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# Predictors of Marital Satisfaction within an Orthodox Jewish Sample

Hod Tamir  
htami001@fiu.edu

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

PREDICTORS OF MARITAL SATISFACTION WITHIN  
AN ORTHODOX JEWISH SAMPLE

A thesis submitted in partial fulfillment of the

requirements for the degree of

MASTER OF SCIENCE

in

PSYCHOLOGY

by

Hod Tamir

2013

To: Dean Kenneth G. Furton  
College of Arts and Sciences

This thesis, written by Hod Tamir, and entitled Predictors of Marital Satisfaction within an Orthodox Jewish Sample, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this thesis and recommend that it be approved.

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Dionne Stephens

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Gordon Finley

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Mary J. Levitt, Major Professor

Date of Defense: March 28, 2013

The dissertation of Hod Tamir is approved.

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Dean Kenneth G. Furton  
College of Arts and Sciences

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Dean Lakshmi N. Reddi  
University Graduate School

Florida International University, 2013

## DEDICATION

To quote N.R. Hanson “All data are theory laden”. My work on marital satisfaction has not only been a professional undertaking but a personal endeavor. I would like to dedicate this work to my wife Chaya for providing me with the support and courage to pursue my dreams, and to my children, Rivka, Daniel, and Noam, for infusing my life with joy, passion, and zeal.

## ACKNOWLEDGMENTS

This paper could not have been possible without the assistance and support of Dr. Levitt, whose consistent encouragement and patience enhanced the privilege of working together. I would also like to thank my committee members, Dr. Finley and Dr. Stephens for their invaluable insight.

ABSTRACT OF THE THESIS  
PREDICTORS OF MARITAL SATISFACTION WITHIN  
AN ORTHODOX JEWISH SAMPLE

by

Hod Tamir

Florida International University, 2013

Miami, Florida

Professor Mary J. Levitt, Major Professor

Romantic experiences in adolescence have been found to predict relationship stability and marital status in adulthood. Religious practice and belief also have been linked to many benefits, including increased marital satisfaction and overall wellbeing. However, certain religions limit cross-gender interaction in areas of education, social interaction, and romantic relationships. Although gender segregation has been studied in educational and occupational contexts, no previous research has addressed religious gender segregation and its impact on relationship development, marital satisfaction, and overall wellbeing. The present study addressed the generalizability of data on cross-gender experience derived from normative populations to a religious subculture, outlining predictors for marital satisfaction and wellbeing in an Orthodox Jewish sample. Results showed some similarities between normative populations and the unique Orthodox Jewish culture represented by the study sample. However factors such as cross gender experience also illustrated divergent paths and outcomes for this sample. This study demonstrates the influence of societal norms and the importance of addressing cultural context when evaluating marital satisfaction.

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## I. INTRODUCTION

An increasing body of literature has emerged with a focus on adolescent development and the transition into adulthood. Over the last three decades, the surge in adolescent research has uncovered several aspects that are important developmental stepping-stones into adulthood, including social relationships. Bowlby's (1982) attachment theory focused on infancy and child-caregiver attachment patterns as predictors for future development. More recently, many studies have surfaced addressing attachment and dyadic experiences in childhood and adolescence as predictors of adult social and romantic relationships. In general, the literature has shown positive effects of peer relationships and romantic experiences. Positive romantic experience in adolescence has been linked with positive outcomes in romantic and marital relationships in adulthood (Meier & Allen, 2009).

Religion and spirituality is another area of research that is increasingly expanding. Despite theoretical assertions by early leaders in psychology that religiosity exacerbates symptoms of anxiety (e.g., Ellis, 1988; Eysenck, 1981; Freud 1943), the majority of empirical studies over the past four decades have indicated that greater basic religious observance such as church attendance and religious study are associated with decreased anxiety (Koenig, Ford, George, Blazer, & Meador, 1993; Williams, Larson, Buckler, Heckmann, & Pyle, 1991). Religious practices have also been linked to enhanced levels of coping with life struggles (see Myleme, Koenig, Hays, Eme-Akwari, & Pargament, 2001 for a review), and decreased post-traumatic stress symptoms (Graham-Bermann, DeVoe, Mattis, Lynch, & Thomas, 2006; Watlington & Murphy, 2006). Religiosity is



also a predictor of marital and relationship satisfaction. Relationship satisfaction and marital stability have consistently been associated with religious practice and beliefs (Call & Heaton, 1997)

However, a common aspect in religious communities, particularly in Eastern religions, is gender segregation, often spanning across educational, social, and romantic experiences. Although many studies have been addressed to gender segregation in relation to education and occupation, few researchers have addressed gender segregation phenomenon within a religious context.

Thus, based on literature regarding the general population, cross-gender interaction is an important component to experiencing and developing social and romantic relationships. Conversely, limiting such interaction may generate negative outcomes for relationship stability and marital satisfaction. However, the social context in which these experiences occur must be considered in achieving a general understanding of the literature. Mitigating factors, such as religious practice and support, may perhaps offset limited social and romantic experiences in religious communities.

The present study addressed variations in cross-gender experiences and the relation of cross-gender experience to marital satisfaction and well-being in an Orthodox Jewish sample. Three areas of literature pertinent to the study have been reviewed: (a) attachment and romantic relationships in adolescence, (b) religion and wellbeing, and (c) gender interaction and segregation.

## II. LITERATURE REVIEW

### *Attachment and Adolescent Romantic Relationships*

Several theories have been proposed to address how adolescent relationships develop and how they fit into existing social structures. Fuhrman and Wehner (1994) devised a behavioral systems approach to adolescent romance within four stages: *affiliative, sexual/reproductive, attachment, and caregiving*. Other theorists (Brown, 1999; Connolly & Goldberg, 1999) have used a phase-based approach with four distinct phases: *Initiation, affiliation, intimacy, and commitment*.

There is considerable overlap between the system and phase approaches to adolescent romantic relationships. Both theories outline a normative pattern for adolescent relationship experience, beginning in early adolescence with group dating, continuing into middle adolescence with increased intimacy and separation from peer groups, and, in late adolescence, the progression towards committed, intimate relationships for longer durations (Seiffge-Krenke, 2003).

Erikson's stage theory (1968) designated key developmental milestones across the lifespan, listing identity formation in adolescence and intimacy in young adulthood. Successfully navigating the adolescent identity crisis is key to developing intimacy in adulthood. Adolescents form romantic relationships, but these tend not to be long term committed partnerships. More recently (Montgomery & Sorell, 1998; Sanderson & Cantor, 1995), research has indicated that romantic experience in adolescence contributes to identity development.

The theory of interpersonal development (Sullivan, 1953) also emphasizes the importance of social relationships, positing that peer relationships become increasingly intimate in adolescence, with romantic relationships merging intimacy and lust to develop loving relationships in late adolescence. The ability to form lasting relationships in adolescence then contributes to adult relationship skills.

Similarly researchers examining adolescent relationships (Collins, Christian, & Hennighausen, 2000; Schmit, 1995) report that positive relations with peers and parents in adolescence predict successful adult romantic relationships. Romantic experiences can be viewed as sequential developmental stages (Feinstein & Ardon, 1973; Mahler, 1972), with adolescent romance serving as a precursor or “practicing” for lasting adult relationships.

Meier and Allen (2009) confirmed the normative trajectory of adolescent romantic relationships specified by Fuhrman and Wehner, (1994), Brown, (1999), and Connolly and Goldberg (1999) progressing from limited experience and interaction to more serious intimate relationships over-time. Notably, Meier and Allen (2009) reported that romantic experience in adolescence is associated with the likelihood of cohabitation in early adulthood, and steady experience (having a steady romantic partner) in adolescence is predictive of marriage in early adulthood. Thus, inter-gender interaction and romantic involvement in adolescence are thought to be important factors in development, especially concerning the establishment of intimate adult relationships. However, as with all normative trajectories, individuals can be expected to deviate from

the outlined steps, especially when these are compounded with social or cultural conditions (Cohen, Kasen, Chen, Hartman & Gordon, 2003).

### *Religion and Well-being*

Aspects of religion have been associated both with general well-being and with marital satisfaction. Furthermore, marital satisfaction is linked to other positive outcomes, including quality of parenting and personal adjustment. Literature relevant to these areas is reviewed in this section.

*Religion and general well-being.* Positive qualities of religion have been reported in numerous studies. Religion has been associated with various health benefits, including physical and mental health (Koenig, McCullough, & Larson, 2001), the ability to cope with life difficulties (Hill & Pargament, 2003), and lower intake of alcoholic beverages amongst middle adults (Bazargan, Sherkat, & Bazargan, 2004) as well as older adults (Krause, 1991). A study evaluating church attendance documented exercise and physical activities at two time points (1965 and 1994). Regular attendees (at baseline) were more likely to exercise regularly 30 years later (Strawbridge, Shema, Cohen, & Kaplan, 2001).

Numerous studies have shown a negative association between religiousness and number of sexual partners and frequency of sexual encounters (Koenig, McCullough, & Larson 2001; Paul, Fitzjohn, Eberhart-Phillips, Herbison, & Dickson, 2000; Poulson, Eppler, Satterwhite, Wuensch, & Bass, 1998; Thornton & Camburn, 1989). Religion effectively serves as a buffer for risk-behavior amongst adolescents and emerging adults. Studies have also highlighted an association between religiosity and academic achievement in elementary school children (Schottenbauer, Spernak, & Hellstrom, 2007),

as well as with Black and Hispanic high school students (Jeynes, 2003), despite unfounded assertions that the religious demographic is less academically adept than their non-religious counterparts (Decter, 1995; Olasky, 1988).

*Religion and marital satisfaction.* Religion has also been linked with marital stability. In a national survey of 4,587 married couples, results showed that when spouses regularly attended church together, they had the lowest risk of divorce among all married groups (Call & Heaton, 1997). Other studies have found that religious involvement is an important predictor of marital satisfaction, commitment, happiness, and adjustment (Hansen, 1992; Robinson, 1994). Indeed, religious involvement is a consistent predictor of long-term marriage (Kaslow & Robison, 1996; Robinson & Blanton, 1993).

Marital satisfaction has also been positively correlated with religious involvement (Call & Heaton 1997; Christiano, 2000; Lehrer, 2004 and Wilcox, 2004). Although many studies have included participants largely from Catholic and Protestant groups, some investigations have also found a relationship between religious practices and marital satisfaction among religious Jews (Kaufman, 1991), Muslims, and Mormons (Dollahite & Marks, 2005).

Studies have also reported greater subjective well-being among married persons than in never married or previously married individuals (Glenn & Weaver, 1979; Gove, Style, & Hughes, 1990; Mastekaasa, 1994; Veenhoven, 1984). Numerous reasons for why married participants report greater well-being have been offered. Marriage affords providing companionship (Glenn, 1975) and confiding in spouse, thus lessening stress and increasing ability to cope (Gove et al, 1990). It may also provide couples with a

positive identity (Gove & Umberson, 1985). Emotional support that is associated with marriage is also connected with well-being (Williams, 1988).

Additionally, marital satisfaction is associated with positive parenting (Easterbrooks & Emde, 1988), whereas marital discord is associated with negative parenting (Fauber, Forehand, Thomas, & Wierson, 1990; Webster-Stratton, 1989). Marital satisfaction plays an important role in creating a positive environment for children to develop and grow. Parents who attend church are more likely to be a part of their child's education (Clydesdale, 1997). Religious service attendance is also correlated with warm styles of parenting (Wilcox, 1998), improvements in quality of mother-child relationship (Pearce & Axinn, 1998) and father's expression of affection (Bartkowski & Xu, 2000). Yet, since the 1960's, the percentage of children born out of wedlock rose from 7% to 41%, with out of wedlock births occurring nearly six times as often. With cohabitation contributing to a significant fraction of births, the institution of marriage itself has been questioned.

Although studies report both positive and negative attributes of marriage, marriage-advocates highlight the numerous benefits associated with marriage as mentioned above. Religion generally encourages marriage and discourages sexual relationships outside of wedlock. However, although studies often underscore the positive connection between religion and marriage, there are some studies that report the opposite. One such study showed religion to promote marital satisfaction when the couple was in good health, but religion seemed to diminish marital satisfaction when psychological problems were present (Sullivan, 2001). Nevertheless, the vast majority of

literature has demonstrated positive relationships between marital satisfaction, religion, and overall wellbeing.

### *Gender Interaction and Segregation*

The phenomenon of voluntary sex segregation or gender-cleavage, described as the tendency to play, socialize, and interact with members of the same gender, has been reported in the literature as early as 1932 (Challman, 1932). Gender-cleavage is consistent cross-culturally (Belle, 1989; Gottman, 1986). It is acknowledged in the social-learning model, based on divergent behavioral styles across genders (Maccoby, 1994). It is especially common in younger children and lessens considerably in early adulthood (Maccoby, 1998; Powlishta, 1995). In late adolescence and early adulthood, cross gender friendships and romantic relationships grow increasingly (Sullivan, 1953) as individuals engage in dyadic relationships, signified as the Intimacy versus Isolation stage in Erikson's (1968) theory.

Despite the benefits of adolescent romance cited in this review, interaction is often precluded within cultural, ethnic, and religious contexts, little of which is reported in the literature. The majority of studies on gender segregation have focused on the educational setting. These studies are reviewed in this section, followed by a consideration of gender segregation and religion.

*Gender segregation and education.* The majority of studies on gender segregation have focused on the educational setting. Within pre-school education, voluntary gender-segregation is often found (Hoffman & Powlishta, 2001); similarly, in middle and high school this phenomenon is found (Poulin & Pederson, 2007), and it even

extends into higher education (Barone, 2011), although gender segregation in college may be typically more indicative of occupational factors, such as choice of majors or activities dominated by males or females, than personal preferences.

Studies of gender segregation in educational settings have primarily addressed early childhood and elementary school education, looking at peer relationships and academic achievement, with a handful addressing the adolescent and adult populations. The No Child Left Behind Act (NCLB) of 1995 stimulated much interest and pressure to raise academic levels amongst public school students. As teachers and researchers evaluated factors related to learning, class gender composition (separate versus mixed gender) was also assessed.

Studies on the topic are largely inconclusive and offer varying results. Several studies report benefits of single-sex education (Rowe, 2000; Salomone, 2003). Other studies list school culture (Riordan, 1999) and gender bias (Datnow, Hubbard, & Woody, 2001) as greater indicators of academic success.

Barton and Cohen (2004) report the social effects on boys and girls when separated by sex. Boys have shown stronger friendship and improved peer relations in same-gender classrooms, whereas girls in same-gender classrooms have shown more aggression than when in coeducational classrooms. The study did not follow up into later relationships with the opposite sex nor did it evaluate long-term effects on peer-relations, but it did suggest that there are changes in behavioral patterns determined by the inter-gender interaction.



*Gender Segregation and Religion.* In some religious communities, limited inter-gender interaction is normative and institutionalized. Aside from separate gender schooling, social and sexual relationships are limited, largely to encourage matrimonial sanctity and to avoid premarital sexual relations. The present study is focused on one such population that is under-represented in research, the Orthodox Jewish community. Although there are a number of distinct denominations within this community, they can be broadly characterized as falling into one of two categories: Orthodox and Ultra-Orthodox. Jewish Orthodoxy and Ultra-Orthodoxy share more commonality than differences. With regards to Jewish law, ideology, and philosophy they are quite similar in comparison to other established subgroups within Judaism, such as Reform, Conservative, and Reconstructionist (Rosmarin, Pargament, & Mahoney, 2009).

However, within the social context, the Orthodox and Ultra-Orthodox differ greatly. The Orthodox community tends to engage more in their social and ecological environs, sharing many typical experiences of the greater population, such as participating in neighborhood sport leagues, joining extra-curricular clubs, attending college, and dating. The Ultra-Orthodox community tends to be more insular and protective against outside influences. Social norms are more rigid and explicit (El-Or, 1994), effectively creating a distinct society in which the societal norms are markedly different from the surrounding culture.

In what Heilman & Cohen (1989) dub “a contra-acculturative stance” toward the secular world, the Ultra-Orthodox community develops a protective barrier against external influence through internal language, private schools, and different foods.

Watching television, which is a strong conveyer of social norms (Neuman, 1982), is frowned upon. Web-surfing or leisurely use of the Internet is increasingly discouraged. Recreational dating (not for marital purposes) is also highly unusual within this community. Given their insular model, there is a paradigm shift in terms of normative behavior and adjustment within this subgroup.

### The Present Study

As norms of socialization vary across cultures, consideration of cultural variation is necessary when addressing adjustment. Many norms that are encouraged and accepted, and that have proven to be reliable predictors of adjustment within the general population, may not have the same benefit in cultures where such experiences are less normative. As Levitt (Levitt, 1991; Levitt, Coffman, Guacci-Franco, & Loveless, 1994) has proposed, relationship satisfaction and stability are likely to be related not only to prior relationship experience, but also to cultural norms governing relationships.

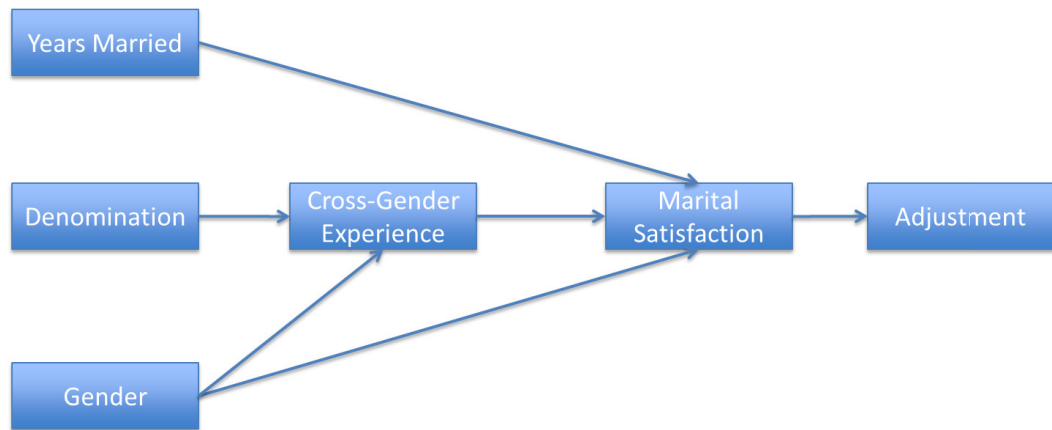
The present study expands a very limited area of research by documenting variation in gender segregation within a religious context and by identifying potential deviations from the general progression of attachment and relationship development outlined in the literature above. It also assesses the generalizability of theories on predictors of marital satisfaction based on research with general populations to an underrepresented religious sample. Finally the study addresses the relation of marital satisfaction to well-being for the Orthodox population.

Specifically, the study draws on survey data collected previously from a population of Orthodox and Ultra-Orthodox Jews containing measures of religious

orientation and practice, gender segregation experiences, marital satisfaction, and psychological adjustment. A structural model of proposed relations among these variables was tested.

The path diagram in Figure 1 includes several predictors for marital satisfaction and adjustment, based on prior findings. Years married and marital satisfaction were expected to have an inverse relationship, as satisfaction has generally been found to decrease with the progression of time (Luckey, 1966; Vaillant & Vaillant, 1993). Also, on the basis of previous findings, gender differences were predicted to be associated with marital satisfaction, with women reporting lower levels of marital satisfaction (Dillaway & Broman, 2001).

Given greater differentiation in gender-related norms in Orthodox populations, gender was also expected to be associated with cross-gender interaction; thus religious denomination (Orthodox versus Ultra-Orthodox) was expected to predict the extent of cross-gender interaction. Cross-gender experience was entered as a predictor of marital satisfaction to determine the extent to which the linkage of these factors theorized in the general population would replicate in these Orthodox groups with limited cross-gender experience. Finally, marital satisfaction was expected to predict adjustment.



*Figure 1. Conceptual model.*

### **III. METHODOLOGY**

#### *Participants and Procedure*

Data collected in 2009 as part of a larger study were used in this secondary data analysis. In total, 250 married Jewish participants were recruited through flyers on university bulletin boards, online social networking sites (such as FaceBook.com), and Jewish social websites (such as ImaMother.com). The series of online questionnaires included an informed consent form. Participants remained anonymous throughout the study. The sample included 213 females and 37 males with an average age of 28.64 years (SD= 6.10) and 15.04 years of education (SD=2.31). All participants identified as religious, with 162 identifying with an Ultra-Orthodox denomination and 88 identifying with an Orthodox denomination. A ten-dollar gift card was awarded to those who completed the survey.

## *Measures*

The measures included two that are widely used to assess psychological adjustment and marital satisfaction, the Depression Anxiety Stress Scales (DASS-21, Lovibond & Lovibond, 1995) and the Dyadic Adjustment Scale (DAS, Spanier, G. B., 1976). Also included were measures of gender segregation and experience, including the Premarital Social Questionnaire (PSQ, see appendix) designed to assess cross-gender experience. Each of the measures is described below.

*Psychological Adjustment/Well-being.* Psychological adjustment was indexed with the Depression Anxiety Stress Scales (DASS-21) (Lovibond & Lovibond, 1995). Participants reported on incidences occurring up to 3 months prior to completing the survey. Sample items include ‘I tended to over-react in situations’; ‘I felt downhearted and blue’; ‘I felt that life was meaningless’. Items are rated on 4-point Likert scale: 0=Did not apply to me at all, 1= applied to me to some degree, or some of the time, 2= Applied to me to a considerable degree, or a good part of the time, 3= Applied to me very much, or most of the time. Higher scores signify higher levels of depression, anxiety and/or stress. Thus, lower scores indicate greater well-being. Internal consistency reliability (Alpha) for the current sample was .90.

*Marital Satisfaction.* The Dyadic Adjustment Scale (DAS, Spanier, 1976) was used to assess marital satisfaction. This 37-item scale included inquiries of the level of agreement between marital partners in matters of ‘Handling finances’, ‘Matters of recreation’, ‘Philosophy of life’, and ‘Career decisions’ using a 6-point Likert scale ranging from “Always agree” to “Always disagree”. A reverse scoring technique was

implemented resulting in higher scores signifying higher satisfaction. Alpha for the current sample was .87.

*Premarital Social Questionnaire (PSQ).* No standardized scale quantifying gender interaction could be accessed; therefore, the PSQ was devised (Tamir & Sacks, manuscript in preparation). The PSQ is a 24 item self-report measure of an individual's amount of interaction with members of the opposite gender during their lifetime prior to becoming married; interactions in four separate domains were assessed: educational, family, social, and dating. The PSQ includes items such as, 'As an adolescent, I had friends of the opposite gender'; 'Before I was married I used email or social networking sites to interact with people of the opposite gender'; 'Before I was married, I spent vacations together with members of my extended family of the opposite gender'. Responses were rated on a five point Likert scale ranging from "Never" to "Very frequently".

Additional questions assessed the type of educational instruction received (same-gender or mixed-gender) and social limitations on inter-gender interaction. For example, participants were asked 'How many siblings do you have of the opposite gender' and 'Have you participated in groups or clubs with members from the opposite gender'. The PSQ total score ranges from 0 to 95, with higher scores indicating higher levels of premarital inter-gender interaction. Cronbach's alpha for the current sample was .91, demonstrating high internal consistency.

#### IV. RESULTS

Means and standard deviations for the study measures can be seen in Table 1.

Table 1. *Means and Standard Deviation of Variables*

Variable	M	SD	Range
Years Married	6.51	5.48	29
CGE	64.31	21.7	89
MS	114	18.9	122
DASS	67.3	22.3	126

N=250

Intercorrelations of the measures are included in Table 2. As can be seen in the table, Cross Gender Experience (CGE) was related significantly to Gender; males had more experience than females. CGE was also related significantly to Denomination; *the Orthodox group had more experience than the Ultra-Orthodox group*. Years Married was inversely related to Marital Satisfaction *and* Marital Satisfaction was related significantly to scores on the Depression, Anxiety, Stress Scale.

Table 2. Correlation coefficient values (Pearson) of variables

	Gender	Years Married	Denomination	CGE	MS
Gender					
Years Married	-.037				
Denomination	-.026	.046			
Cross-Gender Experience	-.189**	.021	-.081		
Marital Satisfaction	-.059	-.230**	-.050	-.052	
Depression Anxiety and Stress	.109	-.014	-.008	.007	-.291**

N=251. \*\*, Correlation is significant at the 0.01 level (two-tailed)



Table 2. *Correlation coefficient values (Pearson) of variables*

	Gender	Years Married	Denomination	CGE	MS	DASS
Gender						
Years Married	-.037					
Denomination	.115	-.069				
CGE	-.192**	.029	-.448**			
MS	-.051	-.204**	.159*	-.051		
DASS	.109	-.014	-.099	.008	-.309**	

N=250. \*  $p < .05$ , \*\* $p < .01$  (two-tailed)

### *Structural Equation Modeling*

The fit of the model in Figure 1 was evaluated using AMOS 18.0 (Arbuckle, 2006). There were no missing data. Outlier analyses were undertaken prior to all major analyses. Multivariate outliers were identified by examining leverage indices for each individual, defining an outlier as a leverage score four times greater than the mean leverage (Wilcox, 1997, 1999, 2003). No outliers were found.

Multivariate normality was evaluated using Mardia's test for multivariate normality. In addition, univariate indices of skewness and kurtosis were examined to determine if the absolute value of any of these indices was greater than 2.0. Three

variables had kurtosis values of 2.0 and greater. These were Years Married (3.45), Marital Satisfaction (3.88) and Depression (2.50). Multivariate normality as measured by Mardia's test was significant with a C.R. value  $> 1.96$ . These coefficients are negatively affected by high kurtosis and low sample numbers. Because of the abnormal distributions, all of the modeling was performed twice, first using Maximum Likelihood Estimators (MLR) and the second using bootstrapping. The two results were found to be similar and consequently only the conventional results are reported here.

Following the recommendations of Bollen and Long (1993), a variety of global fit indices were used. The overall chi-square test of model fit was not statistically significant ( $\chi^2(15) = 23.38, p > .05$ ). The Comparative Fit Index was .94. The Root Mean Square Error of Approximation (RMSEA) was .047. The Standardized Root Mean Square Residual (SRMR) was .05. All of these indices point to a good model fit. Inspection of the residuals and the modification indices revealed no significant points of ill fit. Figure 2 presents the standardized and unstandardized (in parentheses) path coefficients yielded by the analysis.

Some predictions were confirmed. As anticipated, length of marriage was related significantly ( $p < .001$ ) to marital satisfaction. For every one year increase in years married, there was a .79 unit decrease in marital satisfaction. Denomination orthodoxy was also related significantly ( $p < .001$ ) to cross-gender experience. For every one unit increase in denomination (Orthodox to Ultra-Orthodox), there was a 19.87 unit decrease in cross-gender experience. Marital satisfaction was related significantly ( $p < .001$ ) to adjustment. For every one unit increase in marital satisfaction, there was a .34 unit

decrease in the Depression, Anxiety, and Stress scale. Links between gender and cross-gender experience ( $p < .05$ ) were related significantly with men reporting .14 unit increase in experience. Gender and cross-gender experience were not related significantly to marital satisfaction.

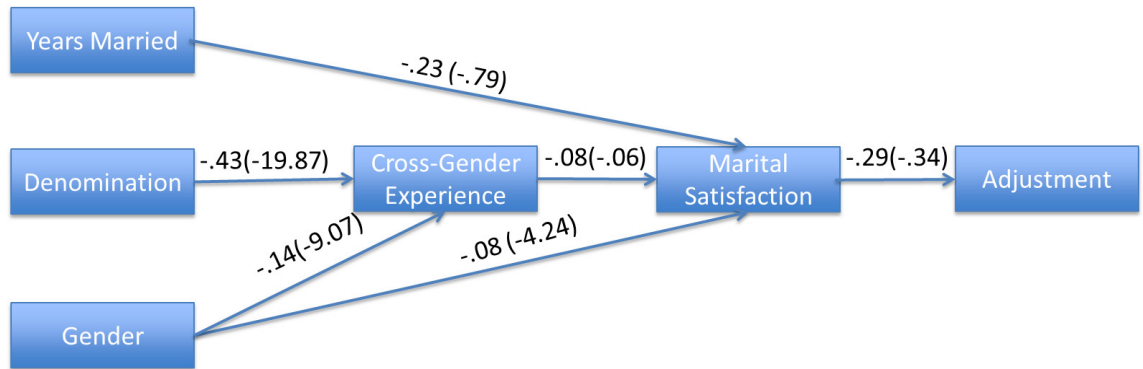


Figure 2. Final model with path coefficients.

## V. DISCUSSION

The goal of this study was to assess the generalizability of factors that contribute to marital satisfaction and adjustment in the general U. S. population to a divergent population, the Orthodox Jewish community. As noted in the introduction, it is essential to consider cultural context when assessing factors related to marital satisfaction and adjustment, as norms of socialization vary across cultures. Predictors of satisfaction and adjustment within the general population may not demonstrate the same benefit in cultures where such predictive experiences are less normative

As has been found previously in the general population, marital satisfaction predicted lower rates of depression, anxiety and stress in this sample of Orthodox Jews,

suggesting that marital relationships are as significant for this group as for the larger culture. The present study also confirmed previous findings of an inverse relationship between marital satisfaction and years married. Vaillant & Vaillant (1993) reported similar results in their longitudinal study tracking marriages and divorces over the course of 40 years. Their findings indicate that over time marital satisfaction steadily declines for approximately 15 years before stabilizing for the subsequent 25 years. Decline in marital satisfaction may be attributed to the demands of childrearing (Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008), or to general difficulties encountered throughout adult life, that are taxing on well-being and marriage (Huston, Caughlin, Houts, Smith, & George, 2001).

Gender was not related significantly to marital satisfaction, perhaps because there were too few males in the sample to detect a gender difference. As predicted, there was a clear distinction between the Orthodox and Ultra-Orthodox groups in relation to cross-gender experience. Orthodox participants reported more cross-gender social interactions, friendships, and romantic relationships than Ultra-Orthodox participants. This finding provides some external validation for the Premarital Social Questionnaire developed for the research on which this study is based.

Across denominations males reported more cross-gender experience, perhaps reflecting varying gender roles and restrictions for men and women in a religious context, however the small number of males within this self-selected sample are perhaps not representative of the general population. However, cross-gender experience was not related significantly to marital satisfaction in this study. With regard to prior research on

cross-gender experience, Meier & Allen (2009) succinctly described the pattern of development in typical populations. Romantic experience in adolescence is considered to be an important component of relationship building and the development of lasting relationships in adulthood. Adolescents who do not benefit from these experiences often report difficulty forming relationships later in life. However these results must be addressed in the context of societal norms. Cross-gender experiences and particularly dating relationships in adolescence are normative within the general U.S. population, but would be considered a violation of the norms generally adhered to by Orthodox Jews.

These results are consistent with the model of relationship satisfaction proposed by Levitt (1991, Levitt et al., 1994) suggesting that relationship satisfaction may be governed by cultural norms as well as prior experience. In general, societal norms often inform the trajectory of human development. From this framework, it is quite possible that an Ultra-Orthodox adolescent who does experience cross-gender friendships and romantic relationships would have more difficulty in establishing a stable marriage relationship, given the implications of deviating from familial and societal norms.

### *Limitations*

For the purpose of this study, classic markers such as dating, intimacy, sexual intercourse, and marriage were used to quantify romantic experiences. However, the landscape of romantic relationships has changed drastically over the past 50 years. Researchers are only beginning to uncover the changes in adolescent and young adult intimate activity. For example, youth are engaging in sexual activity at a younger age (Finer, 2007), young adults are marrying later (Smock & Manning, 2004), and cohabiting

more often (Smock, 2000). The repertoire of sexual activity amongst young adults has expanded far beyond conventional dating and marriage. Terms such as “friends with benefits” (FWBs, sex within the context of friendship, without expectations of future romantic involvement [McGinty, Knox, & Zusman, 2007]), “hook-ups” (sex without emotional intimacy [Paul, McManus, & Hayes, 2000]), and “living apart together” (LAT, committed couples live apart [Strohm, Seltzer, Cochran, & Mays, 2009]), are increasingly common among young adults (Jameson & Ganong, 2010). The impact of these types of relationships on intimate and committed relationships has yet to be established in the literature. It is particularly difficult to accurately gauge these relationships in interviews and surveys.

There were limitations in the sample as well. Of 250 participants, only 38 (<15%) were male, limiting the ability to evaluate gender differences in cross-gender experience and marital satisfaction. Also, participants either identified as Orthodox or Ultra-Orthodox. Given the homogenous nature of these two groups, in comparison to the general population, a non-Orthodox control group would have created a more heterogeneous sample that could offer more insight into the effects of variations in religiosity on romantic relationship formation. Also, a broader understanding of the participants’ religious beliefs and practices may have added insight into the relationship between denomination and belief systems. Future research should be addressed to identifying specific norms related to social relationships that may affect marital satisfaction and personal adjustment.

It should be noted that the absence of a link between cross-gender experience and marital satisfaction is a null finding, with attendant difficulties in assessing its meaning. However, there are some factors that support the conclusion that cross-gender experience is, in fact, not associated with marital outcomes for this population. The sample size of 250 in this study was substantial and certainly sufficient to detect an effect if it existed within this population. Furthermore other associations established in research with the population at large did replicate in the current study, including the links between length of marriage and marital satisfaction and between marital satisfaction and adjustment. Finally, given the normative nature of gender separation for the religious population queried in this study, the absence of an association between cross-gender experience and marital satisfaction is consistent with the theoretical view that social norms factor into relationship satisfaction. Further cross-cultural research is needed to determine the effects of social norms regarding cross-gender interaction in childhood and adolescence on adult relationship outcomes.

Lastly, it is important to note that, as with any correlational methodology, a limitation of using structural equation modeling is establishing the direction of effects. Although the results demonstrate a good model fit consistent with the theoretical underpinnings of the study, the extent to which the modeled relationships among the variables replicate the veridical covariance of variables in nature remains uncertain.

### *Conclusion*

In sum, the present study is a positive first step toward uncovering the effects of societal, cultural, and religious norms regarding cross-gender experience on relationship

outcomes. There is an extensive body of research indicating a relationship between religiosity and marital satisfaction. There are also many theories that link romantic experiences in adolescence to relationships in adulthood. Given that some religious communities promote and support marital stability, yet limit premarital cross-gender experience, cultural norms and social support in these communities may offset the lack of relationship experience as young adults transition into marriage.

The present findings are consistent with the view that culture and society impact the trajectory of an individual's development. Future research might focus on identifying specific cultural norms and social supports that impact marital outcomes. Additionally, it would be beneficial to expand the study to relationship satisfaction outside of marriage, in light of the deferment of marriage that has become increasingly common in young adults. In general, further research is necessary to address variables that impact adjustment within unique cultures and investigate patterns of social support that encourage positive development cross-culturally.



## REFERENCES

- Arbuckle, J. L. (2009). Amos (Version 17.0) [Computer program]. Chicago: SPSS.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-80.
- Barone, C. (2011). Some things never change: Gender segregation in higher education across eight nations and three decades. *Sociology of Education, 84*, 157-176.
- Bartkowski, J. P., & Xu, X. (2000). Distant patriarchs or expressive dads? the discourse and practice of fathering in conservative protestant families. *The Sociological Quarterly, 41*, 465-485.
- Barton, B., & Cohen, R. (2004). Classroom Gender Composition and Children's Peer Relations. *Child Study Journal, 34*, 29-45.
- Bazargan, S., Sherkat, D. E., & Bazargan, M. (2004). Religion and alcohol use among African-American and Hispanic inner-city emergency care patients. *Journal for the Scientific Study of Religion, 43*, 419-428.
- Belle, D. (1989). Gender differences in children's social networks and supports. In D. Belle (Ed.), *Children's social networks and supports*, 173-188. New York: Wiley.
- Bollen, K. & Long, S. (1993). *Testing structural equation models*. Newbury Park: Sage.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry, 52*(4), 664-678.
- Brown, B. Bradford. (1999). " 'You're Going Out with Who?!': Peer Group Influences on Adolescent Romantic Relationships." *The Development of Romantic Relationships in Adolescence*. New York: Cambridge University Press. 291-329
- Call, V.R.A. & Heaton, T.B. (1997). Religious influence on marital stability, *Journal for the Scientific Study of Religion 36*, pp. 382-392.
- Challman, C. R. (1932). Factors influencing friendships among preschool children. *Child Development, 3*, 146-158.
- Christiano, K.J. (2000). Religion and the family in modern American culture. *Family, Religion, and Social Change in Diverse Societies*, 43-78. New York. Oxford University Press.

- Clydesdale, T. T. (1997). Family behaviors among early U.S. baby boomers: Exploring the effects of religion and income change, 1965–1982. *Social Forces*, 76, 605-635.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in Patterns of Developmental Transitions in the Emerging Adulthood Period. *Developmental Psychology* 39, 657–69.
- Collins, W. A., Christian, S. D., & Hennighausen, K. (2000, March). “*The course of true love(s)...*”: *Longitudinal correlates of occurrence and quality in adolescents' romantic relationships*. In I. Seiffge-Krenke (chair), *What can the past and future tell us about adolescents' romantic relationships?* Symposium presented at the biennial conference of the Society for Research on Adolescence, Chicago.
- Connolly, Jennifer and Adele Goldberg. (1999). Romantic relationships in adolescence: the role of friends and peers in their emergence and development. *The Development of romantic relationships in adolescence*, New York: Cambridge University Press. p. 266–90
- Datnow, A., Hubbard, L., & Woody, E. (2001). *Is single gender schooling viable in the public sector? Lessons from California's pilot program*. Retrieved March 19, 2007, from [www.oise.utoronto.ca/depts/tps/adatnow/final.pdf](http://www.oise.utoronto.ca/depts/tps/adatnow/final.pdf)
- Decter, M. (1995). A Jew in anti-Christian America. *First Things*, 56, 25-31.
- Dillaway, H., & Broman, C. (2001). Race, class and gender differences in marital satisfaction and divisions of household labor among dual-earner couples. *Journal of Family Issues*, 22, 309-327
- Dollahite, D.C. and Marks, L.D. (2005). How highly religious families strive to fulfill sacred purposes. *Sourcebook of Family Theory and Research*. 533-541. Thousand Oaks CA: Sage.
- Easterbrooks, M. A., & Emde, R. N. (1988). Marital and parent-child relationships: The role of affect in the family system. *Relationships within families: Mutual influences*, 83-103. New York, Oxford.
- El-Or, T. (1994). *Educated and ignorant: Ultraorthodox Jewish Women and their world*. Boulder, CO: Lynne Rienner Publishers.
- Ellis, A. (1988). Is religiosity pathological? *Free Inquiry*, 18, 27–32.
- Erikson, E. H. (1968). *Identity, youth and crisis*. New York: Norton.
- Eysenck, H.J. (1981). *A model of personality*. New York: Springer.

- Fauber, R. L., Forehand, R., Thomas, A. M., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent adjustment in intact and divorced families: The role of disrupted parenting. *Child Development, 61*, 1112-1123.
- Feinstein, S.C., & Ardon, M.S. (1973). Trends in dating patterns and adolescent development. *Journal of Youth and Adolescence, 2*, 157-166.
- Finer, L. B. (2007). Trends in premarital sex in the United States, 1954-2003. *Public Health Reports, 122*, 73-78.
- Freud, S. (1943). *A general introduction to psychoanalysis*. Garden City, NY: Garden City.
- Furman, W. & Wehner, E. A. (1994). Romantic Views: Toward a Theory of Adolescent Romantic Relationships. In R. Montemayor, G. R. Adams, and T. P. Gullotta (Eds.), *Personal relationships during adolescence*. Thousand Oaks, CA: Sage.
- Glenn, N.D. (1975). The contribution of marriage to the psychological wellbeing of males and females. *Journal of Marriage and the Family 37*, 105-110.
- Glenn, N.D. & Weaver, C.N. (1979). A note on family situation and global happiness. *Social Forces 57*, 960-967.
- Gottman, J.M. (1986). The world of coordinated play: Same- and cross-sex friendship in young children. In J.M. Gottman & J. Parker (Eds), *Conversations of friends: Speculations on affective development*, 139-191. New York: Cambridge University Press.
- Gove, W.R., Style, C.B. & Hughes, M. (1990). The effect of marriage on the well-being of adults: A theoretical analysis. *Journal of Family Issues 11*, 4-35.
- Gove, W. R. , & Umberson, D. (1985). *Marriage and the well-being of men and women*. Paper presented at the annual meeting of the American Sociological Association, Washington, DC.
- Graham-Bermann, S.A., DeVoe, E.R., Mattis, J.S., Lynch, S., & Thomas, S.A. (2006). Ecological predictors of traumatic stress symptoms in Caucasian and ethnic minority children exposed to intimate partner violence. *Violence Against Women, 12*, 662-692.
- Hansen, G. L. (1992). Religion and marital adjustment. In J. F. Schumaker (Ed.), *Religion and mental health (pp. 189-198)*. New York: Oxford University Press.
- Heilman, S. C. and Cohen, S. M. 1989. *Cosmopolitans & parochials: Modern Orthodox Jews in America* , Chicago: University of Chicago Press.

- Hill, P.C., & Pargament, K.I. (2003). Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58, 64–74.
- Hoffmann, M. L., & Powlishta, K. K. (2001). Gender segregation in childhood: A test of the interaction style theory. *Journal of Genetic Psychology*, 162, 298–313.
- Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. *Journal of Personality and Social Psychology*, 80, 237–252.
- Jameson T.B. & Ganong, L. (2010). “We’re not living together:” Stay over relationships among college-educated emerging adults. *Journal of Social and Personal Relationships* 28(4) 536–557
- Jeynes, W. H.(2003).The effects of black and Hispanic 12<sup>th</sup> graders living in intact families and being religious on their academic achievement. *Journal of Urban Education*, 38,35-57
- Kaslow, F. and Robinson, J.A. (1996). Long-term satisfying marriages: Perceptions of contributing factors. *American Journal of Family Therapy*, 24, 154–170
- Kaufman D R. (1991). *Rachel’s daughters: Newly Orthodox Jewish women*. New Brunswick, NJ: Rutgers
- Koenig, H.G., Ford, S.M., George, L.K., Blazer, D.G., & Meador, K.G. (1993). Religion and anxiety disorder: An examination and comparison of associations in young, middle-aged and elderly adults. *Journal of Anxiety Disorders*, 7, 321–342.
- Koenig, H.G., McCullough, M.E., & Larson, D.B. (2001). *Handbook of religion and health*. New York: Oxford.
- Krause, N. (1991). Stress, religiosity, and abstinence from alcohol. *Psychology and Aging*, 6, 34-144.
- Lawrence, E., Rothman, A. D., Cobb, R. J., Rothman, M. T., & Bradbury, T. (2008). Marital satisfaction across the transition to parenthood. *Journal of Family Psychology*, 22, 41-50.
- Lehrer, E.L. (2004). The role of religion in union formation: an economic perspective, *Population Research and Policy Review* 23, 161–185.
- Levitt, M. J., Guacci-Franco, N., & Levitt, J. L. (1994). Social support and achievement in childhood and early adolescence: A multicultural study. *Journal of Applied Developmental Psychology*, 15, 207-222.

- Levitt, M. J. (1991). Attachment and close relationships: A life span perspective. In J. L. Gewirtz & W. F. Kurtines (Eds.), *Intersections with attachment*, 183-205. Hillsdale, NJ: L. Erlbaum.
- Lovibond, S.H.& Lovibond, P.F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.)
- Luckey, E.B. (1966). Number of years married as related to personality perception and marital satisfaction. *Journal of Marriage and Family*, 28, 44-48
- Maccoby, E. E. (1990). Gender and relationships: A developmental account. *American Psychologist*, 45, 513-520.
- Maccoby, E. E. (1994). Commentary: Gender segregation in childhood. In C. Leaper (Ed.), *Childhood gender segregation: Causes and consequences*, 87-97. San Francisco: Jossey-Bass
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Mahler, M.S. (1973). On the first three subplanes of the separation-individuation process. *International Journal of Psycho-Analysis*, 53, 333-338
- Mahoney, A., Pargament, K.I., Tarakeshwar, N., & Swank, A.B. (2001). Religion in the home in the 1980s and 1990s: A meta-analytic review and conceptual analysis of links between religion, marriage, and parenting. *Journal of Family Psychology*, 15, 559-596
- Mastekaasa, A. (1994). Marital Status, Distress, and Well-being: An International Comparison. *Journal of Comparative Family Studies* 25, 183–205.
- McGinty, K., Knox, D., & Zusman, M. E. (2007). Friends with benefits: Women want “friends,” men want “benefits.” *College Student Journal*, 41, 1128–1137.
- Meier, A. & Allen, G. (2009). Romantic relationships from adolescence to young adulthood. *The Sociological Quarterly*, 50, 308-335.
- Montgomery, M.J., & Sorell, G.T. (1998). Love and dating experience in early and middle adolescence: Grade and gender comparisons. *Journal of Adolescence*, 21, 677-689.
- Myleme, H., Koenig, H.G., Hays, J.C., Eme-Akwari, A.G., & Pargament, K.I. (2001). The epidemiology of religious coping: A review of recent literature. *International Review of Psychiatry*, 13, 86–93.
- Neuman, W. (1982). Television and American Culture: The Mass Medium and the Pluralist Audience. *Public Opinion Quarterly*, 46, 471-487.

- No Child Left Behind Act of 2001, 20 U.S.C. 6301 (2001).
- Olasky, M. N. (1988). *Prodigal press: The anti-Christian bias of the American news media*. Westchester, IL. Crossway Books
- Paul, C., Fitzjohn, J., Eberhart-Phillips, J., Herbison, P., & Dickson, N. (2000). Sexual abstinence at age 21 in New Zealand: The importance of religion. *Social Science and Medicine*, 51, 1-10.
- Paul, E. L., McManus, B., & Hayes, A. (2000). "Hookups": Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *The Journal of Sex Research*, 37, 76-88.
- Pearce, L. D., & Axinn, W. G. (1998). The impact of family religious life on the quality of mother-child relations. *American Sociological Review*, 63, 810-828.
- Poulin, F., Pedersen, S. (2007). Developmental changes in gender composition of friendship networks in adolescent girls and boys. *Developmental Psychology*, 43, 1484-1495.
- Poulson, Eppler, Satterwhite, Wuensch, & Bass, (1998). Alcohol consumption, strength of religious beliefs and risky sexual behavior in college students. *Journal of American College Health*, 46, 227-232.
- Powlishta, K. K. (1995). Gender segregation among children: Understanding the "Cootie Phenomenon." *Young Children*, 50, 61-69.
- Riordan, C. (1990). Single gender schools: Outcomes for African and Hispanic Americans. *Research in the sociology of education and socialization* 18, 177-205. Greenwich, CT. JAI Press.
- Robinson, L. C. (1994). Religious orientation in enduring marriage: An exploratory study. *Review of Religious Research*, 35, 207-217.
- Robinson, L. C. & Blanton, P.W. (1993). Marital strengths in enduring marriages. *Family Relations*, Vol. 42, 38-45
- Rosmarin, D.H., Pargament, K.I., & Mahoney, A. (2009). The role of religiousness in anxiety, depression and happiness in a Jewish community sample: A preliminary investigation. *Mental Health Religion and Culture*, 12(2), 97-113
- Rowe, K. (2000). Boys and girls perform better at school in single-sex environments. *Australian Council for Educational Research*.
- Salomone, R. (2003). *Same, different, equal: Rethinking single-sex schooling*. New Haven, CT. Yale University Press.

- Sanderson, C. A., & Cantor, N. (1995). Social dating goals in late adolescence: Implications for safer sexual activity. *Journal of Personality and Social Psychology, 68*, 1121–1134.
- Schmit, D.T. (1995). *Continuity and change in heterosexual relations from middle childhood to adolescence: Evidence from a longitudinal study*. Unpublished doctoral dissertation, University of Minnesota, Minneapolis.
- Schottenbauer, M. A., Spernak, S. M., & Hellstrom, I. (2007). Relationship between family religious behaviors and child well-being among third-grade children. *Journal of Mental Health, Religion & Culture, 10*(2), 191–198
- Seiffge-Krenke, I. 2003. “Testing Theories of Romantic Development from Adolescence to Young Adulthood: Evidence of Developmental Sequence. *International Journal of Behavioral Development 27*, 519–31.
- Smock, P. J. (2000). Cohabitation in the United States: An appraisal of research themes, findings, and implications. *Annual Review of Sociology, 26*, 1–20.
- Smock, P. J., & Manning, W. D. (2004). Living together unmarried in the United States: Demographic perspectives and implications for family policy. *Law and Policy, 26*, 87–117.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38*, 15–28.
- Strawbridge, W. J., Shema, S. J., Cohen, R. D., & Kaplan, G. A. (2001). Religious attendance increases survival by improving and maintaining good health behaviors, mental health, and social relationships. *Annals of Behavioral Medicine, 23*, 68-74.
- Strohm, C. Q., Seltzer, J. A., Cochran, S. D., & Mays, V. M. (2009). “Living apart together” relationships in the United States. *Demographic Research, online publication. doi: 10.4054/DemRes.2009.21.7*.
- Sullivan, K.T. (2001). Understanding the relationship between religiosity and marriage: An investigation of the immediate and longitudinal effects of religiosity on newlywed couples. *Journal of Family Psychology, 15*, 610-626.
- Sullivan, H.S. (1953) *Conceptions of modern psychiatry*. New York: W.W. Norton & Company, Inc.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Tamir, H.Y. & Sacks, M. B. (2008). *Premarital Social Questionnaire (PSQ)*. Manuscript in preparation.

- Thornton, A., & Camburn, D. (1989). Religious participation and adolescent sexual behaviors and attitudes. *Journal of Marriage and the Family*, *51*, 641–653.
- Vaillant, C.O. & Vaillant, G.E. (1993). Is the u-curve of marital satisfaction an illusion? A 40-year study of marriage. *Journal of Marriage and Family*, *55*, 230-239
- Veenhoven, R. (1984). *Conditions of happiness*. Dordrecht, the Netherlands: Reidel.
- Watlington, C.G., & Murphy, C.M. (2006). The roles of religion and spirituality among African American survivors of domestic violence. *Journal of Clinical Psychology*, *62*, 837–857.
- Webster-Stratton, C. (1989). The relationship of marital support, conflict, and divorce to parent perceptions, behaviors, and child conduct problems. *Journal of Marriage and the Family*, *51*, 417-430.
- Wilcox, R. (1997). *Introduction to robust estimation and hypothesis testing*. San Diego: Academic Press. .
- Wilcox, W. B. (1998). Conservative Protestant childrearing: Authoritarian or authoritative? *American Sociological Review*, *63*, 796-809.
- Wilcox, R. (1999). *Fundamentals of modern statistical methods*. New York: Springer
- Wilcox, R. (2003). *Applying contemporary statistical techniques*. San Diego: Academic Press.
- Wilcox, W.B. (2004). *Soft patriarchs, new men: How Christianity shapes fathers and husbands*. University of Chicago Press, Chicago, IL.
- Williams, D. G. (1988). Gender, marriage, and psychosocial well-being. *Journal of Family Issues*, *9*(4), 452-468.
- Williams, D.R., Larson, D.B., Buckler, R.E., Heckmann, R.C., & Pyle, C.M. (1991). Religion and psychological distress in a community sample. *Social Science and Medicine*, *32*, 1257–1262.



## APPENDIX

### Premarital Social Questionnaire

#### SECTION 1

DIRECTIONS: Complete each item based upon your educational experiences. A *Same Gender* classroom refers to a classroom with only male students (if you are a male), or only female students (if you are a female). A *Mixed Gender* classroom refers to a classroom with both male and female students. Circle *Both* if you had some *Same Gender* classes and some *Mixed Gender* classes within the same timeframe.

<u>TIMEFRAME</u>	<u>CLASSROOM TYPE</u>		
1. Early childhood (ages 3-6)	<i>Same Gender</i>	<i>Mixed Gender</i>	<i>Both</i>
2. Lower School (ages 7-11)	<i>Same Gender</i>	<i>Mixed Gender</i>	<i>Both</i>
3. Middle School (ages 12-14)	<i>Same Gender</i>	<i>Mixed Gender</i>	<i>Both</i>
4. High School (ages 15-18)	<i>Same Gender</i>	<i>Mixed Gender</i>	<i>Both</i>
5. College (undergraduate)	<i>Same Gender</i>	<i>Mixed Gender</i>	<i>Both</i>

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6. How many siblings do you have of the opposite gender? \_\_\_\_\_

DIRECTIONS: A number of statements which people used to describe their **premarital** social interactions are listed below. Read each statement and choose the number that best describes how often you have engaged in the activity listed. For example, if you engaged in the activity very frequently choose 1; if you never engaged in the activity choose 5. Use number 2-4 to indicate how often you engaged in the activity.

Do not spend too much time on any one statement; simply choose the option that best describes your past experiences.

8. Before I was married, I conversed with my extended family of the opposite gender.

	<b>Very frequently</b>			<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b> <b>5</b>
<hr/>				

9. Before I was married, I spent time with my extended family of the opposite gender.

	<b>Very frequently</b>			<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b> <b>5</b>
<hr/>				

10. Before I was married, I have spent religious holidays together with members of my extended family of the opposite gender.

	<b>Very frequently</b>			<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b> <b>5</b>
<hr/>				

11. Before I was married, I have spent vacations together with members of my extended family of the opposite gender.

	<b>Very frequently</b>			<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b> <b>5</b>
<hr/>				

12. Before I was married, I used email or social networking sites to interact with my extended family of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

13. Before I was married used email or social networking sites to interact with people of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

14. Before I was married, I Had play dates with children of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

15. Before I was married, I had friends (during childhood) of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

16. Before I was married, I had friends (during adolescence) of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

17. Before I was married, I had friends (during adulthood) of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

18. Before I was married, I participated in groups or clubs (during childhood) that included members of the opposite gender.

	<b>Very frequently</b>				<b>Never</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
_____					

19. Before I was married, I participated in groups or clubs (during adolescence) that included members of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				

20. Before I was married, I participated in groups or clubs (during adulthood) that included members of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				

(Questions 21-24 does **not** refer to a spouse)

21. Before I was married, I dated members of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				

22. Before I was married, I was involved in a serious relationship with a member of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				

23. Before I was married, I experienced intimacy (kissing, touching, holding hands) with a member of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				

24. Before I was married, I experienced sexual intercourse with a member of the opposite gender.

Very frequently			Never	
1	2	3	4	5
<hr/>				