265. <http://dx.doi.org.er.lib.k-state.edu/10.1111/j.1743-6109.2010.02012.x> Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/761416066?accountid=11789>
- Kane, M. (2008). How are sexual behaviors of older women and older men perceived by human service students? *Social Work Education*, 27(7), 723-743.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. *Psychological Bulletin*, 118(1), 3-34. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1037/0033-2909.118.1.3>
- Knapp, D. J., Durtschi, J. A., Clifford, C. E., Kimmes, J. G., Barros-Gomes, P., & Sandberg, J. (2016). Self-esteem and caregiving in romantic relationships: Self- and partner perceptions. *Personal Relationships*, 23(1), 111-123. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1111/pere.12114>
- Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in the long-term heterosexual relationship: The interpersonal exchange model of sexual satisfaction. *Personal Relationship*, 2, 267-285
- Laumann, E. O., Das, A., & Waite, L. J. (2008). Sexual dysfunction among older adults: Prevalence and risk factors from a nationally representative U.S. probability sample of men and women 57-85 years of age. *Journal of Sexual Medicine*, 5(10), 2300-2311. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1111/j.1743-6109.2008.00974.x>

- Laumann E. O., Gagnon J. H., Michael R.T., Michaels S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago, IL: University of Chicago
- Lindau, S. T., Schumm, L. P., Laumann, E. O., Levinson, W., O'Muirheartaigh, C. A., & Waite, L. J. (2007). A study of sexuality and health among older adults in the united states. *The New England Journal of Medicine*, 357(8), 762-775. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1056/NEJMoa067423>
- Mancini, A. D., & Bonanno, G. A. (2006). Marital closeness, functional disability, and adjustment in late life. *Psychology and Aging*, 21(3), 600-610. doi:10.1037/0882-7974.21.3.600
- Mather, M. (2016, January). Fact Sheet: Aging in the United States. Retrieved September 10, 2017, from <http://www.prb.org/Publications/Media-Guides/2016/aging-unitedstates-fact-sheet.aspx>
- McNulty, J. K., Wenner, C. A., & Fisher, T. D. (2016). Longitudinal associations among relationship satisfaction, sexual satisfaction, and frequency of sex in early marriage. *Archives of Sexual Behavior*, 45(1), 85-97. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1007/s10508-014-0444-6>
- Muthén, L.K. and Muthén, B.O. (1998-2016). Mplus User's Guide. Seventh Edition. Los Angeles, CA: Muthén & Muthén
- Older Adults Health and age-related changes. (2017). Retrieved September 12, 2017, from <http://www.apa.org/pi/aging/resources/guides/older.aspx>
- Patrick, S., Sells, J. N., Giordano, F. G., & Tollerud, T. R. (2007). Intimacy, differentiation, and personality variables as predictors of marital satisfaction. *The Family Journal*, 15(4), 359-367. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1177/1066480707303754>

- Peplau, L. A., Fingerhut, A., & Beals, K. P. (2004). Sexuality in the relationships of lesbians and gay men. In J. H. Harvey, A. Wenzel & S. Sprecher (Eds.), *The handbook of sexuality in close relationships; the handbook of sexuality in close relationships* (pp. 349-369, Chapter x, 686 Pages) Lawrence Erlbaum Associates Publishers, Mahwah, NJ. Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/620377195?accountid=1178>
- Peterson, K. M., & Smith, D. A. (2010). An actor-partner interdependence model of spousal criticism and depression. *Journal of Abnormal Psychology, 119*(3), 555-562. <http://dx.doi.org/10.1037/a0020115> Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/849019479?accountid=11789>
- Swann, W. B., Jr., Rentfrow, P. J., & Gosling, S. D. (2003). The precarious couple effect: Verbally inhibited men + critical, disinhibited women = bad chemistry. *Journal of Personality and Social Psychology, 85*(6), 1095-1106. <http://dx.doi.org.er.lib.k-state.edu/10.1037/0022-3514.85.6.1095> Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/614443537?accountid=11789>
- Schnarch, D. M. (2009). *Passionate marriage: love, sex and intimacy in emotionally committed relationships*. New York: W.W. Norton & Co.
- Sprecher, S., 1998. Social exchange theories and sexuality. *Journal of Sex Research 35*, 32-43
- Speer, D. C., & Schneider, M. G. (2003). Mental health needs of older adults and primary care: Opportunity for interdisciplinary geriatric team practice. *Clinical Psychology: Science and Practice, 10*(1), 85-101. <http://dx.doi.org/10.1093/clipsy/10.1.85> Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/620053860?accountid=11789>
- Stepler, R. (2017, March 09). Led by Baby Boomers, divorce rates climb for America's 50 population. Retrieved April 21, 2017, from <http://www.pewresearch.org/fact-t>

ank/2017/03/09/led-by-baby-boomers-divorce-rates-climb-for-americas-50-population/

- Yeh, H., Lorenz, F. O., Wickrama, K. A. S., Conger, R. D., & Elder, G. H., Jr. (2006). Relationships among sexual satisfaction, marital quality, and marital instability at midlife. *Journal of Family Psychology, 20*(2), 339-343. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1037/0893-3200.20.2.339>
- Yoo, H., Bartle-Haring, S., Day, R. D., & Gangamma, R. (2014). Couple communication, emotional and sexual intimacy, and relationship satisfaction. *Journal of Sex & Marital Therapy, 40*(4), 275-293. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1080/0092623X.2012.751072>
- Young, M., Denny, G., Luquis, R., & Young, T. (1998). Correlates of sexual satisfaction in marriage. *Canadian Journal of Human Sexuality, 7*(2), 115-127. Retrieved from <http://search.proquest.com.er.lib.k-state.edu/docview/619369186?accountid=11789>
- Yucel, D., & Gassanov, M. A. (2010). Exploring actor and partner correlates of sexual satisfaction among married couples. *Social Science Research, 39*(5), 725-738. doi:<http://dx.doi.org.er.lib.k-state.edu/10.1016/j.ssresearch.2009.09.002>

**Table 1***Older Adults Reports of the Sexual and Romantic Quality of their Relationship (N = 3,005)*

Variables	<u>Age 57-64</u>		<u>Age 65-74</u>		<u>Age 75-85</u>		Range
	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	
Male	51.8%	0.50	50.1%	0.50	42.4%	0.52	0 – 1
Sex important	02.90	1.15	02.61	1.25	02.21	1.25	1 – 5
Black	16.2%	0.40	19.4%	0.40	14.9%	0.36	1 – 3
Hispanic	12.40%	0.33	10.4%	0.31	07.3%	0.26	0 – 1
Other	03.00%	0.17	02.4%	0.15	01.6%	0.12	0 – 1
Education	29.20%	0.45	20.3%	0.40	15.3%	0.36	0 – 1
How critical	01.49	0.64	01.57	0.65	01.58	0.68	1 – 3
Sex think	02.48	1.24	02.09	1.35	01.57	1.31	0 – 5
Self-rated mental health	03.78	1.00	03.75	0.98	03.61	0.98	1 – 5
Self-rated physical health	03.34	1.11	03.23	1.11	03.01	1.10	1 – 5
Sex dysfunction	00.97	1.14	01.07	1.07	01.12	1.03	0 – 4
Physical pleasure	03.00	1.00	02.83	1.01	02.84	0.99	0 – 4
Sex frequency	02.17	1.00	02.08	0.96	01.86	0.97	1 – 5
Emotional accessibility	02.79	0.40	02.78	0.40	02.71	0.48	1 – 3
Relationship happiness	05.91	1.53	05.87	1.60	06.06	1.51	1 – 7
Emotional satisfaction	02.90	1.05	02.83	1.00	02.84	0.97	0 – 4

*Note:* Sex important = participant reporting if sex was important to them; How critical = participant reporting how critical partner is of them; Sex think = how often participant thinks about sex.

**Table 2***All Older Adults' Reports of the Sexual and Romantic Quality of their Relationship (N = 3,005)*

Variables	1	2	3	4	5
1. Relationship happiness	–				
2. Emotional satisfaction	.57**	–			
3. Physical pleasure	.46**	.67***	–		
4. Sexual frequency	.05	.15**	.24**	–	
5. Emotional accessibility	.40**	.45**	.34**	.03	–

\*\* $p < .01$ . \* $p < .05$  (two-tailed).

**Table 3**

*Newly-Old (57-64) Age Group Reports of the Sexual and Romantic Quality of their Relationship (N = 1,020)*

Variables	1	2	3	4	5
1. Relationship happiness	–				
2. Emotional satisfaction	.62**	–			
3. Physical pleasure	.49**	.71**	–		
4. Sexual frequency	.04	.13**	.23**	–	
5. Emotional accessibility	.41**	.50**	.38**	.06	–

\*\* $p < .01$ . \* $p < .05$  (two-tailed).



**Table 4**

*Young-Old (65-74) Age Group Reports of the Sexual and Romantic Quality of their Relationship (N = 1,092)*

Variables	1	2	3	4	5
1. Relationship happiness	–				
2. Emotional satisfaction	.53**	–			
3. Physical pleasure	.46**	.66**	–		
4. Sexual frequency	.07	.18**	.24**	–	
5. Emotional accessibility	.37**	.42**	.28**	-.02	–

\*\* $p < .01$ . \* $p < .05$  (two-tailed).

**Table 5**

*Young-Old (75-85) Age Group Reports of the Sexual and Romantic Quality of their Relationship (N = 893)*

Variables	1	2	3	4	5
1. Relationship happiness	–				
2. Emotional satisfaction	.54**	–			
3. Physical pleasure	.45**	.66**	–		
4. Sexual frequency	.07	.17**	.27**	–	
5. Emotional accessibility	.44**	.44**	.34**	.00	–

\*\* $p < .01$ . \* $p < .05$  (two-tailed).

**Table 6**

*Summary of Path Analysis for Variables Predicting Newly-Old Age Group (57-64) Relationship Quality (N = 1,020)*

Variable	Relationship Happiness			Emotional Satisfaction		
	<i>b</i>	<i>SE B</i>	$\beta$	<i>b</i>	<i>SE B</i>	$\beta$
Male	0.15	0.10	.06	0.09	0.06	.05
Sex Important	0.00	0.05	.00	0.03	0.03	.03
Black	-0.35*	0.13	-.10	-0.12	0.08	-.05
Hispanic	0.09	0.14	.02	-0.10	0.08	-.04
Other	-0.08	0.29	-.01	0.17	0.16	.03
Education	-0.15	0.09	-.06	-0.05	0.05	-.03
How Critical	-0.24*	0.07	-.13	-0.10*	0.04	-.07
Sex Think	-0.08	0.05	-.06	-0.03	0.03	-.03
Self MH	0.15*	0.06	.12	0.08*	0.03	.09
Self PH	0.04	0.05	.04	-0.02	0.03	-.02
Sex Challenges	0.02	0.04	.02	-0.00	0.02	-.00
Physical Pleasure	0.37*	0.06	.31	0.62*	0.03	.71
Sex Frequency	-0.03	0.05	-.03	-0.02	0.03	-.04
Emotional Access	0.34*	0.06	.28	0.23*	0.03	.26
EA×Ple	-0.07	0.05	-.06	0.02	0.03	.02
EA×Fre	-0.00	0.05	-.00	0.03	0.03	.03

*Note:* Sex Important = participant reporting if sex was important to them; How Critical = participant reporting how critical partner is of them; Sex think = how often participant thinks about sex; Self MH = Self rated mental health; Self PH = Self rated physical health; Emotional Access = emotional accessibility of the relationship; EA×Ple = Emotional accessibility × physical pleasure; EA×Fre = emotional accessibility × sexual frequency.

\* $p < .05$ . \*\* $p < .01$  (two-tailed).

**Table 7**

*Summary of Path Analysis for Variables Predicting Young-Old Age Group (65-74) Relationship Quality (N = 1,092)*

Variable	Relationship Happiness			Emotional Satisfaction		
	<i>b</i>	<i>SE B</i>	$\beta$	<i>b</i>	<i>SE B</i>	$\beta$
Male	0.10	0.11	.04	0.10	0.06	.06
Sex Important	-0.05	0.06	-.04	0.09*	0.03	.11
Black	-0.67*	0.15	-.19	-0.11	0.09	-.04
Hispanic	-0.13	0.16	-.04	-0.11	0.09	-.04
Other	0.01	0.28	.00	0.06	0.16	.01
Education	-0.04	0.11	-.01	0.05	0.07	.03
How Critical	-0.29*	0.08	-.17	-0.12*	0.04	-.10
Sex Think	0.03	0.06	.03	-0.01	0.03	-.02
Self MH	0.03	0.06	.02	0.11*	0.04	.13
Self PH	-0.10*	0.05	-.09	-0.06*	0.03	-.08
Sex Challenges	-0.01	0.05	-.01	0.04	0.03	.05
Physical Pleasure	0.28*	0.07	.24	0.47*	0.04	.60
Sex Frequency	0.05	0.06	.04	0.04	0.03	.05
Emotional Access	0.36*	0.06	.31	0.23*	0.03	.29
EA×Ple	-0.19*	0.04	-.17	0.03	0.03	.04
EA×Fre	0.03	0.05	.02	-0.07*	0.03	-.09

*Note:* Sex Important = participant reporting if sex was important to them; How Critical = participant reporting how critical partner is of them; Sex think = how often participant thinks about sex; Self MH = Self rated mental health; Self PH = Self rated physical health; Emotional Access = emotional accessibility of the relationship; EA×Ple = Emotional accessibility × physical pleasure; EA×Fre = emotional accessibility × sexual frequency.

\* $p < .05$ . \*\* $p < .01$  (two-tailed).

**Table 8**

*Summary of Path Analysis for Variables Predicting Old Age Group (75-85) Relationship Quality (N = 893)*

Variable	Relationship Happiness			Emotional Satisfaction		
	<i>b</i>	<i>SE B</i>	$\beta$	<i>b</i>	<i>SE B</i>	$\beta$
Male	0.17	0.13	.08	0.01	0.11	.00
Sex Important	-0.09	0.08	-.09	0.08	0.06	.10
Black	0.25	0.20	.08	-0.30	0.17	-.11
Hispanic	0.21	0.23	.06	-0.05	0.19	-.02
Other	0.40	0.38	.07	-0.35	0.32	-.07
Education	-0.28	0.15	-.13	-0.17	0.13	-.09
How Critical	-0.34*	0.10	-.23	-0.25*	0.09	-.20
Sex Think	0.01	0.07	.01	-0.07	0.06	-.10
Self MH	0.02	0.07	.02	0.02	0.06	.03
Self PH	-0.03	0.07	-.03	0.07	0.05	.09
Sex Challenges	-0.11*	0.07	-.15	-0.08	0.05	-.10
Physical Pleasure	0.38*	0.07	.41	0.31*	0.06	.41
Sex Frequency	0.02	0.08	.01	0.04	0.06	.05
Emotional Access	0.19*	0.07	.22	0.16*	0.06	.21
EA X Ple	0.06	0.08	.05	0.15*	0.06	.20
EA X Fre	0.05	0.09	.06	-0.12	0.07	.16

*Note:* Sex Important = participant reporting if sex was important to them; How Critical = participant reporting how critical partner is of them; Sex think = how often participant thinks about sex; Self MH = Self rated mental health; Self PH = Self rated physical health; Emotional Access = emotional accessibility of the relationship; EA×Ple = Emotional accessibility × physical pleasure; EA×Fre = emotional accessibility × sexual frequency.

\* $p < .05$ . \*\* $p < .01$  (two-tailed).

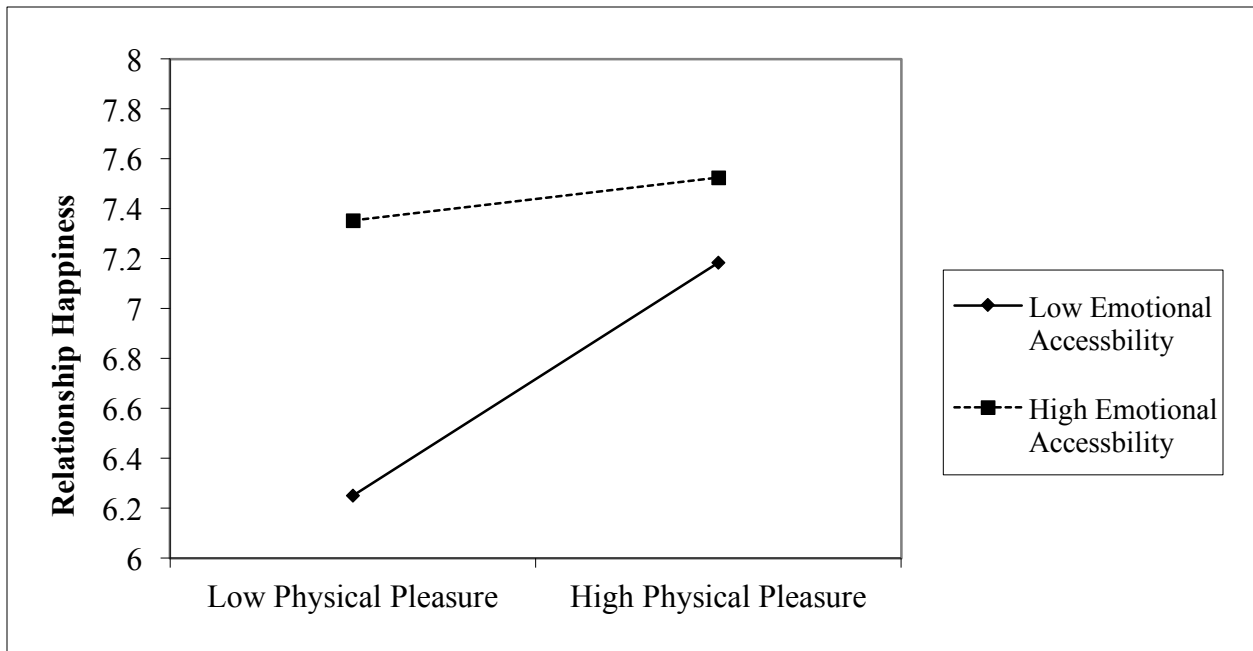
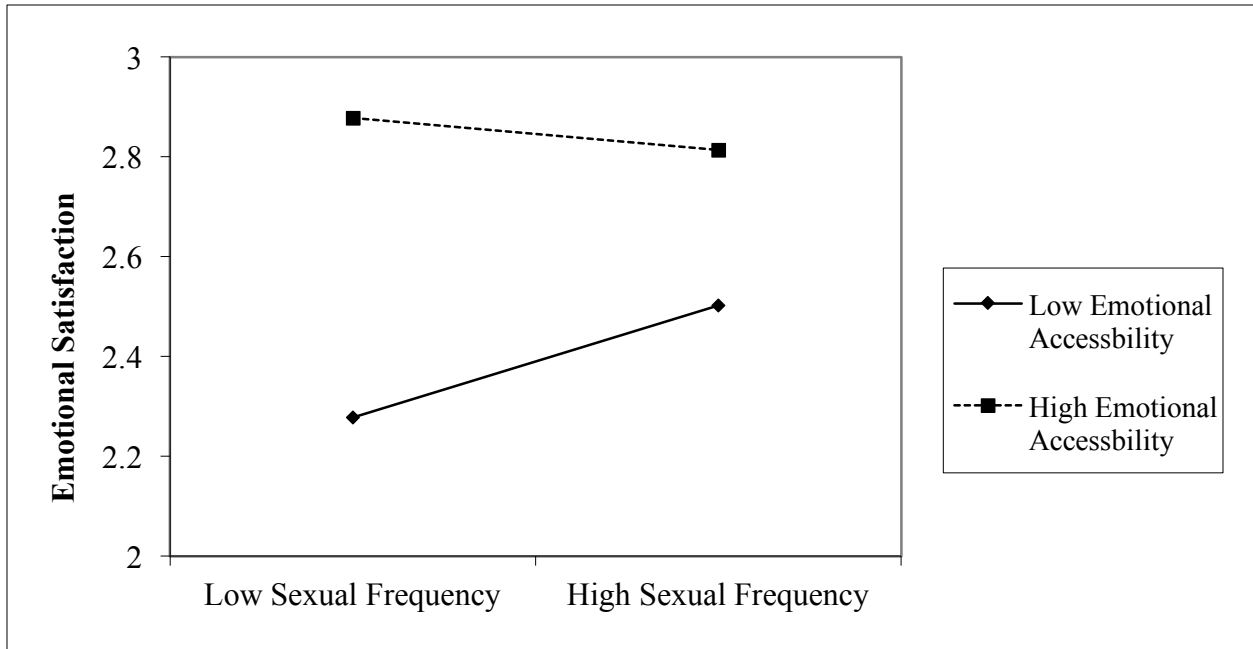


Figure 1. Young Old ( $N = 1,092$ ). Figure showing the significant interaction term for emotional accessibility $\times$ physical pleasure, where emotional accessibility significantly moderates the association between physical pleasure and relationship happiness within the young old sample.



*Figure 2.* Young Old ( $N = 1,092$ ). Figure showing the significant interaction term for emotional accessibility $\times$ sexual frequency, where emotional accessibility significantly moderates the association between sexual frequency and emotional satisfaction within the young old sample.

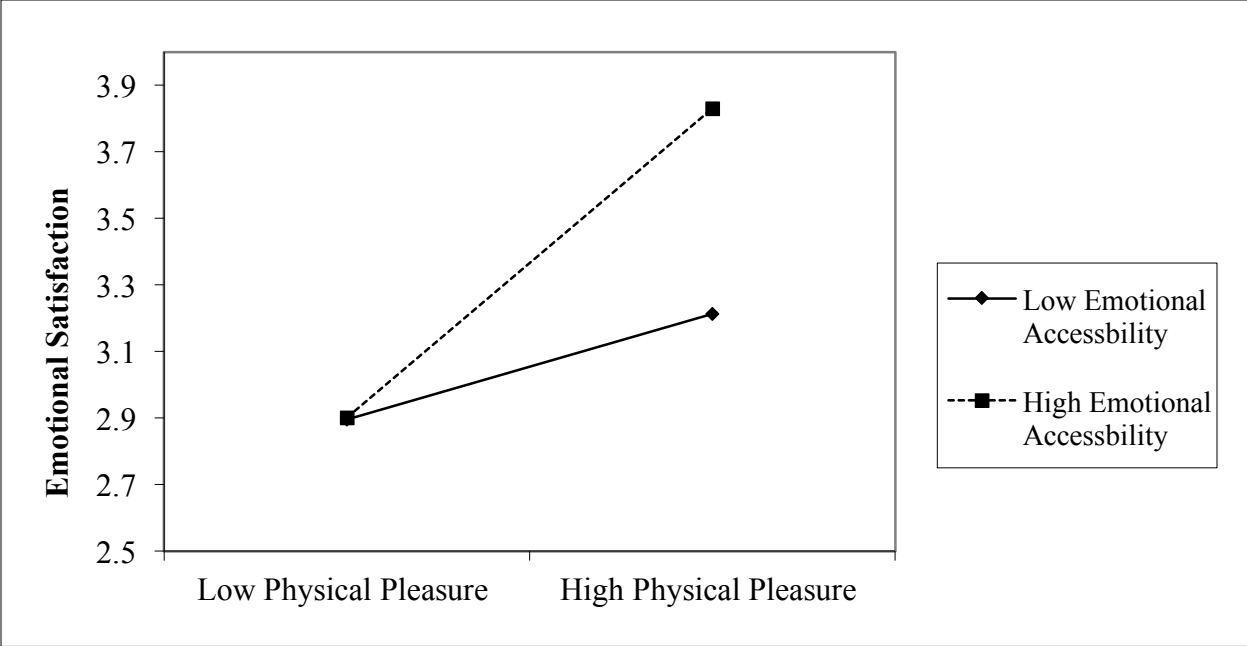


Figure 3. Old (N = 893). Figure showing the significant interaction term for emotional accessibility×physical pleasure, where emotional accessibility significantly moderates the association between physical pleasure and emotional satisfaction within the old sample.