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Understanding Young Adult Cyclical Relationships

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THE FLORIDA STATE UNIVERSITY
COLLEGE OF HUMAN SCIENCES

UNDERSTANDING YOUNG ADULT CYCLICAL RELATIONSHIPS

By

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A Dissertation submitted to the
Department of Family and Child Sciences
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Degree Awarded:
Spring Semester, 2011

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ACKNOWLEDGEMENTS

I am very grateful for everyone who has supported me on my academic journey. I first wish to recognize Dr. Kay Pasley, who has mentored me through countless academic and personal adventures. I also wish to thank my committee members, Drs. Frank Fincham, Lenore McWey, and Neil Abell for your guidance and feedback, without which this dissertation would not have been possible. You have challenged me to push farther and do better. Additionally, Dr. Robert E. Lee, you have always been invested in my success and have used your eloquent words to convince myself and others of my potential.

I would also like to thank Drs. Tom Cornille and Ann Mullis, your endless humor and words of wisdom have added flavor to my academic experience that I will carry with me always. Drs. Larry and Sandy Barlow, you have been watching over me from the beginning and I am deeply grateful for your friendship and professional guidance.

Without my colleagues to laugh, cry, and curse with, I would not have made it through the past four years. I am deeply grateful for your friendship. Without my husband, Drew, I would not have had clean clothes or have eaten non-frozen meals. You are my life partner, my best friend, and my greatest source of support. Thank you for your patience and love. Last, but not least, I would like to thank my family for never doubting me and cheering me on.

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ABSTRACT

The study of cyclical (on again/off again) relationships during young adulthood is relatively new, but initial findings suggest that they experience lower relationship quality. This is problematic because early relationship quality impacts later relationship quality. Building on previous research, the current study compared partners in cyclical ($n = 167$) and non-cyclical ($n = 249$) relationships on individual and relationship characteristics, finding that African American young adults were more likely to be in cyclical relationships than Caucasians. Also, those in cyclical relationships more often reported living more than 50 miles apart from their partner, having relationships of longer overall duration, doing less conscious decision making around relationship transitions, expressing more uncertainty about the future of the relationship, less constructive communication, and lower relationship satisfaction than those in non-cyclical relationships. In testing a model of relationship satisfaction based on the ideas of Stanley et al. (2006), findings included both direct and indirect effects for dedication, lack of conscious decision making (sliding), uncertainty, and constructive communication on relationship satisfaction. Differences were found in the model between those in cyclical and non-cyclical relationships. That is, the model accounted for 40% of the variance in constructive communication for those in cyclical relationships, but only 21% of the variance for those in non-cyclical relationships. Additionally, the model accounted for only 1% more variance in uncertainty (cyclical = 46% and non-cyclical = 45%) and relationship satisfaction (cyclical = 57% and non-cyclical = 56%). Conversely, the model accounts for more variance in relationship safety for those in non-cyclical relationships (cyclical = 19% and non-cyclical = 30%). These findings provide more information on the mechanisms leading to lower relationship quality in cyclical relationships and support the ideas of Stanley et al. on the indirect impact of sliding on relationship satisfaction through relationship behaviors. Implications for intervention, especially couples therapy, and future research are discussed.

CHAPTER 1

INTRODUCTION

Due to economic and societal changes in the United States over the past century, adolescents are continuing their education and identity exploration into their mid-twenties and postponing the acquisition of adult roles (e.g., marriage, parenthood, long-term work; Arnett, 2000). Arnett described this period between the ages of 18 to 25 as emerging adulthood (also referred to as young adulthood in the literature and here). Establishing high quality, lasting romantic relationships is an important developmental task of this period (Berscheid, 1999). In fact, models of romantic relationship development suggest that young adults are entering a period characterized by more commitment and intense emotions, similar to the types of relationship experiences in adulthood (Brown, 1999; Connolly, Furman, & Konarski, 2000; Connolly, Craig, Goldberg & Pepler, 2004). As Meier and Allen (2008) point out, prolonging the transition to adulthood and the delay of marriage provides young adults with “more time and opportunity to gain valuable experience in romantic relationships before forming adult unions” (p. 309). In support of this, Priest, Burnett, Thompson, Vogel, and Schvaneveldt (2009) found that young adults with more relationship experience made better choices and had more realistic expectations going into future relationships.

Within the past decade, researchers have realized the potentially life-altering impact early romantic relationships can have on mental health and development, influencing self-esteem, identity formation, school and career achievement, and sexuality (Collins, Welsh, & Furman, 2009). For example, high quality relationships in young adulthood have been found to increase one’s overall happiness (Demir, 2007), whereas ending a relationship has been linked with increased risk of lower general health (Chung et al., 2002), trauma symptoms (Boelen & Reijntjes, 2008; Chung et al.), and major depressive symptoms (Monroe, Rohde, Seeley, & Lewinsohn, 1999). Importantly, there is also evidence that these early relationships impact later romantic relationships. For example, Overbeek, Stattin, Vermulst, Ha, & Engles (2007) found that the quality of young adult romantic relationships was positively associated with relationship quality and negatively associated with life dissatisfaction 12 years later. For those relationships

that persist into adult committed relationships, Huston (2009) found that the signs of future marital problems surface during young adult courtship.

It follows that effective intervention at this critical stage may prevent detrimental outcomes and promote positive personal growth and future relationship health. With just under 70% of high school graduates immediately enrolling in college (U.S. Department of Education, 2008), higher education provides an important and efficient context in which to intervene. Only by understanding young adult relationship development, can preventive work with this age group be more effective.

The development of romantic relationships among young adults in the U.S. has changed over recent decades into a more ambiguous process lacking a clear, universal progression (see Sassler, 2010). For example, Manning and Smock (2005) found that partners described the process of entering into cohabitation as a fluid, gradual slide that often included multiple breakups and reconciliations. Ambiguity has also been found to be prevalent in relationships identified as “friends with benefits” (a relationship that combines the psychological intimacy of a friendship with the sexual intimacy of a romantic connection; Bisson & Levine, 2009). Bisson and Levine assessed the strategies young adults used to negotiate these relationships and found that young adults in friends-with-benefits relationships most often avoided explicit relational negotiation even though participants strongly feared how sexual involvement might complicate the friendship. The lack of explicit decision making (or “sliding”) around important relationship transitions (e.g., engaging in sexual intercourse, moving in together, and getting married) has been hypothesized to place relationships at greater risk for distress by increasing the barriers to ending the relationship without increasing the conscious desire of an individual to improve the quality of his/her relationship (Stanley, Rhoades, & Markman, 2006). Among other things, sliding may increase the risk of pregnancy, sexually transmitted diseases, and prolonging a relationship that otherwise would end, leading to lower relationship quality and eventual divorce (Stanley et al.).

For some young adults, the process of ending and beginning relationships is done repeatedly with the same partner (labeled as cyclical relationships; Dailey, Pfiester, Jin, Beck, & Clark, 2009). Estimates from a single study ($N = 445$) suggest that cyclical relationships are common among college students (about two-thirds had experienced them; Dailey, Pfiester, et al.). However these relationships have not been the focus of much research; only two studies

have examined the characteristics of cyclical relationships. In line with the findings of Priest et al. (2009), Dailey, Pfiester, et al., Dailey, Rosetto, Pfiester, and Surra (2009) found that those in cyclical relationships commonly renewed their relationships due to perceived growth by one or both partners or a change in expectations. However, those who ended and renewed their relationships reported lower relationship satisfaction than those who had not, and relationship satisfaction decreased with each subsequent renewal (Dailey, Pfiester, et al.). Importantly, Dailey, Pfiester, and associates found that partners in cyclical relationships used strategies that failed to clearly communicate the end of the relationship compared with those who did not renew their relationships after a breakup. Accordingly, couples that experience multiple breakups and reconciliations may be particularly at-risk for sliding and, thus, at-risk for greater distress which might increase their chances for poor health and relational outcomes.

Study Purpose

Relevant to the current study, no research was found that explores the mechanism through which relationship quality decreases for those in cyclical relationships. Given the (a) importance of early relationships for later relationship quality, (b) potential prevalence of cyclical relationships among young adults, (c) preliminary findings showing their poorer relationship processes, and (d) limited focus in the research literature on these relationships, the current study had three goals. One goal was to examine differences in relationship characteristics between those in cyclical and non-cyclical young adult relationships with the intention of replicating the findings from Dailey, Pfiester et al. (2009). The second goal was to test a model of relationship satisfaction based on the ideas of Stanley et al. (2006) to determine its applicability to young adult relationships. The third and final goal was to examine differences in the proposed model for those in cyclical and non-cyclical relationships with the intention of extending the previous findings on cyclical relationships.

CHAPTER 2

REVIEW OF THE LITERATURE

Romantic Relationships in Young Adulthood

Due to societal changes over the past century, young people are continuing their education and identity exploration into their mid-twenties and postponing the acquisition of adult roles (e.g. marriage, parenthood, long-term work; Arnett, 2000), providing young adults with “more time and opportunity to gain valuable experience in romantic relationships before forming adult unions” (Meier & Allen, 2008, p. 309). Accordingly, young adulthood may be a time for young adults to experiment with relationships, so cyclical relationships in this population may be normative. Because the majority of young adults immediately enroll in college after high school (U.S. Department of Education, 2008), understanding their development in this context is essential for intervening to promote future relationship health. Brown’s (1999) four-phase model proposes that as adolescents pass into young adulthood, relationships shift in their form, substance, and function. Their focus turns away from the social context of the relationship and towards the relationship itself, developing skills that allow them to manage longer and more intimate relationships, as well as focusing more on the potential of their romantic relationships for long-term or life-long commitment (Brown). Accordingly, Vennum and Pasley (2011) found that as young adults in their study progressed through college, they reported an increase in the average length of their romantic relationships and a complimentary decrease in the frequency of breakup.

Although there is little research on how romantic relationship development may differ for young adults of different races, Connelly et al. (2004) found that among adolescents, Blacks reported longer but less intimate and committed relationships than their White counterparts. Similarly, Vennum and Pasley (2011) found that a greater percentage of African American undergraduate students reported being in non-exclusive relationships compared with Caucasian undergraduates, but African American students were also more likely to be engaged.

Cyclical relationships in young adulthood. Although the study of young adult relationships is not new, the study of cyclical relationships is. Cyclical relationships are defined

as committed dating relationships that have terminated and renewed at least once (Dailey, Pfiester, et al., 2009), and only two articles have addressed these relationships. Interestingly, Dailey, Pfiester et al. found that 50-60% of the young adult college students in their series of two studies ($N = 445$ for study 1 and $N = 236$ for study 2) had experienced a cyclical relationship. Out of those currently in romantic relationships, the percentage of participants who reported that their relationship was cyclical ranged from 40-60% across their studies, with two to three renewals experienced on average (Dailey, Pfiester, et al.).

Dailey, Pfiester et al. (2009) found differences in the characteristics of cyclical relationships compared to non-cyclical relationships. For example, those in cyclical relationships reported relationships of longer total length compared with those in non-cyclical relationships. Additionally, they found differences in the break up process experienced by those in cyclical and non-cyclical relationships. Specifically, those in cyclical relationships more often reported the use of indirect breakup strategies and attributed their first break up to communication problems and negative behavior compared to non-cyclical partners who ended their relationships (Dailey, Pfiester et al.). Participants also differed in their experiences post-break up. Dailey, Rosetto, et al. (2009) found that partners in cyclical relationships more often stayed in contact after breaking up and reported an implicit understanding that the relationship had not ended but had been redefined than did those in non-cyclical relationships. Reasons for renewing the relationship included the perception that they were communicating more effectively, they or their partner had changed for the better, there was continued attachment, or one or both partners renewed their effort to continue the relationship. Given these reasons for renewal, it is surprising that those in cyclical relationships report higher uncertainty and ineffective conflict, and lower dedication and relationship satisfaction than those in non-cyclical relationships and that dedication and relationship quality decrease and uncertainty increases with each subsequent renewal (Dailey, Pfiester, et al.). Although they compared those in cyclical and non-cyclical relationships on relationship characteristics (e.g., relational uncertainty, satisfaction), they did not examine differences in the demographic characteristics of these two groups.

Theoretical Perspective

Social exchange principles are commonly used in the study of premarital (young adult) relationship stability (Cate, Levin, & Richmond, 2002). These models suggest that partners consider the rewards and costs of the present relationship compared to alternatives. Rusbult's

(1980, 1983) investment model of relationship development built upon these ideas by specifying that commitment to relationships is high when satisfaction and investment in the relationship is high, and costs and alternatives are low. Extending these ideas, Stanley and Markman (1992) proposed that commitment consists of two related constructs that function to increase relationship stability: personal dedication and constraint commitment. They argued that commitment includes forces that motivate connection (personal dedication) to the relationship and forces that increase the costs of leaving the relationship (constraint commitment). Dedication is defined as the conscious desire of an individual to want to improve the quality of his/her relationship for the benefit of both participants, whereas constraints refer to forces that compel an individual to remain in a relationship (i.e., social pressure, moral beliefs, monetary investment, poor alternative partners, etc.) regardless of their personal dedication to that relationship (Stanley & Markman).

According to the inertia perspective, Stanley et al. (2006) suggest that some relationship transitions increase constraints which favor the continuance of the relationship regardless of fit, possible relationship problems, or mutual commitment to the future of the relationship. Stanley et al. refer to this process of moving through relationship transitions without fully considering the implications as “sliding versus deciding”. Sliding in relationships increases the chance of accruing constraints which function to make the relationship more stable, but do not necessarily increase satisfaction (Stanley & Markman, 1992). Stanley and Markman refer to the dimensions of constraint commitment proposed by Johnson (as cited in Stanley & Markman): structural investments (possessions and the investment of money), social pressure, termination procedures (the difficulty of the steps it would take to end the relationship), unattractiveness of alternatives (how unhappy a person would be with the changes after ending the relationship), and availability of alternative partners.

Constraints in young adult relationships. Previous research has found that the constraints of living less than 50 miles apart and having a relationship of longer duration were related to increased relationship stability in college populations (Vennum & Pasley, 2011). Using these findings and applying Stanley and Markman's (1992) model of relationship commitment and maintenance, several constraints likely aid in the continued renewal of cyclical relationships, including distance, cohabitation, and relationship duration. For example, when asked about the reasons for termination, Dailey, Pfiester, et al. (2009) found that cyclical partners less frequently

(11.9%) reported distance than did non-cyclical partners (43%). According to the Stanley and Markman (1992) model, the constraint of living in closer proximity might lower barriers to renewing the relationship due to ease or increased opportunity for contact. Some research supports this idea. In a study of the emotional consequences of relationship termination in young adults, Sbarra and Emery (2005) found that on days where participants had contact with their former partners, the decline in love and sadness halted, and partners reported increased feelings of love towards their former partner and sadness at the loss of the relationship. Cohabiting might also constrain a relationship by increasing barriers to permanently ending a relationship. Again, there is some research supporting this idea. Specifically, Manning and Smock (2005) found that many partners described the process of entering into and ending cohabitation as a gradual slide, the latter being fraught with much uncertainty and multiple attempts at reconciliation. Finally, duration may constrain a relationship by serving as a barrier to permanently ending it. Research on marriage suggests that more dissatisfaction is necessary for bringing about the end of longer-term relationships, because greater barriers accrue over time (White & Booth, 1991). From this literature, differences in cyclical and non-cyclical relationships are expected. Specifically, I expected that partners in cyclical relationships will report living closer together, cohabiting more frequently, and having relationships of longer duration than partners in non-cyclical relationships.

A Commitment Model of Relationship Satisfaction

According to Stanley et al. (2006), any transition that increases constraints in a relationship without also increasing dedication puts the relationship at risk for later distress (e.g., less satisfaction) and possible termination (“sliding versus deciding”). Stanley and Markman (1992) suggested that because people are motivated to behave in ways consistent with their commitments, the lower level of deliberation present with sliding behavior puts relationships at risk by decreasing their chances of engaging in later pro-relationship behaviors (e.g., sacrifice, constructive communication, fidelity). Using this theoretical model, I propose to test a conceptual model which posits that sliding and dedication are indirectly related to relationship satisfaction through uncertainty, safety, and constructive communication and that dedication is also directly related to relationship satisfaction but sliding is not.

Consistent with the hypothesis put forth by Stanley et al. (2006), Vennum and Fincham (in press) found that sliding in romantic relationships did not predict lower relationship

satisfaction 14 weeks later, but it did predict more negotiation. As a result, I expected there to be a negative relationship between sliding and constructive communication (Path A, see Figure 1), but no direct relationship between sliding and relationship satisfaction. Additionally, research has found that establishing clearly formed commitment in a relationship is linked with higher relational certainty and relationship satisfaction (Baxter & Bullis, 1986). Thus, I hypothesized that dedication will be positively related to relationship satisfaction (Path B) and negatively related to relational uncertainty (Path C) and that sliding will be positively related to relational uncertainty (Path D).

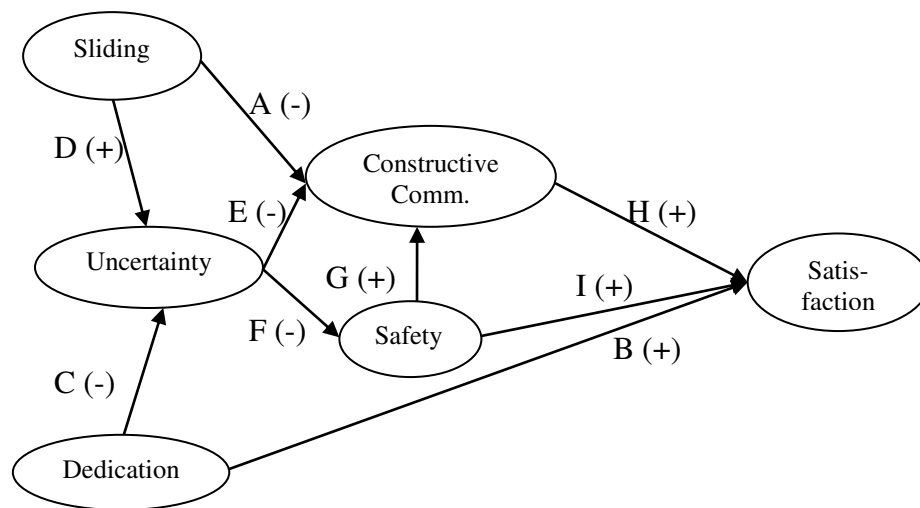


Figure 1. Model 2a: Hypothesized structural model.

According to Knobloch and Solomon (1999), relational certainty consists of norms for appropriate behavior in the relationship and mutuality of feelings between partners, their definition of the relationship, and their perceptions of their future together. Relational uncertainty influences how romantic partners communicate about their relationship (Knobloch & Carpenter-Theune, 2004; Knobloch & Solomon, 2005). Partners who perceive more uncertainty in their relationship also display less ability to perceive the presence of relationship talk when it is present (i.e., content messages that reference the state of the relationship; Knobloch & Solomon, 2005). Thus, I expected relational uncertainty will be negatively related to constructive communication (Path E).

Further, when uncertainty is high, partners perceive talking about sensitive topics with their partner as more threatening (Knobloch & Carpenter-Theune, 2004). In fact, Knobloch and Solomon (2002) suggested that people only employ direct information-seeking strategies when they feel secure in the relationship; thus, relational uncertainty may decrease one's sense of emotional safety in the relationship (Path F), making constructive communication more difficult (Path G). As such, those most in need of relationship discussion may also find it the most difficult and the most threatening. Because a negative conflict style and unresolved conflict are related to lower levels of relationship satisfaction in young adult relationships (Cramer, 2000), I expected constructive communication will be positively related to relationship satisfaction (Path H). Although little research exists on emotional safety in young adult relationships, physical and psychological violence are related to lower relationship satisfaction (Hettrich & O'Leary; Scott & Straus, 2007); thus, I reasoned that if emotional safety operates in a similar fashion to that of physical and psychological violence, then emotional safety will be positively related to relationship satisfaction (Path I).

Differences in the proposed model for those in cyclical relationships. Dailey, Pfister, and associates (2009) found that partners in cyclical relationships used strategies that failed to clearly communicate the end of the relationship compared with those in non-cyclical relationships. According to the constraint model (Stanley et al., 2006), the failure to clearly communicate that the relationship was over would be a slide, and sliding would increase the risk of future relationship distress. In the model proposed here, relationship distress is reflected in lower relationship satisfaction. Thus, I expected that the indirect relationship between sliding and relationship satisfaction will be stronger for those in cyclical relationships, and that the proposed model will account for more variance in relationship satisfaction for those in cyclical relationships. Further, I expected that those in cyclical relationships will report more sliding, less dedication, higher relational uncertainty, lower safety in expressing their thoughts and feelings to a partner, lower constructive communication, and less satisfaction in their relationship than those in non-cyclical relationships.

The Present Study

This study had three goals. The first goal was to examine differences in relationship characteristics and demographic characteristics for those in cyclical and non-cyclical young adult relationships. In attempting to replicate previous findings, I expected that about 50% of

participants in romantic relationships will be in cyclical relationships and that those in cyclical relationships will have renewed their relationships an average of two to three times (Hypothesis 1). As far as relationship dynamics, I hypothesized that partners in cyclical relationships will report higher levels of uncertainty and lower levels of dedication, constructive communication, and relationship satisfaction compared with those in non-cyclical relationships (Hypothesis 2). Further developing the research on cyclical relationships, I also expected that those in cyclical relationships will report more sliding and less safety in their relationships compared with partners in non-cyclical relationships (Hypothesis 3). Based on previous research, I hypothesized that as number of renewals increased, partners will report more sliding and uncertainty along with less dedication, safety, constructive communication, and relationship satisfaction (Hypothesis 4).

In extending the research on cyclical relationships, I also expected several individual characteristics will differ between those in cyclical and non-cyclical relationships. Based on developmental theory I expected to find that the two groups differed by year in college with cyclical relationships becoming less common as students progressed from freshman to senior year. Because those in cyclical relationships report lower dedication and previous findings on young adult romantic relationships have found that African American students more commonly report being in non-exclusive relationships, I expected African American students to be in cyclical relationships more frequently than Caucasian students (Hypothesis 5).

Additionally, since I expected sliding will be more prevalent in cyclical relationships, I also expected, based off the ideas of Stanley and Markman (1992), that those in cyclical relationships will report more constraints in their relationships. Specifically, I expected that partners in cyclical relationships will report living closer together, cohabiting more frequently, and having relationships of longer duration than partners in non-cyclical relationships (Hypothesis 6).

The second goal was to test a commitment model of relationship satisfaction. This model suggests that sliding and dedication are indirectly related to relationship satisfaction through uncertainty, safety, and constructive communication and that dedication is also directly related to relationship satisfaction but sliding is not. Specifically, I expected dedication to be positively related to relationship satisfaction (Hypothesis 7) and negatively related to relational uncertainty (Hypothesis 8). I expected sliding to not be directly related to relationship satisfaction, but

instead to be positively related to relational uncertainty (Hypothesis 9) and negatively related to constructive communication (Hypothesis 10). Further, higher levels of relational uncertainty will be associated with less constructive communication and feelings of emotional safety in romantic relationships (Hypothesis 11), and less emotional safety will be associated with less constructive communication (Hypothesis 12). Finally, less constructive communication and emotional safety will be associated with less relationship satisfaction (Hypothesis 13).

The third and final goal was to examine whether the proposed model tested as part of the second goal operates in the same fashion for those in cyclical and non-cyclical relationships. I posited that the expected associations will be stronger for those in cyclical relationships (Hypothesis 14) and that the model will account for more of the variance in relationship characteristics for those in cyclical relationships (Hypothesis 15).

CHAPTER 3

METHODS

Sample

Data for this study were drawn from a larger study on young adult romantic relationships collected by the Family Institute at The Florida State University during spring semester 2011 (IRB approval was obtained prior to secondary data analysis, see Appendix A). Participants were 979 undergraduate students (69% female and 31% male) in an introductory family relations course. This class meets a liberal studies requirement, so students represent all colleges and majors on campus (Fincham, Cui, Braithwaite, & Pasley, 2008). Students were given several options for class credit, including participation in this survey.

Students who chose to participate in the study were sent links to the survey through a secure online system (refer to Appendix B for the survey items used for this study). Responses from students were included if they were less than 26 years of age (young adults typically range from 18-25; Arnett, 2000) and did not miss more than two control questions which suggested that their data were reliable. Twenty participants were dropped from the study. The mean age of the remaining participants ($N = 959$) was 19.33 years ($SD = 1.24$), and 66% were Caucasian, with some African American (14%) and Latino (12.1%) participants. The remainder of participants indicated they were Asian, of mixed race, or “other.”

Forty-three percent of students (315 females and 101 males) answered *yes* to the question “Are you currently in a romantic relationship?” These participants composed the final sample and were asked to indicate if their current relationship was one where they had broken up and gotten back together again. Descriptive information on participants in cyclical and non-cyclical relationships are presented in Table 1. The mean age of those in cyclical relationships ($n = 167$) was 19.36 ($SD = 1.3$), and 59.3% were Caucasian, 20.4% were African American, 13.8% were Latino, and 6.6% were Asian or other races. The average age of those in non-cyclical relationships ($n = 249$) was 19.54 ($SD = 1.3$), and 71.1% were Caucasian, 9.2% were African American, 13.3% were Latino, and 6.4% were Asian or other races. The majority of participants (97%) reported being in opposite-sex relationships. Participants in romantic relationships were

also asked to specify whether they were dating, dating exclusively, engaged, or married. The majority of those in both cyclical and non-cyclical groups reported their relationships were with opposite-sex partners (95.2% in cyclical and 97.6% in non-cyclical relationships) and described their relationship as dating exclusively (88.6% and 82.7% of cyclical and non-cyclical groups, respectively).

Table 1. *Final Sample Demographic Characteristics (N = 416)*

Demographic Characteristics	Cyclical (n = 167)		Non-Cyclical (n = 249)	
	Frequency	Percent	Frequency	Percent
Race				
Caucasian	99	59.3	177	71.1
African American	34	20.4	23	9.2
Latino	23	13.8	33	13.3
Asian	6	3.6	3	1.2
Other	5	3.0	13	5.2
Sex				
Male	43	25.7	58	23.3
Female	124	74.3	191	76.7
Year in College				
Freshman	70	41.9	79	31.7
Sophomore	54	32.2	91	36.5
Junior	35	21.0	54	21.7
Senior	8	4.8	24	9.6
Sexual Orientation				
Same-Sex	7	4.2	6	2.4
Opposite-Sex	159	95.2	243	97.6
Relationship Status				
Dating	15	9.0	32	12.9
Dating Exclusively	148	88.6	206	82.7
Engaged	0	0.0	9	3.6
Married	1	0.6	0	0.0

Measures

Cyclical relationships. Identifying cyclical relationships was determined in the following manner. First, participants who indicated that they were currently in a romantic relationship and answered *yes* to the question “Is this a relationship where you have broken up and gotten back together at least once?” were categorized as being in a cyclical relationship. Of those who reported being in a romantic relationship, 40.1% ($n = 167$) were categorized as being in a cyclical relationship. These participants were then asked to indicate how many times they had broken up and gotten back together with this partner using an open-ended response. Due to the large positive skew of the number of renewals and consistent with previous research (Dailey, Pfiester et al., 2009), number of renewals was made into a categorical variable with 5 categories representing 1, 2, 3, 4, and 5 or more renewals, respectively. Of those in cyclical relationships, 37.1% reported that they had ended and renewed their relationship once, 24.6% had renewed their relationship twice, 16.8% had experienced three renewals, 8.4% had experienced four renewals, and 13.2% experienced 5 or more renewals. Partners renewed their relationship two to three times on average. Interestingly, 10 participants reported ending and renewing their relationship more than 10 times.

Relationship constraints. To assess current constraints in the relationships, participants indicated whether they were living separately (0) or together (1), how far they lived from their partner in miles, and how long they had been in this romantic relationship. Proximity to partner was measured as *0-10 miles*, *11-20 miles*, *21-50 miles*, *51-100 miles*, *101-200 miles*, or *more than 200 miles*. Because of the parabolic distribution in responses, this variable was coded into ≤ 50 miles apart (0) and > 51 miles apart (1). Relationship duration was taken from participant reports of how many years and months they had been with their current partner and converted into the number of months they had been together.

Relationship processes. Five relationship processes included in the conceptual model were measured. Sliding was assessed with 5 items developed to reflect the perspective of Stanley et al. (2006) on thoughtfulness regarding relationship decisions (Vennum & Fincham, in press). Participants reported their level of agreement with the following statements: “With romantic partners I weigh the pros and cons before allowing myself to take the next step in the relationship (e.g., be physically intimate),” “It is important to make conscious decisions about whether to take each major step in romantic relationships,” “Considering the pros and cons of

each major step in a romantic relationship destroys its chemistry,” “It is important to me to discuss with my partner each major step we take in the relationship,” and “It is better to ‘go with the flow’ than to think carefully about each major step in a romantic relationship.” Responses ranged from *strongly disagree* (1) to *strongly agree* (5). Items were coded so higher scores reflect more sliding in relationships. Cronbach alpha was .73 for those in cyclical relationships and .64 for those not in cyclical relationships, suggesting the scale may not be as reliable in the non-cyclical sample. The item-total statistics indicated that dropping the two negatively worded items (“Considering the pros and cons of each major step in a romantic relationship destroys its chemistry,” and “It is better to ‘go with the flow’ than to think carefully about each major step in a romantic relationship”) would increase the reliability of the scale. Exploratory factor analysis using principal axis factoring with oblique rotation (oblique rotation allows extracted factors be correlated after rotation) confirmed that these two items loaded on a second factor. With these two items removed, the remaining items loaded on one factor, and Cronbach alpha for the 3-item scale was .72 for those in cyclical relationships and .74 for those in non-cyclical relationships.

Relational uncertainty was assessed with 17 items (see Table 2) from the Relational Uncertainty Scale (Knobloch & Solomon, 1999) modified to reflect current young adult relationship language. Participants reported their level of uncertainty on a 5-point scale, ranging from *not certain at all* (1) to *completely certain* (5). Items were coded so higher scores indicate greater relational uncertainty. Exploratory factor analysis using principal axis factoring and oblique rotation with a pilot sample of 218 undergraduates in romantic relationships revealed two factors that accounted for about 67% of the variance in the items. Factor one (eigenvalue = 10.01) consisted of 7 items reflecting uncertainty around the current status of the relationship, and factor two (eigenvalue = 1.36) consisted of 10 items reflecting uncertainty about the future of the relationship. Cronbach alphas were .90 for Future Uncertainty and .93 for Current Uncertainty in this sample. Results from a confirmatory factor analysis ($\chi^2(118) = 291.33, p < .01$; CFI = .91; TLI = .89; RMSEA = 0.08; SRMR = 0.05) with a second sample of 219 supported the two-factor structure, although item 12 was dropped due to low reliability. For the current sample, Cronbach alphas for Future Uncertainty for the cyclical and non-cyclical groups were .95 and .97, respectively. Cronbach alphas for Current Uncertainty in the current sample were .84 for those in cyclical relationships and .90 for those non-cyclical relationships.

Table 2. *Factor Loadings for the Modified Relational Uncertainty Measure*

When thinking about your current romantic relationship, how sure are you about...	Factor 1	Factor 2
6. whether you and your partner feel the same way about the relationship?	1.695	.260
5. the boundaries for appropriate and/or inappropriate behavior in this relationship?	1.076	.747
8. whether this relationship has a future?	.973	-.085
7. whether this relationship is what you want it to be?	.959	-.071
16. where this relationship is headed?	.945	-.066
14. whether this relationship is where you and your partner want it to be?	.901	-.082
4. whether you and your partner will stay together?	.841	.028
11. whether you and your partner describe the relationship the same to others?	.729	.168
9. what you can expect from your partner?	.563	.301
10. whether your partner likes you as much as you like him or her?	.592	.206
12. whether this relationship will end soon?	.425	-.084
13. how you can or cannot behave around your partner?	-.125	.893
3. whether this is more than a friendship?	-.053	.876
1. what you can or cannot say to each other?	-.166	.843
17. whether this is a committed relationship?	.118	.768
15. how to label your current relationship around friends?	.114	.665
2. whether you and your partner feel the same way about each other?	.338	.571

Dedication to the relationship was measured with 4 items from the Commitment Inventory (Stanley & Markman, 1992). Participants reported their level of agreement on a 5-point scale, ranging from *strongly disagree* (1) to *strongly agree* (5). Items were “My relationship with my partner is more important to me than almost anything else in my life,” “I may not want to be with my partner a few years from now,” “I like to think of my partner and me more in terms of ‘us’ and ‘we’ than ‘me’ and ‘him/her’,” and “I want this relationship to stay strong no matter what rough times we may encounter.” Responses were coded so higher scores reflect greater dedication. Exploratory factor analysis using principal axis factoring with oblique

rotation revealed one factor, and Cronbach alphas were .84 for the cyclical group and .82 for the non-cyclical group.

A measure of emotional safety in the relationship (*relationship safety*) was developed and asked about level of agreement with five statements: “I feel safe...telling my partner about my goals and dreams,” “sharing all my innermost beliefs with my partner,” “asking for things I want from him/her,” and “letting my partner know exactly how I feel.” Responses range from *strongly disagree* (1) to *strongly agree* (5), and higher scores reflect greater relationship safety.

Exploratory factor analysis with oblique rotation revealed one factor, and Cronbach alphas were .91 for those in cyclical relationships and .82 for those in non-cyclical relationships.

The CPQ Constructive Communication subscale (Christensen & Sullaway, 1984) is a 7-item assessment of an individual’s perception of the couple’s ability to solve a conflict by mutually discussing the problem, expressing their feelings to each other, and suggesting possible solutions and compromises. Participants rated the likelihood of these behaviors occurring when a relationship problem arises or during a discussion of a relationship problem on a scale of *very unlikely* (1) to *very likely* (9), and responses were coded so higher scores reflected more constructive communication. The CPQ Constructive Communication subscale has been shown to be correlated .51 with observed behavior (Halweg, Kaiser, Christensen, Fehm-Wolfsdorf, & Groth, 2000). Exploratory factor analysis using principal axis factoring with oblique rotation indicated the recoded negatively worded items loaded on a separate factor. Correlating negatively worded items in the presence of method effects has been shown to provide a good fit to the data when evaluating social constructs (DiStefano & Motl, 2006), so this technique will be used in the analysis of the hypothesized model of relationship satisfaction. Cronbach alphas were .84 for the cyclical group and .75 for the non-cyclical group.

The 4-item version of the Couples Satisfaction Index (Funk & Rogge, 2007) was used to assess participants’ satisfaction with their current relationship. The CSI has demonstrated higher precision of measurement than other satisfaction scales and strong convergent and construct validity (Funk & Rogge). The first question asked, “In general, how satisfied are you with your relationship?” with responses ranging from *worse than all others (extremely bad)* (1) to *better than all others (extremely good)* (6). The second question asked, “How rewarding is your relationship with your partner?” with responses ranging from *not at all* (1) to *very much or extremely* (6). The next question asked about level of agreement with “I have a warm and

comfortable relationship with my partner” on a scale from *strongly disagree* (1) to *strongly agree* (6). The last question asked participants to rate the “degree of happiness, all thing considered” of their relationship on a scale from *extremely unhappy* (1) to *perfect* (7) with *happy* (4) representing “the degree of happiness of most relationships.” Items were summed so higher scores indicate greater relationship satisfaction. Exploratory factor analysis using principal axis factoring with oblique rotation revealed one factor, and Cronbach alphas were .90 for both the cyclical and non-cyclical groups.

Analytic Strategy

To examine differences in relationship characteristics and sample demographic characteristics for those in cyclical and non-cyclical young adult relationships, I used ANOVAs for examining mean differences between the groups on continuous variables and cross-tabulations to examine differences between groups on categorical variables (Hypotheses 1-3). Missing data were handled by mean imputation by group. Although using mean imputation can result in an underestimation of variables’ standard error, it is not expected to influence results when the rate of missing data is less than three percent as in this study (Grace-Martin, 2009). Because group sizes were unequal, Welch’s *F*-statistic was requested for the ANOVAs. Welch’s *F* is an alternative *F*-ratio that adjusts *F* and residual degrees of freedom to be robust when homogeneity of variances is violated (Field, 2005). Because I had no specific hypotheses about the specific effect of a certain number of renewals against any other number of renewals, I carried out post-hoc tests to compare all categories of number of renewals with each other. For comparing participants by number of renewals, I requested Gabriel’s procedure, because it has greater power when sample sizes are different and tests for homogeneity between groups. The Games-Howell procedure was also requested because of the uncertainty of knowing whether the population variances are equivalent. For examining group differences with categorical variables, I used crosstabulations which allow for the examination of frequencies of observations that belong to specific categories on more than one variable. Pearson Chi-square was used in the crosstabulations to determine if the expected frequencies match the actual frequencies in the data.

Full structural regression (SR) modeling was used to test the hypothesized relationships in the conceptual model between sliding, uncertainty, dedication, constructive communication, emotional safety, and relationship satisfaction (Hypotheses 4-10). SR models combine a path

model with measurement components to allow for direct and indirect effects between latent variables (Kline, 2005). All models were tested in *Mplus* 5.0 using individual raw data (Muthén & Muthén, 1998-2007). Missing data were handled using full information maximum likelihood (FIML). Rather than discarding cases containing missing values, parameter estimates and standard errors are estimated directly from observed data through an iterative procedure that does not require data to be missing completely at random (Acock, 2005). Thus, parameter estimates from FIML provide less biased information than ad hoc procedures, such as listwise deletion or pairwise deletion (Acock; Allison, 2003).

The estimators used in structural equation modeling assume the data are continuous and multivariate normally distributed, and violations of these assumptions can produce biased model fit indices, parameter estimates, and their significance tests (Hancock & Mueller, 2006). To identify an appropriate estimator, I examined the normality of the data; it has been recommended that absolute values larger than two for skewness and seven for kurtosis are problematic (e.g. Chou & Bentler, 1995). Because the data had skewness (3 items ranging from -2.05 to -3.2) and kurtosis (1 item at 13.83) values outside the recommended range, maximum likelihood robust (MLR) estimation method was used to evaluate the model. MLR with Satorra-Bentler (S-B) scaling (Satorra & Bentler, 2001) adjusts the model chi-square, fit indices, and standard errors of the parameter estimates by a factor based on the amount of non-normality in the data. In this case, the S-B rescaled χ^2 difference test is used to compare nested models.

To assess the fit of the full SR model, a two-step approach was used (Anderson & Gerbing, 1988). The first step was to evaluate the fit of the measurement (or confirmatory factor analysis) model and to revise it, if necessary, to obtain an adequate fit. Model χ^2 was used to evaluate overall model-data fit, with non-significant χ^2 indicating the model-implied covariance matrix is not significantly different from the observed covariance matrix (the model is a good fit to the data). Chi-square is influenced by sample size and may result in significance even when the model is minimally mis-specified (Marsh, Hau, & Wen, 2004), so additional fit indices are also provided as supplemental evidence in the evaluation of the model-data fit: the comparative fit index (CFI), the root mean square error approximation (RMSEA), and the standardized root mean square residual (SRMR). It has been recommended that values greater than .95 for CFI and smaller than .06 and .08 for RMSEA and SRMR suggest good model fit (Hu & Bentler, 1999). These are rules of thumb rather than definite cutoffs for fit (e.g., Marsh et al.).

Indirect effects were computed as the product of direct effects. When using MLR, the preferred method for analyzing mediation (bias-corrected bootstrapped confidence intervals), cannot be applied in *Mplus*. Instead, *Mplus* applies the Delta method proposed by Sobel (1987) to compute the standard error associated with indirect effects.

To determine if the direct effects in the model vary between those in cyclical and non-cyclical relationships (or if group membership moderated the relationships specified in the model), I used cross-group equality constraints which forced the unstandardized parameter estimates to be the same between groups (Hypotheses 11 & 12). Because the constrained models are nested within the unconstrained model, a χ^2 difference test can be performed to compare the constrained and unconstrained models (Kline, 2005). If the fit of the constrained model is not significantly worse than that of the unconstrained model, I can conclude that the parameter may be equal in the populations. If the fit of the constrained models is significantly worse compared to the unconstrained model, then I can conclude that the parameters may not be equal in the populations. Finally, I constrained the error variances in the model to be equal for participants in cyclical versus non-cyclical relationships to test whether the model has comparable explanatory power across these groups (see Kline).

CHAPTER 4

STUDY RESULTS

Characteristics of Cyclical and Non-cyclical Relationships: Descriptive Findings

To replicate and extend findings from Dailey, Pfiester, et al. (2009) regarding the differences in individual and relationship characteristics of those in cyclical relationships, I used ANOVAs (Table 4) and cross-tabulations (Table 3).

I first examined whether there were differences in the racial composition of the two groups. For those in cyclical relationships a higher percentage were African American (20.4%) than those in non-cyclical relationships (9.2%) and a lower percentage were Caucasian (59.3%) compared with the non-cyclical group (71.1%), $\chi^2(3, N = 416) = 11.148, p = .011$. In other words, 59.6% of the 54 African American students in this sample reported that their current relationship was cyclical compared with 35.9% of Caucasians, 41.1% of Latinos, and 40.1% Asians or other races. Next, I examined whether group membership varied by school year. Although the percentage of those in cyclical relationships decreased as students progressed from freshmen to senior year (47%, 37.2%, 39.3%, 40.2% for freshmen, sophomores, juniors, and seniors, respectively), this difference was not statistically significant, $\chi^2(3, N = 415) = 6.478, p = .091$.

Regarding constraints to ending the relationship, those in cyclical relationships more commonly reported living over 50 miles from their partner (50%) than those not in non-cyclical relationships (40.2%), $\chi^2(1, N = 415) = 3.91, p = .03$, which was not expected. Also contrary to expectations, those in cyclical relationships (9.0%) did not report living with their partner more often than those in non-cyclical relationships (9.7%), $\chi^2(1, N = 414) = .048, p = .485$. Consistent with expectations, participants in cyclical relationships reported being in their relationships for an average of 23.17 months ($SD = 16.15$) compared with those in non-cyclical who reported an average length of 14.75 months ($SD = 17.58$), $F(1, 400) = 23.32, p < .001$.

Table 3. Results of *Crosstabulations for Cyclical and Non-cyclical Partners*

Variables	Cyclical (<i>n</i> = 167)		Non-cyclical (<i>n</i> = 249)		X^2	<i>df</i>	<i>p</i>
	<i>N</i>	%	<i>N</i>	%			
Race					11.1	3	.011
Caucasian	99	59.3	177	71.1			
African American	34	20.4	23	9.2			
Latino	23	13.8	33	13.3			
Asian or Other	11	6.6	16	6.4			
Year in College					6.48	3	.091
Freshman	70	41.7	79	31.9			
Sophomore	54	32.3	91	36.7			
Junior	35	21.0	54	21.8			
Senior	8	4.8	24	9.7			
Distance					3.91	1	.048
Less than 50 miles apart	83	50.0	149	59.8			
More than 50 miles apart	83	50.0	100	40.2			
Cohabitation					0.05	1	.827
Cohabiting	15	9.0	24	9.7			
Not cohabiting	151	91.0	224	90.3			

Note. The percentages are for within the cyclical and non-cyclical groups.

Other differences between those in cyclical and non-cyclical relationships were also found for several relationship characteristics (see Table 4). Those in cyclical relationships reported more sliding ($M = 6.51$, $SD = 2.37$) in their relationships compared with those in non-cyclical relationships ($M = 5.49$, $SD = 2.17$), $F(1, 309.46) = 18.10$, $p < .001$. Partners in cyclical relationships also reported greater uncertainty about the future of the relationship ($M = 20.22$, $SD = 8.47$) than those in non-cyclical relationships ($M = 18.14$, $SD = 8.63$), $F(4, 414) = 5.89$, $p = .016$. Conversely, as expected, cyclical partners reported less constructive communication ($M = 48.24$, $SD = 10.88$) compared to non-cyclical partners ($M = 54.68$, $SD = 7.21$), Welch's $F(1, 262.87) = 45.27$, $p < .001$. Also as expected, those in cyclical relationships reported lower satisfaction ($M = 19.25$, $SD = 3.76$) than those in non-cyclical relationships ($M = 21.31$, $SD = 3.19$), Welch's $F(1, 315.60) = 33.81$, $p < .001$. Contrary to expectations, those in cyclical

and non-cyclical relationships did not differ on the amount of dedication, current uncertainty, and safety.

Table 4. *Analysis of Variance Results for Cyclical and Non-cyclical Relationships (N = 416)*

Relationship Characteristics	Cyclical (n = 167)		Non-cyclical (n = 249)		F	p
	M	SD	M	SD		
Duration	23.17	16.15	14.75	17.58	23.32	.000
Sliding	6.51	2.37	5.49	2.17	20.70	.000
Dedication	15.33	3.30	15.53	3.16	0.385	.535
Future Uncertainty	20.22	8.47	18.14	8.63	5.89	.016
Current Uncertainty	9.94	3.93	9.51	4.41	1.01	.315
Relationship Safety	17.80	3.00	18.15	2.37	1.60*	.206
Constructive Communication	48.24	10.88	54.68	7.21	45.27*	.000
Relationship Satisfaction	19.25	3.76	21.31	3.19	33.81*	.000

*Welch's F-statistic used when variances between groups were not homogenous.

I next examined whether these relationship characteristics varied by the number of renewals for those in cyclical relationships. Consistent with previous research, number of renewals was made into a categorical variable with 5 categories representing 1, 2, 3, 4, and 5 or more renewals, respectively. There was a significant effect of number of renewals on sliding [$F(4, 163) = 4.75, p = .001$], dedication [$F(4, 163) = 2.48, p = .046$], uncertainty about the future [$F(4, 163) = 5.92, p < .001$], relationship safety [$F(4, 53.347) = 3.13, p = .017$], constructive communication [$F(4, 163) = 14.67, p < .001$], and relationship satisfaction [$F(4, 163) = 12.61, p < .001$]. Uncertainty about the current state of the relationship did not vary by number of renewals (see Table 5).

Table 5. *Analysis of Variance by Number of Renewals (N = 167)*

Variables	1 Renewal (n = 62)		2 Renewals (n = 42)		3 Renewals (n = 28)		4 Renewals (n = 14)		≥ 5 Renewals (n = 21)		F	p
	M	SD	M	SD	M	SD	M	SD	M	SD		
Sliding	6.48	2.15	5.66	1.80	6.18	2.25	8.31	3.15	7.45	2.74	4.75	.001
Dedication	15.34	3.29	15.69	3.10	16.39	2.75	14.38	4.18	13.76	3.28	2.48	.046

Table 5 Continued.

	1 Renewal (<i>n</i> = 62)		2 Renewals (<i>n</i> = 42)		3 Renewals (<i>n</i> = 28)		4 Renewals (<i>n</i> = 14)		≥ 5 Renewals (<i>n</i> = 21)			
Variables	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Future Uncertainty	18.73	7.65	18.90	7.89	19.11	7.60	22.50	7.90	27.71	10.20	5.92	.000
Current Uncertainty	9.23	3.35	9.93	4.37	9.37	2.73	10.17	2.82	12.91	5.42	2.38*	.063
Relationship Safety	18.08	2.47	17.64	3.66	18.89	1.71	16.92	3.07	16.33	3.69	3.13*	.017
Constructive Comm.	52.05	8.53	50.90	8.32	47.93	9.39	44.50	11.81	35.08	11.94	14.67	.000
Relationship Satisfaction	20.10	3.20	19.83	2.76	19.75	2.89	20.00	3.92	14.57	4.53	12.61	.000

*Welch's F-statistic used when variances between groups were not homogenous.

Post hoc analysis was conducted for those relationship characteristics that varied by number of renewals. The results of the Gabriel procedure indicated that the variances across number of renewal groups were not homogenous, so the results of the Games-Howell procedure which is more robust when the homogeneity of variance assumption is not met appear in Table 6. Using the Games-Howell procedure, the two groups were found to differ on dedication, future uncertainty, relationship safety, constructive communication, and relationship satisfaction. Partners who had renewed three times ($M = 16.39$, $SD = 2.75$) reported more dedication than those who reported renewing five or more times ($M = 13.76$, $SD = 3.28$). Partners who had renewed once ($M = 18.73$, $SD = 7.65$), twice ($M = 18.90$, $SD = 7.89$), or three times ($M = 19.11$, $SD = 7.60$) reported less uncertainty about the future compared with those who had renewed their relationship five or more times ($M = 27.71$, $SD = 10.20$). Partners who renewed three times ($M = 18.89$, $SD = 1.71$) reported more safety in their relationship than those who renewed five or more times ($M = 16.33$, $SD = 3.69$). Additionally, partners who renewed one ($M = 52.05$, $SD = 8.53$), two ($M = 50.90$, $SD = 8.32$), and three ($M = 47.93$, $SD = 9.39$) times also reported more constructive communication than those who renewed their relationship five times or more ($M = 19.25$, $SD = 3.76$). Finally, partners who renewed their relationship one ($M = 20.10$, $SD = 3.20$), two ($M = 19.83$, $SD = 2.76$), three ($M = 19.75$, $SD = 2.89$), or four ($M = 20.00$, $SD = 3.92$) times all reported more relationship satisfaction than those who renewed their relationship at least five times ($M = 14.57$, $SD = 4.53$).

Table 6. *Post Hoc Analysis Using the Games-Howell Procedure (N = 167)*

Contrasts by Variable	Mean Diff.	Std. Error	<i>p</i>	95% Confidence Interval	
				Lower Bound	Upper Bound
Dedication					
3 & 5	-2.64	0.87	.033	-5.12	-0.15
Future Uncertainty					
1 & 5	-8.98	2.49	.000	-14.50	-3.46
2 & 5	-8.81	2.13	.000	-14.78	-2.85
3 & 5	-8.60	2.31	.003	-15.13	-2.07
Relationship Safety					
3 & 5	-2.56	0.85	.041	-5.04	-0.08
Constructive Comm.					
1 & 5	-16.97	2.77	.000	-25.00	-8.93
2 & 5	-15.83	2.85	.000	-24.06	-7.59
3 & 5	-12.85	3.10	.002	-21.72	-3.98
Relationship Satisfaction					
1 & 5	-5.53	1.05	.000	-8.57	-2.48
2 & 5	-5.26	1.06	.000	-8.33	-2.20
3 & 5	-5.18	1.11	.000	-8.37	-1.30
4 & 5	-5.43	1.43	.005	-9.56	-1.30

Testing the Proposed Measurement Model

Next, the full structural regression model presented in Figure 1 was tested. I first assessed the fit of the hypothesized measurement model (Figure 2, Model 1). Results of assessing the measurement model show that it had 231 degrees of freedom with S-B rescaled $\chi^2(231) = 499.36, p < .001$. The scaling correction factor for MLR was 1.171 in this model. CFI, RMSEA, and SRMR for the modified measurement model were also examined: CFI = .94, RMSEA = .05, and SRMR = .05. All of the direct effects of the single factor on the items were significant at $p < .001$ (see Table 6 for the standardized parameter estimates). These values indicate that the measurement model is an adequate fit to the data.

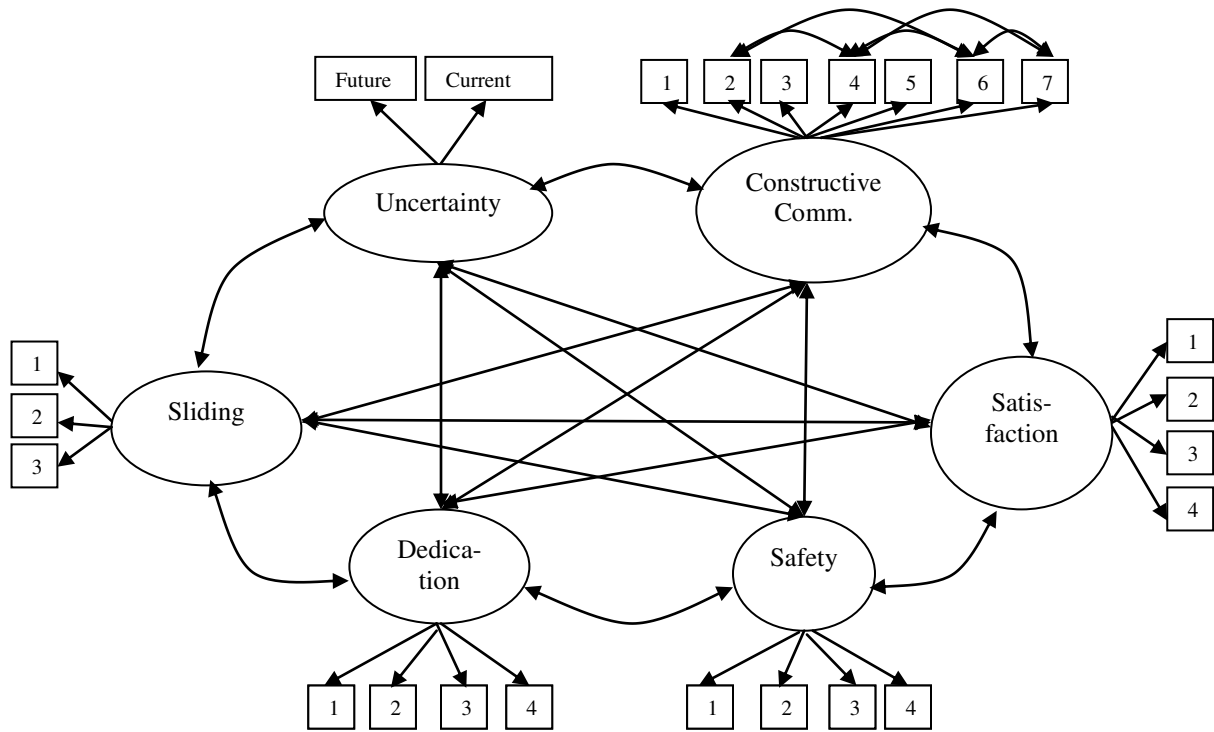


Figure 2. Model 1: Hypothesized measurement model.

Table 7. Standardized Parameter Estimates for the Measurement Model

Parameter Estimates	Model 1
Path Coefficients	
Sliding → sliding1	.68
Sliding → sliding2	.76
Sliding → sliding3	.70
Dedication → Ded1	.72
Dedication → Ded2	.71
Dedication → Ded3	.77
Dedication → Ded4	.82
Uncertainty → Future	.98
Uncertainty → Current	.88
Constructive Comm. → Comm1	.88
Constructive Comm. → Comm2	.29
Constructive Comm. → Comm3	.76
Constructive Comm. → Comm4	.39
Constructive Comm. → Comm5	.79
Constructive Comm. → Comm6	.43
Constructive Comm. → Comm7	.45

Table 7 continued.

Parameter Estimates	Model 1
Safety → safe2	.75
Safety → safe3	.81
Safety → safe4	.80
Safety → safe5	.81
Satisfaction → sat1	.84
Satisfaction → sat2	.90
Satisfaction → sat3	.90
Satisfaction → sat4	.75
Correlations between Error Variances	
Comm2 ↔ Comm4	.41
Comm2 ↔ Comm6	.34
Comm2 ↔ Comm7	.38
Comm4 ↔ Comm6	.50
Comm4 ↔ Comm7	.45
Comm6 ↔ Comm7	.69
Correlations between Latent Variables	
Sliding ↔ Dedication	-.19
Sliding ↔ Uncertainty	.33
Sliding ↔ Constructive Comm.	-.50
Sliding ↔ Safety	-.32
Sliding ↔ Satisfaction	-.33
Dedication ↔ Uncertainty	-.66
Dedication ↔ Constructive Comm.	.35
Dedication ↔ Safety	.45
Dedication ↔ Satisfaction	.68
Uncertainty ↔ Constructive Comm.	-.60
Uncertainty ↔ Safety	-.57
Uncertainty ↔ Satisfaction	-.76
Constructive Comm. ↔ Safety	.42
Constructive Comm. ↔ Satisfaction	.59
Safety ↔ Satisfaction	.48

All path coefficients: $p < .01$.

Testing the Proposed Structural Model

With the measurement model adequately fitting the data, I moved to step two and investigated the fit of the hypothesized structural model (Figure 1; Model 2a). The hypothesized full structural model had 236 degrees of freedom with S-B rescaled $\chi^2(236) = 537.88$, $p < .001$. The scaling correction factor was 1.171 for this model. CFI indicated the model did not fit the data adequately (CFI = .93) while RMSEA (.06) and SRMR (.05) were in the

recommended range (see Table 8 for fit indices for all full SR models). Two paths were not significant at $p < .01$: the direct path from safety to relationship satisfaction and the path from safety to constructive communication. These paths were removed, the covariance between safety and relationship satisfaction was set as 0, and the modified full structural regression model (Figure 3; Model 2b) was re-run.

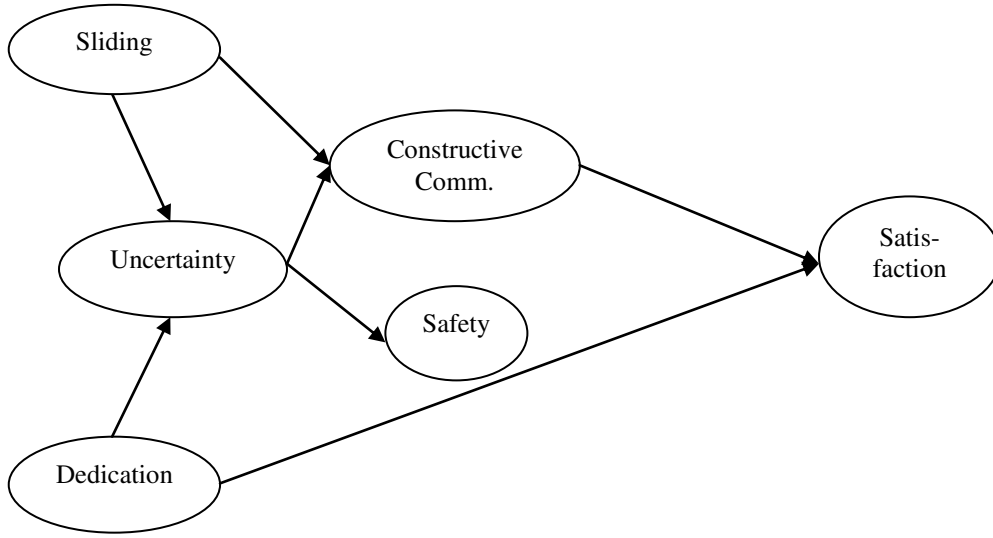


Figure 3. Model 2b: Modified structural model with non-significant paths removed.

Once the non-significant paths were removed, S-B rescaled $\chi^2(237) = 541.20$, $p < .001$ and the scaling correction factor for this model was 1.176, CFI = .93, RMSEA = .06, SRMR = .05. To improve the fit of this model, the modification indices suggested a direct path from uncertainty to satisfaction. Knobloch and Solomon (2003) found that happiness was the emotion most associated with increases in relational certainty, so adding the direct relationship from uncertainty to relationship satisfaction in addition to the indirect relationship through constructive communication in the final model made theoretical sense.

The model including a direct effect from uncertainty to satisfaction (Figure 4; Model 2c) had 236 degrees of freedom with S-B rescaled $\chi^2(236) = 508.45$, $p < .001$. The scaling correction factor for the modified structural model was 1.173. CFI, RMSEA, and SRMR were also examined: CFI = .94, RMSEA = .05, and SRMR = .05. The added path from uncertainty to

satisfaction was significant at $p < .01$. No further paths were suggested by the modification indices.

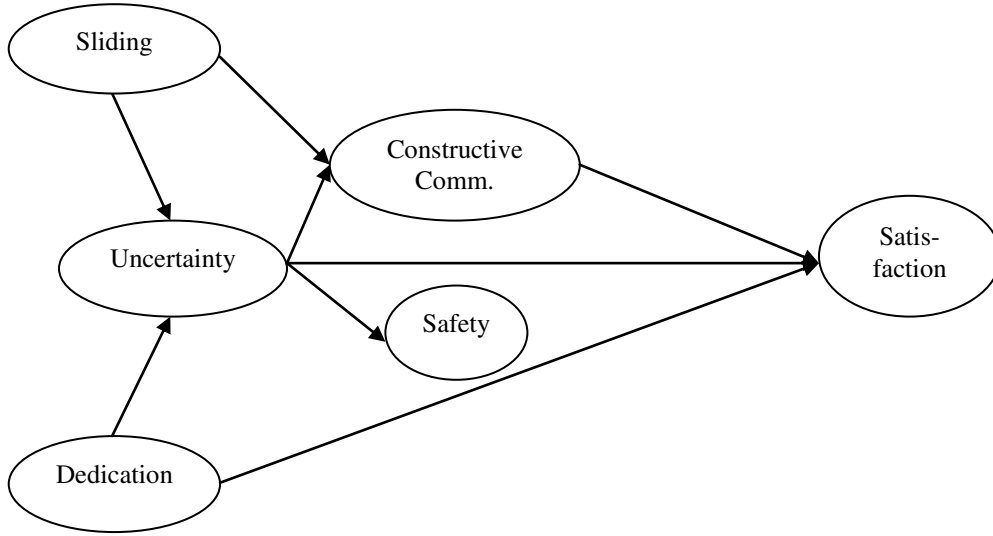


Figure 4. Model 2c: Final structural model.

Because both Models 2b and 2c were reasonable fits to the data, a χ^2 difference test with S-B correction was performed. The χ^2 values using regular ML method were $\chi^2(237) = 636.45$, $p < .001$ for Model 2b and $\chi^2(236) = 596.62$, $p < .001$ for the final structural model (Model 2c). The χ^2 difference value with the S-B correction between these two models was calculated by:

$$\chi^2_{rescaled\ diff} = \frac{636.45 - 596.62}{(1.176 \cdot 237 - 1.173 \cdot 236) / (237 - 236)} = 21.14$$

where 1.176 and 1.173 were the scaling correction factors and 237 and 236 were degrees of freedom for Models 2b and 2c, respectively. The value of the chi-square difference test exceeded the critical value for one degree of freedom of 3.84 at $\alpha = .05$, indicating that adding the direct path from uncertainty to satisfaction significantly improved the model fit.

To complete the assessment of overall model fit of the final structural model, a χ^2 difference test with S-B correction was performed to evaluate the relative fit of Model 2c and the measurement model (Model 1). Because full structural regression model is nested within the measurement model, a chi-square difference test determines whether the structural part of the model is an adequate fit to the data. The χ^2 values using regular ML method were

$\chi^2(236) = 596.62, p < .001$ for the final structural model and $\chi^2(231) = 584.52, p < .001$ for the measurement model. The χ^2 difference value with the S-B correction between these two models was thus calculated by:

$$\chi^2_{\text{rescaled diff}} = \frac{596.62 - 584.52}{(1.173 \cdot 236 - 1.171 \cdot 231) / (236 - 231)} = 9.56$$

where 1.173 and 1.171 were the scaling correction factors and 236 and 231 were degrees of freedom for Models 2c and the measurement model, respectively. The chi-square difference test had a value of $\chi^2_{\text{rescaled diff}}(5) = 9.56$, which does not exceed the critical value of 11.07 (the chi-square difference test is not significant at $\alpha = .05$). This indicates that there is no significant difference between the two models; thus, I chose the simpler, more parsimonious model, and conclude that the final full structural regression model (Model 2c) is a good fit to the data.

Table 8. *Summary of Fit Indices for Four Models*

Model	S-B rescaled χ^2	<i>df</i>	<i>P</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>
Model 1	499.36	231	.000	.94	.05	.05
Model 2a	537.88	236	.000	.93	.06	.05
Model 2b	641.20	237	.000	.93	.06	.05
Model 2c	508.45	236	.000	.94	.05	.05

Direct effects. Three variables were hypothesized to have direct effects on relationship satisfaction: dedication, safety, and constructive communication. Safety was not related to relationship satisfaction, although dedication and constructive communication were. Additionally, a direct effect from uncertainty to relationship satisfaction was added to the final model. As shown in Table 9, uncertainty had the strongest unique contribution (represented by a standardized path coefficient of -.40) to explaining the variance in relationship satisfaction, followed by dedication ($\beta = .33$) and constructive communication ($\beta = .23$). The magnitude of these direct effects corresponded to medium to large effect sizes, according to Cohen (1988).

Indirect effects. In the final full structural regression model (Model 2c), there were three indirect effects from sliding to relationship satisfaction and two indirect effects from dedication to relationship satisfaction (see Table 9). All five indirect effects were significant at $p < .01$. The magnitude of the effects from sliding to satisfaction ranged from -.03 to -.09. The two specific

indirect effects of dedication on satisfaction were .07 and .25. In the final model, there were also two indirect effects on safety: one from dedication through uncertainty (.36) and the other from sliding through uncertainty (-.13). The sum of these specific indirect effects formed total indirect effects for dedication (.32) and sliding (-.20) on relationship satisfaction.

Table 9. *Standardized Parameter Estimates for the Full Structural Model*

Parameter Estimates	Model 2c
Direct Effects	
Sliding → Uncertainty	.22
Sliding → Constructive Comm.	-.33
Dedication → Satisfaction	.33
Dedication → Uncertainty	-.62
Uncertainty → Satisfaction	-.40
Uncertainty → Constructive Comm.	-.49
Uncertainty → Safety	-.59
Constructive Comm. → Satisfaction	.23
Specific Indirect Effects	
Sliding → Uncertainty → Comm. → Sat.	-.03
Sliding → Comm. → Sat.	-.08
Sliding → Uncertainty → Sat.	-.09
Dedication → Uncertainty → Comm. → Sat.	.07
Dedication → Uncertainty → Sat.	.25
Sliding → Uncertainty → Safety	-.13
Dedication → Uncertainty → Safety	.36
Total Indirect Effects	
Sliding → Satisfaction	-.19
Dedication → Satisfaction	.32
Sliding → Safety	-.13
Dedication → Safety	.36
Sliding → Satisfaction	-.19
Dedication → Satisfaction	.32
All path coefficients: $p < .01$.	

The *R*-squared value for each endogenous latent factor in the model can be explained as the percentage of variance in that factor that is accounted for by its predictors, thus 49% of the variance in uncertainty, 46% of the variance in constructive communication, 34% of the variance in safety, and 67% of the variance in satisfaction was explained in the final model.

Multiple-Sample SEM

Once a reasonably good model for the whole sample was determined, a multiple-sample analysis was performed to compare the two groups. Using the model established in the previous analysis (Model 2c), I first examined the fit to the data with all the direct effects unconstrained (Model 3a). The unconstrained model assumes that all freely estimated parameters are not the same across groups (Table 11). As expected, this model is a good fit to the data with 12 degrees of freedom with S-B rescaled $\chi^2(12) = 14.24, p = .29$; CFI = 1.0, RMSEA = .03, and SRMR = .03. The scaling correction factor for MLR was 1.210.

Table 10. *Unstandardized Parameter Estimates for Cyclical and Non-cyclical Groups: Unconstrained Model*

Parameter Estimates	Cyclical (<i>n</i> = 167)	Non-cyclical (<i>n</i> = 249)
Direct Effects		
Sliding → Uncertainty	.42 ⁺	.89*
Sliding → Constructive Comm.	-.72*	-.56*
Dedication → Satisfaction	.38*	.30*
Dedication → Uncertainty	-2.11*	-2.27*
Uncertainty → Satisfaction	-.11*	-.12*
Uncertainty → Constructive Comm.	-.51*	-.19*
Uncertainty → Safety	-.12*	-.11*
Constructive Comm. → Satisfaction	.09*	.03
Residual Variances		
Uncertainty	92.88*	94.99*
Constructive Comm.	71.45*	39.63*
Safety	7.01*	3.87*
Relationship Satisfaction	5.49*	4.51*

* $p \leq .001$, ⁺ $p < .10$

With the unconstrained model fitting the data well, I then imposed equality constraints between those in cyclical and non-cyclical relationships on all direct effects (Model 3b). The model with equality constraints on all parameters (Model 3b) had 29 degrees of freedom with S-B rescaled $\chi^2(20) = 39.93, p = .01$. The scaling correction factor for MLR was 1.273 in this model. CFI, RMSEA, and SRMR were also examined: CFI = .96, RMSEA = .07, and SRMR = .12. These values indicated this model was not a good fit to the data. The modification indices suggested that relaxing the constraint on the direct effect between uncertainty and communication would improve the fit of the model. This suggestion was supported by visually examining the value for this parameter for those in cyclical versus non-cyclical relationships in the unconstrained model; the direct effect from uncertainty to constructive communication was significant for those in cyclical relationships but not for those in non-cyclical relationships. After relaxing the constraint on the path between uncertainty and communication, Model 3c had 19 degrees of freedom with S-B rescaled $\chi^2(19) = 20.54, p = .36$ and a scaling correction factor of 1.289. CFI, RMSEA, and SRMR also indicated the model was a good fit to the data: CFI = 1.0, RMSEA = .02, and SRMR = .05. The modification indices showed no values over 3.84. To further examine model fit compared to the fully unconstrained model, an S-B scaled chi-square difference test calculated by:

$$\chi^2_{rescaled\ diff} = \frac{26.469 - 17.227}{(1.289 * 19 - 1.1210 * 12) / (19 - 12)} = .14$$

indicated that constraining the direct effects (except the one from uncertainty to constructive communication) across groups did not significantly decrease the fit of the model; thus, it is preferable to keep the simpler model with equality constraints on all direct effects except from uncertainty to constructive communication.

After comparing whether the structural model paths were the same across groups, I constrained the error variances to be equal for participants in cyclical and non-cyclical relationships (Model 3d). This tests whether the model has comparable explanatory power across the groups. This model had 27 degrees of freedom with S-B rescaled $\chi^2(27) = 59.87, p < .001$, and a scaling correction factor of 1.751. CFI, RMSEA, and SRMR values indicated that Model 3d was not a good fit to the data: CFI = .94, RMSEA = .08, and SRMR = .28. The modification indices suggested allowing the residual variances of safety to vary across groups. After relaxing this constraint, Model 3e was also not a good fit to the data with S-B rescaled $\chi^2(25) = 58.02$,

$p < .001$, a scaling correction factor of 1.468, CFI = .94, RMSEA = .08, and SRMR = .24. The modification indices next suggested relaxing the constraint on the error variance of relationship satisfaction. Once the variances of relationship satisfaction were no longer constrained to be equal across groups, the model (Model 3f) still fit the model poorly with S-B rescaled $\chi^2(23) = 45.16$, $p = .00$, CFI = .96, RMSEA = .07, and SRMR = .20. The scaling correction factor was 1.335. Next, the modifications indices suggested the error variance for constructive communication be relaxed. The fit indices of Model 3g indicated it was a reasonable fit to the data with S-B rescaled $\chi^2(21) = 29.57$, $p = .10$, CFI = .96, RMSEA = .07, and SRMR = .20. The scaling correction factor was 1.321. Finally, the modification indices suggested relaxing the constrained error variances for uncertainty, which is the last constrained error variance. Relaxing this constraint brings us back to Model 3c. (See Table 12 for fit indices for all models in the multiple-sample SEM.) To examine whether constraining the residual variances of uncertainty significantly decreased the fit of the model, an S-B scaled chi-square difference test between these models was calculated by:

$$\chi^2_{rescaled\ diff} = \frac{39.050 - 26.469}{(1.321 \cdot 21 - 1.289 \cdot 19) / (21 - 19)} = 1.94$$

with two degrees of freedom. These results indicated that constraining the residual variance for uncertainty to be the same across groups did not significantly decrease the fit of the model; thus, the preferred model is 3g, the simpler model.

Table 11. *Fit Indices for Multiple Sample Structural Equation Models*

Model	χ^2	<i>df</i>	<i>P</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>
Model 3a	14.24	12	.286	1.0	.03	.03
Model 3b	39.93	20	.005	.96	.07	.12
Model 3c	20.54	19	.363	1.0	.02	.05
Model 3d	59.87	27	.000	.94	.08	.28
Model 3e	58.02	25	.000	.94	.08	.24
Model 3f	45.16	23	.004	.96	.07	.20
Model 3g	29.57	21	.101	.98	.04	.07

The final model has all but one direct effect constrained (the one from uncertainty to constructive communication) and all but one residual variance (uncertainty) constrained across groups. This suggests that the relationship between all the variables except that between uncertainty and constructive communication were the same for those in cyclical and non-cyclical relationships, but that the model did not have comparable explanatory power across groups. When the direct effect from uncertainty to constructive communication was unconstrained, the value was $-.51$ for those in cyclical relationships and $-.19$ for those in non-cyclical relationships. This indicates that the negative relationship between uncertainty and constructive communication is stronger for those in cyclical relationships. This is reflected in the R-square values of the endogenous latent variables for those in cyclical and non-cyclical relationships. The model accounts for 40% of the variance in constructive communication for those in cyclical relationships, but only 21% of the variance for those in non-cyclical relationships. Additionally, the model accounts for slightly more variance in uncertainty (46% and 45% for cyclical and non-cyclical groups, respectively) and relationship satisfaction (57% and 56% for those in cyclical and non-cyclical groups, respectively). Conversely, the model accounts for less variance in relationship safety for those in cyclical relationships (19% and 30% for cyclical and non-cyclical groups, respectively). Finally, because smaller chi-square values indicate a better fit between the model and the data (Muthen, 2006), I examined the chi-square contribution in the final model from each group and found that chi-square was 12.034 for the cyclical group and 17.537 for the non-cyclical group.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Given the importance of early relationships for later relationship quality, the prevalence of cyclical relationships, and the lower relationship quality found in these relationships, the current study had three goals. The first goal was to replicate and extend what is known about the individual and relationship characteristics of partners in young adult cyclical relationships by examining differences between the two groups. The second goal was to test a model of relationship satisfaction based on the ideas of Staley et al. (2006) to determine its applicability to young adult relationships in general. The third and final goal was to examine differences in the proposed model for those in cyclical and non-cyclical relationships with the intention of extending the previous research on cyclical relationships.

Differences between Partners in Cyclical and Non-cyclical Relationships

Hypotheses 1 & 2. Similar to previous findings (Dailey, Pfiester et al., 2009), 41% of those in romantic relationships reported that their relationship was cyclical, and these partners renewed their relationships two to three times on average. Also in support of previous findings, those in cyclical relationships reported more uncertainty and less safety, constructive communication, and relationship satisfaction in their relationships compared with those in non-cyclical relationships. Contrary to expectations, those in cyclical relationships did not report less dedication. In examining the sample frequencies, about 50% of those in non-cyclical relationships had been together for one year compared with only 25% of those in cyclical relationships, perhaps leading to a lower reporting of dedication due shorter duration in non-cyclical relationships. I tested this hunch and found that dedication was not related to relationship duration among those in cyclical relationships ($r = .081, p = .316$), whereas it was correlated .265 ($p < .001$) with duration for those in non-cyclical relationships. This suggests that time together may help to explain dedication among those in cyclical relationships only. Focusing on those who had been in their relationships for at least one year (117 in cyclical relationships and 110 in non-cyclical relationships), revealed that those in cyclical relationships reported lower dedication ($M = 15.66, SD = 2.75$) than did those in non-cyclical relationships

($M = 16.78$, $SD = 2.75$), Welch's $F(1, 220.66, p = .006)$. Thus, it may be that dedication develops differently over time in cyclical relationships such that they experience an erosion of dedication compared with those in cyclical relationships.

Hypothesis 3. Several additional relationship factors were examined: uncertainty, relationships safety, and sliding. Uncertainty included references to both the current state and future of the relationship. Contrary to expectations, uncertainty about the current state of the relationship did not differ between those in cyclical and non-cyclical relationships, but uncertainty about the future of the relationship did. One interpretation is that partners in cyclical relationships are able to better assess the current rather than the future status of the relationship based on their current experiences. Those in cyclical relationships have already experienced the ending of the relationship, so they may be more uncertain that about the probability of the relationship ending in the future.

I also hypothesized that those in cyclical relationships would report lower emotional safety in the relationship, but results were contrary to expectations. It may be that the measure used did not adequately measure safety in talking about sensitive topics, found to be related to uncertainty in previous research (Knobloch & Carpenter-Theune, 2004). Another interpretation is that those in cyclical relationships may feel safe about the current status of the relationship but not as safe discussing their future, about which they are more uncertain. A closer examination of the individual items of the safety scale lends support for this idea. For example, scores on the sole item that is future oriented, "telling my partner about my goals and dreams," were significantly lower for those in cyclical relationships, $F(1) = 5.638, p = .02$. Further research is needed to test this interpretation. Additionally, results indicated that more sliding is present in cyclical than non-cyclical relationships. This is congruent with the previous findings by Dailey, Pfister, et al. (2009) that those in cyclical relationships use more indirect strategies to end their relationships.

Hypothesis 4. Previous research found that as the number of times partners renewed their relationships increased, relationship quality decreased. Uncertainty about the current state of the relationship did not vary by number of renewals. However, of the other relationship characteristics (sliding, dedication, uncertainty about the future, relationship safety, constructive communication and relationship satisfaction), the differences were between fewer renewals and five or more renewals. It may well be that there is a threshold of renewals needed before they

affect certain relationship characteristics. Then again, the sample size may have been inadequate to detect differences or obtain an adequate picture of patterns. Additionally, certain relationship characteristics may develop differently than others over time in cyclical relationships, but I did not have the data to test this hypothesis.

Hypothesis 5. Absent in previous research was an examination of differences in demographic characteristics of those in cyclical versus non-cyclical relationships. Contrary to expectations, the prevalence of cyclical relationships did not vary by year in school. Previous research in support of Brown's (1999) developmental theory suggests that relationship length increases as undergraduates progress through college (Vennum & Pasley, 2011). Given that cyclical relationships tended to be longer on average than did non-cyclical relationships, failing to assess whether relationships are cyclical may skew results regarding relationship stability. In line with expectations, however, there were differences by race, such that African American students more commonly reported being in cyclical relationships than in non-cyclical relationships. Although this supports the idea that African American students may have less committed relationships (Connelly et al., 2004; Vennum & Pasley, 2011), previous research found that African Americans are less likely to marry and spend less time married than other races due largely to economic and social factors (Dixon, 2009), perhaps indicating that similar forces are operating in young adult relationships.

Hypothesis 6. I expected sliding to be more prevalent in cyclical relationships. As sliding increases the chance of accruing constraints which make the relationship more stable, but do not necessarily increase satisfaction (Stanley & Markman, 1992), I hypothesized that those in cyclical relationships would live closer to their partner, cohabit, and have longer relationships overall than would partners in non-cyclical relationships. Results were contrary to expectations. In fact, only duration of the relationship differed between the two groups, with those in cyclical relationships reporting longer relationships. It may be that other constraints are more impactful but unmeasured here. For example, those in cyclical relationships might have larger shared friend groups, more encouragement from their families to maintain the relationship, or use more social media to stay in contact in long-distance relationships. Also, few reported that they lived together (9.4%). If the process of coming to live together is a gradual slide as described by Manning and Smock (2005), the use of a dichotomous item here may not adequately capture this process and identifies only those participants on the far ends of the continuum.

Testing a Commitment Model of Relationship Satisfaction

Hypotheses 7-13. The second goal was to test a model of relationship satisfaction based on the ideas of Stanley et al. (2006). Consistent with expectations, dedication was positively related to relationship satisfaction and negatively related to relational uncertainty, and sliding was positively related to relational uncertainty and negatively related to constructive communication. These findings are consistent with previous research regarding the impact of dedication on relationship satisfaction and uncertainty (Baxter & Bullis, 1986) and sliding on communication (Vennum & Fincham, in press). Other findings add to the literature on decision making in young adult relationships. Specifically, sliding through relationship transitions without deliberation was linked with decreases emotional safety, constructive communication, and relationship satisfaction by increasing uncertainty. Contrary to expectations, emotional safety was not related to constructive communication or relationship satisfaction. Although Knobloch and Solomon (2002) suggested that people only employ direct information-seeking strategies when they feel secure in the relationship, these results indicate that emotional safety as measured here may not impact communication.

In the final model, uncertainty made the strongest contribution to explaining relationship satisfaction, followed by dedication and constructive communication. The magnitude of these direct effects are medium to large (Cohen, 1988), indicating these relationship characteristics do impact young adult romantic relationships. Additionally, there were three indirect effects from sliding to relationship satisfaction and two indirect effects from dedication to relationship satisfaction. The sums of these specific indirect effects were .32 for dedication and -.20 for sliding on relationship satisfaction. These findings are congruent with previous findings on dedication, sliding, and uncertainty in romantic relationships (e.g. Vennum & Fincham, in press; Knobloch & Carpenter-Theune, 2004) as well as the ideas of Stanley et al. (2006). Impressively, the final model accounted for 49% of variance in uncertainty, 47% of the variance in constructive communication, 34% of the variance in safety, and 67% of the variance in satisfaction.

Hypotheses 14 & 15. Contrary to expectations, only one direct effect was stronger for those in cyclical relationships: the effect of uncertainty on constructive communication. This indicates that for those in cyclical relationships, uncertainty more negatively affects

communication in the relationship. Accordingly, the model accounted for more variance in constructive communication for those in cyclical versus non-cyclical relationships. The remaining relationships between variables in the model were similar for those in the two groups, suggesting relationship type did not moderate these relationships. Although the model was a better fit for those in cyclical relationships, only 1% more of variance in relationship satisfaction was accounted for in the cyclical model. This suggests there are other factors not in the model that may contribute to the lower relationship satisfaction found in young adult cyclical relationships. For example, Cui, Fincham, and Pasley (2008) found that efficacy affected conflict levels in young adult romantic relationships. Thus, those in cyclical relationships may feel that they lack the relationship skills necessary to make the relationship work long-term. It may also be that those in cyclical relationships ignore warning signs that their relationship is destructive (escalation, putdowns/invalidations, avoidance/withdrawal, and negative interpretations) when the relationship is developing (Markman, Stanley, & Blumberg, 1994). Lack of actively assessing for the presence of these characteristics can lead individuals to establish relationships higher in destructive communication and behaviors (Markman et al.; Vennum & Fincham, in press).

Consistent with the ideas of Stanley et al. (2006), the results do indicate that sliding through relationship decisions can put a relationship at risk for lower satisfaction by influencing their behavior in that relationship (e.g., communication). Contrary to the ideas of Stanley and Markman (1992), those in cyclical relationships did report more sliding but not less dedication, indicating that sliding may not be related to dedication in young adult relationships. Sliding and uncertainty were related to communication, although dedication was not, suggesting that it may not be the lower commitment to the relationship that accounts for the lower pro-relationship behaviors.

Limitations

Several measurement issues are limitations of the study. All scales used in this study are self-report assessments completed by only one partner of the romantic relationship, so obtaining a more complete picture of the relationship offered by dyadic data was not possible. This also means that there may be common method variance inflating the estimation of the relationships between variables. Dyadic data combining self-report scales with observational measures of communication would further this line of research by allowing for the inclusion of partner

influences on satisfaction and reducing common method variance. The measures of relationship duration used did not allow differentiation of participants in cyclical relationships reporting how long they have been in this relationship overall from those reporting how long they and their partner have been together since the most recent breakup. The values indicate the former, but I cannot be certain. Additionally, as mentioned, cohabitation is likely a gradual process that could not be accurately captured by the dichotomous item used in this study.

Two other limitations are notable. One limitation is that the sample consisted of college students with an overrepresentation of women (around 54% of the general college population is female [Mather & Adams, 2007] compared to 69% of this sample). This limits the generalizeability of the findings. Additionally, owing to the correlational nature of the data, I could not determine causal relationships between the variables in the model. Moreover, bidirectional influences may exist. However, it was beyond the scope of these data to determine directionality, because longitudinal data were not available.

Further Research

This model suggests several areas for further research. Although participants in cyclical relationships did not report lower dedication than those in non-cyclical relationships, follow-up analysis indicated that dedication was not positively related to relationship length in cyclical relationships but it was in non-cyclical relationships. A tracking of changes in relationship characteristics (e.g. dedication) across multiple transitions with larger samples is needed, especially as students make long-term commitments to a particular partner. A difference in the racial composition of the two groups was also found that needs further exploration. Although this model accounts for more than 50% of the variance in relationship satisfaction overall, the model was barely a better fit for those in cyclical relationships. The difference was largely due to the stronger negative effect of uncertainty on constructive communication for those in cyclical relationships. So although the model offers an explanation for the lower constructive communication present in cyclical relationships, more research is needed on other factors that may explain the differences between the two groups should they exist. There is also a need for further examination and expansion of the ideas of Stanley et al. (2006) on the impact of sliding in young adult romantic relationships. Accordingly, other measures of constraints that may be more relevant to the young adult population need to be tested (e.g. shared friend groups,

encouragement from their families to maintain the relationship). Importantly, the findings of this study need to be examined in non-college student populations.

Implications for Application

Adding to the literature on young adult romantic relationships, this study confirmed the prevalence of cyclical relationships in another college sample and the lower relationship quality reported by these partners. The results of this study also add to the growing literature on the detrimental impact of sliding in romantic relationships. Interventions aimed at increasing active decision making in relationships, decreasing uncertainty, and increasing communication skills may hold promise for improving the quality of young adult romantic relationships as well as future romantic relationships.

These results also have implications for Marriage and Family Therapists working clinically with couples and individuals. Understanding the negative effect of uncertainty on constructive communication in cyclical couples allows clinicians to work with partners to improve communication and reduce uncertainty in their relationships. Additionally, given the role that thoughtfulness in relational decision making plays in relationships behaviors, clinicians can assess the presence of sliding and help individuals and couples more thoroughly examine their decisions regarding their relationship. These results also suggest that it is important to inform young adults about the lower quality present in cyclical relationships and that strategies in relationship education to improve deciding in relationship and communication skills and decrease uncertainty would be beneficial.

Conclusion

Given the importance of early relationships to later relationship quality and the prevalence of cyclical relationships among young adults, it is important to understand the characteristics of these relationships. This study adds further evidence of the lower quality experienced by these couples and provides a preliminary understanding of how sliding through relationship transitions may increase the risk for the poorer relational outcomes in young adult relationships. The findings also suggest that uncertainty and constructive communication may play an important role in explaining the lower relationship quality experienced by cyclical partners. Expansion and replication of these findings is warranted with more representative samples followed longitudinally through multiple relationship transitions.

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 12/16/2010

To: Amber Vennum

Address: 230 Sandels Building
Dept.: FAMILY & CHILD SCIENCE

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
Understanding Young Adult Cyclical Relationships

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to

weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 12/14/2011 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Beatrice Pasley, Advisor

HSC No. 2010.5380

APPENDIX B

SURVEY ITEMS

I am a

- ☐ Male
- ☐ Female

How old are you? (years is sufficient)

Age _____

I am:

- ☐ White (Non-Hispanic)
- ☐ African American
- ☐ Latino
- ☐ Asian
- ☐ Native American/American Indian
- ☐ Other (please specify): _____

I am a

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Other (please specify): _____

Are you currently in a romantic relationship (e.g., dating, have a boyfriend/girlfriend, engaged, married)?

- ☐ Yes
- ☐ No

Is this a relationship where you have broken up and gotten back together at least once?

- ☐ Yes
- ☐ No

(If participants answered yes to the above question)

How many times have you broken up and gotten back together with this partner?

(enter number in box)

This relationship is with

- ☐ An opposite sex partner
- ☐ A same sex partner

Which statement best described your relationship

- ☐ Dating exclusively (one person only- my boyfriend/girlfriend)
- ☐ Dating
- ☐ Engaged
- ☐ Married
- ☐ Other (please specify): _____

My partner and I are

- ☐ Living separately
- ☐ Living together

How far away from you does your partner live?

- ☐ 0-10 miles ☐ 11-20 miles ☐ 21- 50 miles ☐ 51-100 ☐ 101-200 miles ☐ 201+ miles

How long have you been in this romantic relationship?

	1 month	2 months	3	4	5	6	7	8	9	10 months	11 months
zero years and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
one year and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
two years and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
three years and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
four years and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
five years or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sliding

Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Agree				Strongly Disagree
With romantic partners, I weigh the pros and cons before allowing myself to take the next step in the relationship (e.g. be physically intimate)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is important to make conscious decisions about whether to take each major step in romantic relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Considering the pros and cons of each major step in a romantic relationship destroys its chemistry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is important to discuss with my partner each major step we take in the relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's better to "go with the flow" than to think carefully think about each major step in a romantic relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Relational Uncertainty

When thinking about your relationship, how sure are you about

	Not sure at all				Extremely sure
1. what you can or cannot say to each other?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. whether you and your partner feel the same way about each other?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. whether this is more than a friendship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. whether you and your partner will stay together?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. the boundaries for appropriate and/or inappropriate behavior in this relationship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. whether you and your partner feel the same way about the relationship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. whether this relationship is what you want it to be?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. whether this relationship has a future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. what you can expect from your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. whether your partner liked you as much as you like him or her?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. whether you and your partner describe the relationship the same to others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. whether this relationship will end soon?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. how you can or cannot behave around your partner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. whether this relationship is where you want it to be?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. how to label your current relationship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. where this relationship is headed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. whether this is a committed relationship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dedication

Please answer each of the following questions by indicating how strongly you agree or disagree with the idea expressed.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
My relationship with my partner is more important to me than almost anything else in my life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I may not want to be with my partner a few years from now.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like to think of my partner and me more in terms of "us" and "we" than "me" and "him/her."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I want this relationship to stay strong no matter what rough times we may encounter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Relationship Safety

I feel safe....	Strongly disagree					Strongly agree
...telling my partner about my goals and dreams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...sharing my inner most beliefs with my partner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...asking my partner for things I want from him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...letting my partner know exactly how I feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Constructive Communication

Please answer these questions with reference to your romantic partner.

The following questions ask about what happens when a problem occurs in your relationship.

When a problem arises, or during a discussion of a relationship problem,

	Very Unlikely								Very Likely
Mutual Discussion - Both members try to discuss the problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mutual Blame - Both members blame, accuse, and criticize each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mutual Expression - Both members express their feelings to each other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mutual Threat - Both members threaten each other with negative consequences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mutual Negotiation - Both members suggest possible solutions and compromise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Verbal Aggression -

Man calls woman names, swears at her, or attacks his character

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Woman calls man names, swears at him, or attacks his character

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Relationship Satisfaction

In general, how satisfied are you with your relationship?

Not at all	A little	Somewhat	Mostly	Almost completely	Completely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I have a warm and comfortable relationship with my partner

Not at all true	A little true	Somewhat true	Mostly true	Almost completely true	Completely true
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How rewarding is your relationship with your partner?

Not at all	A little	Somewhat	Mostly	Almost Completely	Completely
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The choices on the following scale represent different degrees of happiness in your relationship. The middle point, "Happy" represents the degree of happiness of most relationships. Please select the answer which best describes the degree of happiness, all things considered, of your relationship.

Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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BIOGRAPHICAL SKETCH

Amber Vennum

Department of Family and Child Sciences
The Florida State University

Education

- Ph.D. (2011) Marriage and Family Therapy, The Florida State University (FSU)
Tallahassee, FL
Certificate in Educational Measurement and Statistics
Dissertation: Understanding Young Adult Cyclical Relationships
Major Professor – Dr. Kay Pasley
- M.A. 2007 Marriage and Family Therapy, University of Houston-Clear Lake
Clear Lake, TX
- B.A. 2003 Psychology, Rice University
Houston, TX
Tibetan Studies, School for International Training Semester Abroad
(Independent Study Project: Tradition versus the west: The corporal punishment debate in a Tibetan exile community)

Professional Experience

- 2009-present Graduate Research Assistant, Family and Child Sciences, FSU
Supervisor: Dr. Kay Pasley
Responsibilities: Data analysis and preparation of manuscripts for publication; design and implement research projects.
- Graduate Teaching Assistant, Family and Child Sciences, FSU
Supervisor: Dr. Ann Mullis, CHD 4615- Public Policies Affecting Children and Families
Responsibilities: Assist 30 students per semester in online class; facilitate online discussions, grade assignments and provide feedback; respond to questions and concerns; encourage and monitor progress through constant contact via email.
- Summer 2010 Graduate Teaching Assistant, Family and Child Sciences, FSU
Responsibilities: Sole instruction for online courses, CHD 4615; select and assign course materials; develop lectures, assignments, discussions, and exams; grade assignments and provide feedback; address student questions and concerns; and encourage and monitor student progress.
- 2007-2009 Graduate Research Assistant, Family and Child Sciences, FSU
Supervisor: Dr. Robert E. Lee

Responsibilities: Assist in the preparation of manuscripts for publication, including data collection and analysis, writing, and editing; manage the clinical database for the Center for Couple and Family Therapy; assist in grant writing; preparing and analyzing data for the 4th-year report of a federally-funded project.

Graduate Teaching Assistant, Family and Child Sciences, FSU
Five-yr., federally funded project to develop a national model of relationship education (PI, Dr. Frank Fincham; Co-PI, Dr. Kay Pasley).

Responsibilities: Deliver 2-3 experientially-based recitation sessions (N = 30) per week and evaluate student progress; assist instructor of lecture portion of course in content delivery and student evaluation.

Summer 2008 Graduate Teaching Assistant, Family and Child Sciences, FSU
Responsibilities: Sole instruction, FAD 2230, Family Relations, undergraduate course for 60 students; select and assign course materials; create and deliver lectures; evaluate student learning through exams and assignments; address student questions and concerns.

Clinical Experience

2010 - 2011	<p>Marriage and Family Therapy Internship, Lee's Place, Tallahassee, FL.</p> <ul style="list-style-type: none"> ▪ Provide individual, couple, and family therapy for the community around issues of grief, loss, and trauma. ▪ Assist in grant writing.
2007-2009	<p>Marriage and Family Therapy Practicum, Center for Couple and Family Therapy, The Florida State University, Tallahassee, FL.</p> <ul style="list-style-type: none"> ▪ Provide individual, couple, and family therapy to the community. ▪ Supervise visitations for court-ordered families through the Supervision Plus Program.
2006-2007	<p>Marriage and Family Therapy Internship - Clear View Education Center, Clear Lake, TX.</p> <ul style="list-style-type: none"> ▪ Provide individual, group, and family therapy to students and families within Clear Creek Independent School District. ▪ Conduct Solution-Focused classroom interventions.
2005-2006	<p>Marriage and Family Therapy Practicum- University of Houston-Clear Lake</p> <ul style="list-style-type: none"> ▪ Provide couple and family therapy to the community surrounding University of Houston-Clear Lake.

Licensures/Certifications

2010	Certified Family Life Educator- Provisional
2009	Registered Marriage and Family Therapy Intern in Florida
2009	Approved Supervisor Candidate, American Association for Marriage and Family Therapy

Publications

- Lee, M. M., Lee, R. E., & **Vennum, A. V.** (2010). Voices of foster parents of Sudanese refugee youths: Affirmations and insights. *International Social Work*. Advance online publication. doi: 10.1177/0020872809358396
- Lee, M. M., & **Vennum, A. V.** (in press). Using critical incident journaling to encourage cultural awareness in doctoral marriage and family therapy students. *Journal of Family Psychotherapy*.
- Vennum, A. V.**, & Fincham, F. D. (in press). Assessing decision making in young adult romantic relationships. *Psychological Assessment*.

Manuscripts in Progress

- Vennum, A. V.**, & Pasley, K. (under review). Signs the end is near: Predicting young adult relationship dissolution. *Journal of College Student Development*.
- Vennum, A. V.**, & Vennum, D. C. (in preparation). The experiences of marriage and family therapists in the school system. For submission to *Journal of Marital and Family Therapy*.
- Vennum, A. V.**, Garneau, C. L., & Pasley, K. (in preparation). Family influences on young adult romantic relationships. For submission to *Journal of Marriage and Family*.

Professional Presentations

- Vennum, A. V.**, Garneau, C. L., & Pasley, K. (2010, November). *Family influences on young adult romantic relationships*. Poster presented at the annual meeting of the National Council on Family Relations, Minneapolis, MN.
- Vennum, A. V.** (2010, September). *Ethical challenges and clinical advantages of MFTs in schools*. Poster presented at the annual conference of the American Association for Marriage and Family Therapy, Atlanta, GA.
- Vennum, A. V.**, & **Pasley, K.** (2009, November). *Signs the end is near: Causes of relationship breakups in young adults*. Paper presented at the annual meeting of the National Council on Family Relations, San Francisco, CA.
- Vennum, A. V.**, & Vennum, D. C. (2009, October). *The experiences of MFTs in schools*. Poster presented at the annual conference of the American Association for Marriage and Family Therapy, Sacramento, CA.
- Lee, M. M., Lee, R. E., Troupe, F. Y., & **Vennum, A. V.** (2008, October). *Voices of foster parents of Sudanese refugee youths: Affirmations and insights*. Poster presented at the annual conference of the American Association for Marriage and Family Therapy, Memphis, TN.
- Vennum, A. V.**, Koenig-Reed, M., & Jalali, S. (2006, January). *The relationship between partner emotional intelligence and dyadic adjustment: A multi-method study*. Poster presented at the annual conference of the Texas Association of Marriage and Family Therapy, Houston, Texas.

Honors and Awards

Hortense Glenn Society (member since 2010)
FSU Family Institute Robison Award (2009, 2010)

Kappa Omicron Nu Honor Society in Human Sciences (member since 2009)
Cora B. and Ross Evans Scholarship (2007)
Psi Chi National Honor Society in Psychology (members since 2005)

Professional Affiliations

National Council on Family Relations (NCFR, student member since 2007)
American Association for Marriage and Family Therapy (AAMFT; student member since 2004)