REDEFINING COMMITMENT AND ATTRACTIVE ALTERNATIVES: RE-EXAMINING

THE INVESTMENT MODEL

by

GARY COLE RATCLIFFE

B.S., Brigham Young University, 2008

M.S., Kansas State University, 2011

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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The current study tested Rusbult's (1980) investment model of relationship commitment. Specifically, this study used data from 875 married individuals to examine the associations between marital satisfaction, alcohol use, video gaming, relationship length, and the presence of children on two types of relationship commitment: psychological attachment and behavioral intent. The results indicate that alcohol use, video gaming, relationship length, and presence of children are not significantly associated with psychological attachment or behavioral intent. However, findings in the current study do suggest that psychological attachment and behavioral intent are independent constructs and should be examined separately. Furthermore, neuroticism and religiosity did predict individual's behavioral intent, but not psychological attachment.

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Chapter 1 - Introduction

Rusbult's (1980, 1983) investment model of relationship commitment has been used to understand the role of commitment in many different contexts (e.g., organization, job, residential community, school). As it pertains to romantic relationships, the investment model has made major contributions. One such contribution is the paradigm-altering proposition and finding that "strong commitment-not high satisfaction-is the psychological state that characterizes partners in an enduring relationship" (Rusbult, Agnew, & Arriaga, 2012; p. 222). Put another way, a focus on marital commitment is more pertinent to marital stability than a focus on marital satisfaction. According to the investment model (Rusbult, 1983) commitment is predicted by three primary variables: relationship satisfaction, quality of alternatives to the relationship, and investment size. Research has repeatedly found that higher levels of relationship satisfaction, lower quality of relationship alternatives, and larger investment size all predict higher levels of commitment, which in turn predict greater persistence in the relationship.

With the understanding that commitment is central to the success of relationships, it is helpful to understand what is meant by *commitment*. Originally, Rusbult (1983, 1987) suggested that commitment has two elements: psychological attachment and behavioral intent. Psychological attachment is indicative of one's desire or inclination to stay in a marriage. Behavioral intent relates more directly to one's actual behavior in the marriage. More specifically, behavioral intent might also be described as one's commitment to work on the marriage, which may differ from one's psychological attachment to a marriage. For instance, a husband may *feel* psychologically attached his wife, and at the same time not feel committed to work on his marriage. I propose that behavioral intent, or a commitment to work on one's

marriage, is critical to the idea of marital commitment because the power of psychological attachment in maintaining marriages is found in its effect on the *behaviors* of individuals in marriages. In other words, without a *commitment to work on* a marriage a psychological commitment *to* a marriage loses its potency (Schoebi, Karney, & Bradbury, 2012).

However, notwithstanding the theoretical differences between these two elements of commitment, they have typically been combined into one single measure (Rusbult, 1983; Rusbult, Martz, Agnew, 1998). Recently, Schoebi et al., (2012) argued that combining these two ideas (psychological attachment and behavioral intent) into one commitment measure is inappropriate and empirically less-effective. In fact, they argue that not distinguishing between these two elements of commitment has led to concerns in the validity of the investment model, specifically that commitment and satisfaction are less distinct than the investment model purports (Le & Agnew, 2003). In making their argument, Schoebi et al. examined the differential effect of psychological attachment and behavioral intent on relationship outcomes and found that behavioral intent, not psychological attachment, accounted for variability in reported steps towards marital dissolution and actual marital dissolution. These findings shed light on previous challenges to the investment model (i.e., that commitment and satisfaction are not empirically unique) and instead offers support for its tenets when commitment is conceptualized as a commitment to maintain the relationship, in addition to psychological attachment.

With behavioral intent exhibiting more predictive power of relationship outcomes than psychological attachment, the investment model should be re-examined in order to assess its ability to predict both psychological attachment and behavioral intent, and in turn predict marital stability. In doing so, I believe two considerations should be made concerning the operationalization of the variables in the investment model. First, in addition to "psychological

attachment," or a desire to persist in a relationship (Rusbult, 1987; Schoebi et al., 2012), commitment should be conceptualized as behavioral intent, or "an inclination to engage in maintenance behaviors" (Schoebi, et al., 2012; p.730). Put another way: an intent or commitment to work on the marriage. One measure which has been utilized to capture this idea of relationship work (also referred to as relationship self-regulation), is the Behavioral Self-Regulation for Effective Relationships Scale (BSRERS; Wilson, Charker, Lizzio, Halford, & Kimlin, 2005). The BSRERS is used to capture the idea of relationship self-regulation (RSR), defined as "the extent to which individual partners work to sustain their relationship" (p. 185; Halford, Lizzio, Wilson, & Occhipinti, 2007). More specifically, RSR assesses the relationship strategies and effort individuals put towards maintaining their marriage. Although research has established a positive association between RSR and relationship satisfaction (e.g., Shafer, Jensen, & Larson, 2012), RSR has yet to be examined in the context of the investment model as a form of commitment (i.e., behavioral intent). By utilizing RSR as a measure of behavioral intent, I hope to refine what is meant by relationship commitment (Schoebi et al., 2012). Specifically, I will compare the association of marital satisfaction, quality of alternatives, and investment size with behavioral intent (RSR) and psychological attachment.

Second, the investment model's definition of attractive alternatives might be expanded to include variables which might distract from relationship work. According to the investment model, attractive alternatives include other potential partners, spending time with others, or even solitude (Rusbult, 1983). However, when commitment is conceptualized to include one's *commitment to work* on the marriage, additional considerations must be made. For instance, how much we work to maintain our marriage is strongly connected to how much time we give to the marriage, and several things compete for our marital time, such as leisure activities. When

people do not dedicate sufficient time to work on their marriage, they exhibit a lack of commitment to work on their marriage. This displacement of time (Kraut et al, 1998; e.g., playing video games instead of nurturing the marriage or assisting with household chores) may inhibit the success of the marriage. Previous research has found that engaging in certain activities, such as substance abuse (Whisman, 1999) and playing video games (Coyne et al., 2012), can have a negative effect on romantic relationships, perhaps in part because these activities serve as attractive alternatives to working on and maintaining the relationship. In the current study I will examine these two considerations (RSR as an element of marital commitment; substance use and video gaming as attractive alternatives) while testing the investment model. In doing so, I hypothesize that marital satisfaction, attractive alternatives, and investment size will predict RSR (i.e., behavioral intent or the second pillar of relationship commitment in Rusbult's investment model), which in turn will predict marital stability. Furthermore, I hypothesize that attractive alternatives will be more strongly related to RSR (relationship work) than to psychological attachment.

Chapter 2 - Literature Review

The Investment Model

In an effort to understand why some marriages end in divorce and others do not, Rusbult (1980) proposed the investment model in order to predict commitment and stay-leave behavior in relationships. The investment model builds upon the reasoning of interdependence theory (Kelley & Thibaut, 1978) by proposing that whether or not people remain in a relationship is largely due to feelings of commitment (Mikkelson & Pauley, 2013). During the last 30 years, a large body of research has found support for this framework in several different types of relationships, from commitment in romantic relationships to college student's commitment to their school (Geyer, Brannon, & Shearon, 1987). Consistently, three variables have predicted levels of commitment, or feelings of commitment, in relationships: level of relationship satisfaction, quality of relationship alternatives, and investment size (Le & Agnew, 2003). *Satisfaction level* is the positive versus negative evaluation of the relationship, based primarily upon the feelings experienced in the relationship. The model proposes that if an individual's needs are met, satisfaction levels are likely to be higher (Rusbult et al., 1998) and so are feelings of commitment. The *quality of alternatives* refers to attractiveness, or the rewards versus costs, of other options outside the relationship. If the attractiveness of a given alternative is perceived to be low or the costs too high, an individual will be more likely to feel committed to their current relationship. Generally speaking, research on the investment model in close relationships has focused on the attractiveness of other potential partners, rather than other types of alternatives, such as time spent with friends or solitude (Rusbult, 1987). *Investment size*, or the resources associated with the relationship, has also displayed a positive association with feelings

of commitment (Rusbult, Drigotas, & Verette, 1994; Rusbult et al., 1998). Relationship investments can either be intrinsically put into a relationship (e.g., time together) or extrinsically bound to a relationship (e.g., children). In either case, the greater the investment size in the relationship, the more feelings of commitment in the relationship. See figure 1 for a visual depiction of the investment model.

The investment model has provided major contributions to our understanding of marital commitment, and research has generally support the tenets of the model. However, recent studies appear to contradict some key elements of the investment model. For example, Rusbult and colleagues (1998) proposed that commitment would predict relationship maintenance behaviors and that commitment has an independent influence above and beyond relationship satisfaction (Rusbult, Bissonnette, Arriaga, & Cox, 1998; Rusbult, Verette, Whitney, Slovik, & Lipkis, 1991). Contrary to this proposition, another study utilized both self-report and observational data and found that after controlling for relationship satisfaction, commitment no longer predicted observed maintenance behaviors (Tran & Simpson, 2009). These findings suggest that commitment, defined as psychological attachment, may overlap considerably with relationship satisfaction, leading to redundancy in measurement (Schoebi et al., 2012).

In response to such findings, Schoebi et al., (2012) proposed it may be a measurement issue rather than a problem with the tenets of the investment model. In other words, re-examining the way commitment is measured may shed light on why recent findings purport that commitment *does not* stand independent of relationship satisfaction, contradicting a major tenet and contribution of the investment model. To test this proposition, satisfaction and commitment data from 172 married couples were assessed over the first 4 years of marriage as well as divorce rates at 11 years. Two types of commitment were utilized: an inclination to maintain the

relationship (i.e., behavioral intent) and long term relationship orientation (i.e., psychological attachment). The results of the study confirmed their hypothesis that redefining commitment would help explain prior results contradicting the investment model. First, within-person correlations between behavioral intent and psychological attachment suggested the two variables are distinguishable concepts. Furthermore, behavioral intent (defined as an inclination to work on the relationship) accounted for unique variance in steps towards dissolution and actual dissolution *independent of relationship satisfaction*. On the other hand, psychological attachment (defined as a desire to persist in the relationship) was not associated with the likelihood couples would take steps towards ending their relationship. Clearly, a commitment to work on or maintain one's relationship is an important variable to consider in explaining why some marriages succeed and others fail. Referring to this inclination to maintain one's relationship, Schoebi et al., (2012) conclude with a call for future research "aimed at refining measures of this concept" (p. 741), to which the present examination hopes to assist by utilizing relationship self-regulation as a key commitment variable. In doing so, RSR will be compared to psychological attachment in its association with marital satisfaction, quality of alternatives, and investment size as well as its ability to predict marital stability. The current study will use a variant of the same measure utilized by Schoebi et al., (2012) in assessing psychological attachment (dedication commitment scale; Stanley & Markman, 1992).

Commitment to Work: Relationship Self-Regulation

Although relationship self-regulation (RSR) has not yet been framed as a type of commitment or been examined in the context of the investment model, several reasons exist that suggest RSR may not only be an important component of marital success but also a reasonable description of the "behavioral intent" element of commitment (Rusbult, 1983). First, relationship

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self-regulation has its grounding in individual self-regulation, which "implies modulation of thought, affect, behavior or attention" (Karoly, 1993; p. 25). Previous research has shown that individual self-regulation skills are predictive of whether or not promises in romantic relationships will be kept or broken (Peetz & Kammrath, 2011). When applied further to a relational context, this looks like a commitment to manage one's thoughts and actions for the sake of the marriage, to work on the marriage "for better or for worse." For example, RSR has been described as "the extent to which individual partners work to sustain their relationship" (Halford et al., 2007, p.185) and "the process by which couples are able to monitor and sustain their relationship" (Meyer, Larson, Busby, & Harper, 2012, p. 142). Schoebi et al. (2012) emphasized the importance of having a commitment measure which focuses on an inclination to participate in behaviors that will sustain the relationship. Likewise, the originators of the RSR construct suggest that "it is behavior that impacts upon the partner and influences the relationship" (Wilson et al., 2005; p. 385). Therefore, RSR has an explicit focus on an individual's intent to engage in behaviors focused on sustaining the relationship. For example, the measurement for RSR (BSRERS) includes Likert scale statements such as "I try to *apply* ideas about effective relationships to improve our relationship" and "Even when I know what I could do differently to improve things in the relationship, I cannot seem to *change my behavior*" (*emphasis added*; Wilson et al., 2005). RSR's focus on behavioral intent suggests that it may also be classified as an element of relationship commitment.

In addition to RSR's behavioral commitment face validity, RSR has also been linked empirically with key relationship outcomes such as marital satisfaction and stability (Halford, et al., 2007; Ratcliffe et al., 2013; Shafer et al., 2012; Wilson et al., 2005). In the initial examination of the Behavioral Self-Regulation for Effective Relationships Scale (BSRERS),

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Wilson and colleagues (2005) tested the relationship between relationship self-regulation and marital satisfaction in multiple samples and found that RSR accounted for considerable variance in marital satisfaction. These findings have been replicated in both cross-sectional (i.e., Shafer et al., 2012) and longitudinal studies (Halford et al., 2007). Relationship self-regulation has also been tested as a mediator between two predictor variables: experiences in one's family of origin (Ratcliffe et al., 2013) and attachment (Pepping & Halford, 2012) and the outcome variable relationship satisfaction. In each case, RSR served as a mediator between the predictor and outcome variables. Although RSR has typically been conceptualized to predict relationship satisfaction (e.g., Halford et al., 2007; Wilson et al., 2005), there are theoretical reasons to suggest that relationship satisfaction predicts RSR. According to the investment model, relationship satisfaction is likely to predict one's behavioral intent (i.e., commitment) to maintain the marriage, or in other words engage in relationship self-regulation. For example, if a husband is satisfied with his marital interactions his dependence upon his wife to have his relational needs met is likely to increase, as well as his commitment to maintaining those positive interactions (Rusbult, Wieselquist, Foster, & Witcher, 1999). Therefore, it is reasonable to examine RSR as either a predictor or outcome of relationship satisfaction.

It is helpful to know that RSR is related to more positive relationships, however unless RSR is malleable and can be learned it is of little use to practitioners and educators, which leads to another important finding pertaining to relationship self-regulation: RSR can be taught and learned, thus improving relationships. RSR has been utilized as a core element of the relationship education program Couple CARE, a program which teaches couples concepts of self-change, intimacy and caring, managing differences, and adapting to change. Female participants in Couple CARE have reported an increase in RSR in themselves and their partner. In addition,

Couple CARE has a demonstrated positive effect on the relationship satisfaction and stability of couples (Halford et al., 2004), again suggesting the positive impact of RSR on relationship outcomes. From this review it appears that RSR is an important relational concept, which can be taught to others, and that is closely associated with a commitment to work on maintaining the relationship. In summary, it is both theoretically and empirically reasonable then to examine RSR as an element of relationship commitment.

Attractive Alternatives and Relationship Outcomes

In the investment model, the quality (or attractiveness) of an alternative to the relationship is said to predict the level of commitment in the relationship. Originally, quality of alternatives was described in the context of an alternative relationship as "whatever is the best available alternative" (Rusbult, 1983; p. 102). Available alternatives are assessed by anticipated costs versus rewards and may include another partner, dating around, solitude, or spending time with friends and relatives. The more attractive the alternative, the greater threat to relationship commitment. Research has offered a substantial amount of support for the quality of alternatives hypothesis as perceived attractiveness of alternatives have consistently predicted levels of commitment (see Le & Agnew, 2003 for a meta-analysis on the findings of the investment model).

In redefining the definition of commitment, additional considerations should be given to expanding what might be considered attractive alternatives. For instance, if relationship commitment is conceptualized as a commitment to work on the relationship, than anything that appears more enticing than working on one's relationship (e.g., making efforts to change oneself) could be considered an attractive alternative. In that context there may be many attractive alternatives. Certainly the original description of attractive alternatives of spending time alone,

with friends, or with another romantic partner is still pertinent, but digging deeper into this description may also prove instructive of additional attractive alternatives. For example, what are people doing in "solitude" or "with friends?" For many people, the answer to that question could be 'playing video games" or "drinking." There are certainly many other potential attractive alternatives, and future research should examine the effects of these alternatives on relationship commitment. For the purposes of the current study, I am conceptualizing substance use and video gaming as attractive alternatives to relationship work. I propose that each of these relationship alternatives are "attractive" as evidenced by their prevalence in our society. Each has the propensity to become a time-consuming pursuit with the capacity to turn people away from their spouse, thus weakening their commitment to work on their marriage. The stronger pull one feels to a particular alternative is certainly indicative of how attractive that alternative is to that person. Below I will describe each one in greater detail, including their documented relationship with relationship processes and/or outcomes.

Alcohol use

Alcohol use is widespread in the United States, and there is little doubt that alcohol attracts many users. In fact, according to the results from the 2011 National Survey on Drug Use and Health, over half of Americans (51.8%; 133.4 million) aged 12 and older reported being current drinkers of alcohol and nearly one quarter (22.6%) of Americans participated in binge drinking during the 30 days prior to the survey. Although attractive to many people, alcohol use can have adverse effects on marriages. Over the years, alcohol use has consistently been linked to marital dissatisfaction (for review see Marshal, 2003). A national survey examining the primary reasons people divorce found that "drinking or drug use" was third, behind only incompatibility and infidelity (Amato & Previti, 2003). Among younger married couples, alcohol

intoxication can be particularly detrimental to the stability of the relationship (Collins, Ellickson, & Klein, 2007). It might be that alcohol use influences an individual's psychological attachment and behavioral commitment in a marriage, impacting relationship stability. Considering the number of people who engage in alcohol use, and the deleterious effects it can have on a marriage, alcohol use could serve as an attractive alternative to relationship work.

Video gaming

Since Rusbult originally proposed the investment model in 1980, several major technological advances have taken place. These advancements have impacted couple relationships in many ways. One implication of these advancements is the seemingly increased attractiveness of technological leisure activities, such as video gaming. Video games are a popular past time for many Americans and the majority of households possess at least one video game console or computer (Hartmann, Jung, & Vorderer, 2012). Even without a gaming console, people can play video games, so long as they have access to the Internet, which is the case for most Americans. As of May 2013, 85% of adults in the United States were Internet users, and the rates were even higher among younger adults (92% of 30-49 year olds and 98% of 18-29 year olds; www.pewinternet.org). Although not all Internet users and owners of video game consoles play video games, these statistics highlight the reality for most Americans in romantic relationships: video games are an alternative opportunity available to them. For some, this alternative is very attractive. In recent years, video game sales and popularity have increased and although professionals are without consensus on the validity of a "video game addiction" (Ferguson, Coulson, & Barnett, 2011), the very discussion around "video game addiction" suggests that for some, video games are an enticing, time-consuming activity. When provided a choice between dedicating time to make personal change and maintaining one's relationship

versus playing an enjoyable video game, some might view video gaming as an attractive alternative. In one study, married individuals who reported playing Massively Multiplayer Online Role-Playing Games (MMORPGs) also reported lower levels of marital satisfaction directly related to their gaming behaviors, such as fighting about the video game (Ahlstrom et al., 2012). Coyne and colleagues (2012) found that men's time spent playing video games was associated with increased conflict in the marriage, which in turn was associated with physical and relational aggression in the relationship. The negative effect of excessive video gaming on relationships may work through the influence of video gaming on one's behavioral intent. In addition, developing an attachment to a video game may also impact the psychological attachment one has to their partner. In short, for many individuals video games appear to be an attractive alternative to relationship work with potentially damaging effects.

Investment Size and Relationship Outcomes

Like the other determinants of commitment in the investment model (relationship satisfaction and quality of alternatives), investment size has also received consistent support from the research on the investment model (see Le & Agnew, 2003 for review). Relationship investment size refers to the degree and importance of relationship resources that would decrease or be lost if the relationship was terminated (Rusbult et al., 2012). Investments can be either intrinsic (resources put into the relationship), such as time and emotional energy or extrinsic (resources that have little to do with the relationship itself, but are related to the individuals in the relationship), such as relationships with people uniquely tied to the marriage (Rusbult, 1987). In the present study, time invested into the relationship and the presence of children in the marriage are being used to examine relationship investments. Previous research has linked relationship longevity to relationship stability (Attridge, Berscheid, Simpson, 1995; Femlee, Sprecher, &

Bassin, 1990) as well as the presence of children (Belsky, 1990; Waite & Lilliard, 1991), although more recent research challenges the notion that children are a protective factor against divorce (McDermott, Fowler, & Christakis, 2013). Other studies have utilized Rusbult, Martz, and Agnew's Investment Model Scale and also discovered that both intrinsic and extrinsic investments are related to commitment to one's relationship (e.g., Etcheverry, Le, Wu, Wei, 2012; Mikkelson & Pauley, 2013). These findings offer support for the investment model that increased investment size is related to relationship commitment.

The Present Study

The current study will test the following hypotheses:

1. Marital satisfaction, quality of alternatives, and investment size will predict individual levels of RSR and psychological attachment. Specifically, it is hypothesized that:

    a. Higher levels of marital satisfaction will be associated with higher levels of RSR and psychological attachment.

    b. Higher levels of alcohol use and video gaming will be associated with lower levels of RSR and psychological attachment. The association with RSR will be stronger than the association with psychological attachment.

    c. Longer relationship length and the presence of children will be associated with higher levels of RSR and psychological attachment.

2. RSR and psychological attachment will mediate the relationship between marital satisfaction, quality of alternatives, investment size and marital stability.

The present study will examine relationship commitment through the framework of the investment model. In doing so, several contributions to the literature will be made. First, following the recommendation of Schoebi and colleagues (2012), I will take steps to further refine the definition of commitment in the investment model by focusing on the behavioral intent element of commitment. Specifically, I define relationship self-regulation as a type of behavioral commitment to work on the marriage. This will not only shed light on the investment model, but also on the application of relationship self-regulation as a variable of commitment. In addition, I broaden the scope of what might be considered attractive alternatives to the marriage. Because marriages require intentionality and effort in order to succeed, I have identified two behavioral choices that have the propensity to distract partners from being intentional and from exerting effort towards maintaining their marriages. In this paper I will be able to determine whether or not alcohol use and video gaming actually serve as attractive alternatives to marital work and if participation in these behaviors is ultimately related to lower levels of marital stability. To increase confidence in the findings of our model, several control variables will be included in the analyses. Specifically, because previous studies have demonstrated that they may be related to other key variables being tested in the current model (for review see Karney & Bradbury, 1995), the current analysis will control for the effects of age, income, education (Marital instability; Kurdek, 1993), religious orientation (Marital instability; Call & Heaton, 1997), prior divorce (RSR; Meyer et al., 2012), marital beliefs (Kurdek, 1993), and personality (commitment; Kurdek, 1997).

Chapter 3 - Method

Participants

The research questions were examined using data from the Relationship Evaluation Questionnaire (RELATE; Busby, Holman, Taniguchi, 2001). RELATE is a 276 question survey which focuses on assessing four areas which influence marital satisfaction: personality/values, family and friend support, communication skills, and upbringing/background. Within these four areas, data were provided to test the validity of the investment model with the proposed alterations (i.e., commitment and attractive alternatives). Data from RELATE was gathered individually from a variety of sources: college students, married couples seeking therapy, and couple recruited via the Internet. Internet referrals came from class instructors, relationship educators, clergy, and other sources (Coyne et al., 2012). The purpose of the current study is to test the investment model in predicting behavioral intent, psychological attachment, and marital stability. The RELATE questionnaire undergoes continuous revision, therefore, the sample was limited to participants who had completed the most recent version of RELATE, which included the RSR measures. Because commitment is an individual process and research has shown that commitment varies by marital status (Stafford, Kline, & Rankin, 2004), the sample was further refined to include the responses of individuals who were currently married. Finally, as this questionnaire was developed by researchers at Brigham Young University, there is a higher concentration of Latter Day Saint (LDS) participants in the sample. In order to increase the generalizability of the study, a random sample of all LDS participants were included in the final sample that is similar to the percentage of LDS members in the U.S. population (about 3%). The current study included 306 males and 569 females, for a total of 875 participants. Most

participants identified themselves as White (72.2%), with 10% indicating their race or ethnic group as African (Black), 6.2% as Latino, and 4.5% as Asian. On average participants were 35.4 years of age, were educated with a bachelor's degree, made between forty thousand and sixty thousand dollars a year, and had between one and two children. Overall there were low levels of alcohol use with participants indicating an average use between rarely and sometimes as well as low levels of video gaming with the average participant reporting playing video games less than once a week (see Table 3).

Measures

Marital Satisfaction

Marital satisfaction was measured with a 7-item scale, assessing the degree of satisfaction individuals felt in different aspects of their marriage. Responses were answered on a 5-point Likert scale ranging from *Very Dissatisfied* (1) to *Very Satisfied* (5). Items included "The physical intimacy you experience," "The love you experience," "How conflicts are resolved," "The amount of relationship equality you experience," "the amount of time you have together," "The quality of your communication," "Your overall relationship with your partner" ($\alpha = .92$).

Attractive Alternatives

Marriages are improved and maintained when individuals engage in behavioral work geared towards marital improvement and maintenance. In this study, I examined attractive alternatives to marital work. One way to assess the attractiveness of a given alternative is to determine how frequently individuals engage in that behavior. Therefore, in order to assess whether or not substance use and video gaming could be conceptualized as attractive alternatives in the investment model, two smaller measures were utilized to assess frequency. For *alcohol*

use, participants were asked how frequently they used alcohol (1 = *Never* to 5 = *Very often*). The attractiveness of *video games* was assessed by first asking participants if they ever play video games. If they report in the affirmative, they were asked how often (6 = more than once a day, 5 = once a day, 4 = once a week, 3 = 2-3 times a month, 2 = once a month, 1 = less than once a month, 0 = never) they played several different genres of video games, including role playing games (RPGs), first person shooter/fighting games, MMPORGS, sports, music/party games, and exercise/fitness games. Participants who declined any video game use received a 0. All other participants were given a total number consisting of all reported genres played and how often each genre was played. For example, if an individual reported playing a first person shooter game daily (5) and a party game 2-3 times a month (3) and "never" for any other genres he or she would receive a total score of 8.

Investment Size

Similar to the measurement of attractive alternatives, investments were measured with smaller assessments. According to the investment model, relationship investments can be both intrinsic and extrinsic and include any resource associated with the relationship (Rusbult, 1983). Intrinsic investments are resources that are put directly into the relationship, such as the length of the relationship. *Length of the relationship* was assessed with the following question: "How long have you and your partner been married?" Responses include: 1-3 months, 4-6 months, 6-12 months, 1-2 years, 3-5 years, 6-10 years, 11-15 years, 16-20 years, 21-30 years, 31-40 years, and more than 40 years. Extrinsic investments are considered extraneous resources and might include shared relationships, such as children. The *presence of children* in the current relationship might be considered an extrinsic investment and therefore was assessed with a single item: "How many children do you have?"

Commitment

Relationship Self-Regulation. RSR was utilized to examine the behavioral intent element of commitment (Rusbult, 1983). Specifically, RSR was framed as a commitment to work on one's relationship. RSR contains two scales assessing relationship self-regulation: relationship strategies and relationship effort. These measures were derived from the *Behavioral Self-Regulation for Effective Relationships Scale* (BSRERS; Wilson et al., 2005) and have been used in previous research (Meyer et al., 2012). Each scale contains four items. Relationship strategies included questions such as "I try to apply ideas about effective relationships to improve our relationship" and "I actually put my intentions or plans for personal change into practice" (α = .76). Example items from the Relationship Effort scale included, "Even when I know what I could do differently to improve things in the relationship, I cannot seem to change my behavior" and "If my partner doesn't appreciate the change efforts I am making, I tend to give up" (α = .75). Both RSR scales were answered on a 5-point Likert scale (1 = *Never True* to 5 = *Always True*) and coded so that higher scores indicated higher levels of RSR.

Personal Dedication Commitment. In order to parse out the two elements of commitment originally suggested by Rusbult (1983), Schoebi and colleagues (2012) constructed two separate scales from the personal dedication commitment scale (Stanley & Markman, 1992): desire for persistence (DP) and inclination to engage in maintenance behaviors (IM). DP pertains to the idea of psychological attachment whereas IM captures the idea of behavioral intent. In this study, RSR was compared to a variant of the four-item DP scale utilized by Schoebi et al., (2012; excluding one item not available in the current study) in its ability to predict marital stability as well as its association with marital satisfaction, quality of alternatives, and investment size. In the current study, the items used to assess psychological attachment include, "I want my

relationship to stay strong no matter what rough times we may encounter," "I may not want to be with my partner in a few years from now" (reverse coded), and "My relationship is more important to me than almost anything else in my life." ($\alpha = .83$)

Marital Stability

Marital stability was examined using a 2-item scale, with the following questions: "How often have you thought your marriage might be in trouble?" and "How often have you and your partner discussed ending your marriage?" Answers were given on a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Very Often*). Items were recoded so that higher scores indicated greater stability ($\alpha = .82$).

Control Variables

The influence of several variables was controlled for in the analysis. Demographic control variables include *religiosity* [A 3-item Religious Orientation Scale was used. Items include "Spirituality is an important part of my life.", "How often do you pray (commune with a higher power)?", (1 = Never to 5 = Very Often), and "How often do you attend religious services?" (weekly, at least monthly, several times a year, once or twice a year or less, never; ($\alpha = .88$)], *gross income* (none, under $20,000, $20,000-39,999, $40,000-59,999, $60,000-79,999, $80,000-99,999, $100,000-119,999, $120,000-139,999, $140,000-159,999, $160,000-199,999, $200,000-299-999, $300,000 or above), and *education* [less than high school, high school equivalency (GED), high school diploma, some college-not currently enrolled, some college-currently enrolled, associate's degree, bachelor's degree, graduate or professional degree not completed, graduate or professional degree completed].

In addition, because of their potential impact on marital commitment, prior divorce (0 = *never experienced a divorce;* 1 = *divorced one or more times*) and marital beliefs (i.e., importance of marriage) were also controlled for. One item assessed prior divorce: "How many times have you been divorced?" Beliefs about marriage were assessed using a single item, with responses ranging from Strongly Disagree to Strongly Agree (higher scores indicated marriage is a high priority): "Being married is among the one or two most important things in my life". Neuroticism was assessed with a 7-item scale, asking participants "How much do these words or phrases describe you?" Words or phrases included "sad and blue", "feel hopeless", "depressed", "fearful", "tense", "nervous", and "worrier" ($\alpha = .88$).

Previous research has indicated potential gender differences pertaining to key variables in the current study, namely relationship self-regulation (Halford et al., 2004), marital satisfaction (Saxbe, Repetti, & Nishina, 2008), and marital commitment (Osborn, 2012). Therefore, gender was tested as a moderator in order to determine whether the model was different for men and women.

Chapter 4 - Results

Preliminary Analyses and Analytic Plan

The data were first explored with descriptive statistics and correlations, followed by *t*-tests to determine mean differences between men and women. These analyses were conducted using IBM SPSS Statistics Version 21 (IBM Corporation, 2012). Missing data was low, ranging from no missing data for relationship strategies, effort, satisfaction and alcohol to 1.5% for relationship length. Normality of the data was assessed and each of the scales and individual variables had acceptable values for skewness and kurtosis and should therefore be considered normally distributed (Chou & Bentler, 1995). The research questions were answered using multiple-group path analysis in Mplus 7.0 (Muthen & Muthen, 2012). Due to the normal distribution of the data, Maximum Likelihood (ML) was chosen as the appropriate estimator, and missing data were handled using full-information maximum likelihood. Model fit was evaluated with the model chi-square (χ^2), but because this test is influenced by sample size and may result in significance even when the model is minimally mis-specified (Marsh, Hau, & Wen, 2004), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean square residual (SRMR) were also used to examine overall model-data fit. Values greater than .95 for CFI and smaller than .06 and .08 for RMSEA and SRMR suggest good model fit (Hu & Bentler, 1999). Moderation was tested by constraining paths to be equal between men and women and calculating the chi-square difference between the freely estimated model to determine if applying the model constraints significantly worsened the fit of the model to the data.

Correlation Analysis and Mean Differences

Results of the correlation analysis revealed important information about the bivariate

relations among the variables (see Tables 1 and 2). As expected, marital satisfaction was positively related to each of the commitment variables for males (relationship effort, $r = .46$, $p < .001$; relationship strategies, $r = .32$, $p < .001$; personal dedication commitment, $r = .51$, $p < .001$) and females (relationship effort, $r = .55$, $p < .001$; relationship strategies, $r = .37$, $p < .001$; personal dedication commitment, $r = .54$, $p < .001$). However, attractive relationship alternatives (alcohol use and video gaming) demonstrated a limited association with the outcome variables for both males and females. Only alcohol use among males was significantly correlated with relationship strategies ($r = -.15$, $p = .011$). Examinations between relationship investments and the three commitment variables revealed significant correlations. For males, relationship length exhibited a negative correlation with personal dedication commitment ($r = -.15$, $p = .008$). For females, both the presence of children and relationship length were negatively correlated with relationship strategies (presence of children, $r = -.09$, $p = .032$; relationship length, $r = -.12$, $p = .005$) and personal dedication commitment (presence of children, $r = -.12$, $p = .003$; relationship length, $r = -.22$, $p < .001$). Control variables also revealed interesting findings. First, there were a significant number of participants who reported having no income but were currently in the process of completing an undergraduate or graduate degree. This sub-sample of highly educated participants with minimal income contradicts the axiom that higher education is associated with higher levels of income. Therefore, education served as a more adequate control in the current sample and income was excluded from the model. Neuroticism was negatively correlated with relationship effort (females, $r = -.48$, $p < .001$; males, $r = -.46$, $p < .001$), relationship strategies (females, $r = -.29$, $p < .001$; males, $r = -.21$, $p < .001$), and personal dedication commitment (females, $r = -.24$, $p < .001$; males, $r = -.16$, $p = .005$). Religiosity was also correlated with each of these variables as well, but positively (relationship effort, females, r

= .15, $p < .001$; males, $r = .19$, $p = .001$; relationship strategies, females, $r = .15$, $p < .001$;

males, $r = .22$, $p < .001$; personal dedication commitment, females, $r = .10$, $p = .019$; males, $r =$

.15, $p = .010$). Importance of marriage was positively correlated with relationship strategies

(females, $r = .10$, $p = .024$; males, $r = .20$, $p < .001$) and personal dedication commitment

(females, $r = .32$, $p < .001$; males, $r = .35$, $p < .001$), but not with relationship effort (females, r

= .03, $p = .489$; males, $r = .09$, $p = .109$).

Next, mean differences between men and women were explored with independent sample

t-tests. Men and women significantly differed on a number of variables (see Table 3).

Specifically, males reported significantly higher mean scores for alcohol use, video gaming and

relationship length. Females reported significantly higher mean scores for education, importance

of marriage, religiosity, neuroticism, relationship effort, and relationship strategies. With the

correlations and t-tests providing interesting information, attention can now be turned to the

research questions.

Path analysis results

The hypothesized model was tested and was found to be a poor fit to the data χ^2 (9 =

406.478, $p < .05$; RMSEA = .223 (90% CI = .205 .242), CFI = .796; TLI = .048; SRMR = .041.

Modification indices indicated a need to regress marital stability onto marital satisfaction to

improve model fit. Given the very high bivariate relationship between these two variables ($r =$

.73, $p < .001$) and the subsequent high path coefficient in additional path models, it was

determined that marital satisfaction and marital stability were too highly related to be useful

within the same model given the cross-sectional nature of these data. Marital stability, therefore,

was dropped and the model was rerun. This new model was fully saturated, so fit statistics are

not provided. Results can be viewed in Figure 3. Marital satisfaction was positively related to

relationship strategies (β = .27, p < .001), relationship effort (β = .41, p < .001), and

psychological commitment (β = .46, p < .001), with higher levels of marital satisfaction

associated with higher levels of each of these hypothesized forms of commitment. Neither of the

hypothesized attractive alternatives, amount of alcohol use or video game use, was related to the

commitment variables. Of the two hypothesized relationship investment variables, only

relationship length was significantly related to personal dedication commitment (β = -.09, p <

.01), with longer relationships associated with lower levels of personal dedication commitment.

The control variables were significantly related to the commitment variables. Education

(β = .10, p < .001), marital importance (β = .08, p < .05), religiosity (β = .13, p < .001), and

neuroticism (β = -.11, p < .001) were all related to relationship strategies. Higher levels of

education and religiosity, greater belief in the importance of marriage, and lower levels of

neuroticism were all related to higher levels of implementing relationship strategies. Religiosity

(β = .08, p < .01) and neuroticism (β = -.29, p < .001) were related to relationship effort, in that

higher levels of religiosity and lower levels of neuroticism were related to higher levels of

relationship effort. Finally, a greater belief in the importance of marriage was associated with

higher levels of personal dedication commitment (β = .28, p < .001). The residual variance of

relationship strategies and relationship effort was significantly correlated (β = .41, p < .001), but

the residual variances between relationship strategies and personal dedication commitment and

between relationship effort and personal dedication commitment were not significant. To test

whether any associations in the model were significantly stronger between marital satisfaction

and the commitment variables, corresponding parameter estimates were constrained to be equal

and the chi-square difference test was conducted. The association of marital satisfaction with

relationship effort was significantly stronger than the association of marital satisfaction and

relationship strategies ($\chi^2_{diff}(1) = 27.616$, $p < .001$). Similarly, the association of marital satisfaction with personal dedication commitment was significantly stronger than the association of marital satisfaction and relationship strategies ($\chi^2_{diff}(1) = 30.376$, $p < .001$). The association between marital satisfaction and relationship effort was not significantly different than the association between marital satisfaction and personal dedication commitment ($\chi^2_{diff}(1) = 2.205$, $p = .138$). Finally, the path analysis accounted for 18% of the variance in relationship strategies, 36% of the variance in relationship effort, and 37% of the variance in personal dedication commitment.

Moderation

To empirically test for moderation of gender, two models were run, one in which path coefficients between men and women were free to vary, and the other where the path coefficients for men and women were constrained to be equal. Chi-square difference tests were then computed to determine if there were statistical differences between the models. For gender, the constrained model did not significantly worsen model fit ($\Delta \chi^2_{SB}(26) = 15.831$, $p = .940$), rejecting the hypothesis that gender moderates the relationships specified in the model.

Chapter 5 - Discussion

The current study used Rusbult's (1980) investment model of relationship commitment to examine the association between marital satisfaction, alcohol use, video gaming, relationship length, and the presence of children on commitment. In the initial proposition of the investment model, two elements of commitment were proposed: psychological attachment and behavioral intent. In this study, both elements were examined. In the current study I hypothesized that higher levels of marital satisfaction, lower levels of alcohol use and video gaming, longer relationship length and the presence of children would predict higher levels of personal dedication commitment (psychological attachment) and relationship self regulation (behavioral intent). Results of the study found partial support for these hypotheses. First, marital satisfaction predicted higher levels of personal dedication commitment and relationship strategies and effort. These findings support previous research which has linked marital satisfaction with relationship self-regulation (e.g., Halford et al., 2007; Wilson et al., 2005) and personal dedication commitment (Stanley & Markman, 1992). Although not surprising, these findings reiterate an important point pertaining to marriage when viewed in the context of the investment model: when people are satisfied with their marriage they not only *feel* more committed, they are inclined to *act* more committed. People who are satisfied in their marriages typically have their individual needs met, allowing that person to focus less on meeting their own needs and instead on meeting the needs of their partner and the marriage. This focus on the marriage is likely to manifest itself in increased levels of marital work. In the current model, however, alcohol use and video gaming were not significantly associated with personal dedication commitment, relationship effort, or relationship strategies. In addition, relationship length was negatively related to personal dedication commitment (as relationship length increased, personal dedication

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commitment decreased), rather than positively related as hypothesized. Relationship length demonstrated no significant relationship with either relationship strategies or relationship effort. Likewise, the presence of children was unrelated to each of the outcome variables. Lastly, relationship strategies and effort were significantly correlated with one another. However, neither of the relationship self-regulation scales (strategies and effort) were significantly related to personal dedication commitment. Because these variables were significantly related at the bivariate level, this finding might be influenced by the amount of shared variance between relationship satisfaction and the commitment variables.

Although the hypotheses received only limited support, other interesting findings were discovered through the course of the study. First, although alcohol use was not significantly related to commitment (personal dedication commitment and relationship self-regulation) in the hypothesized model, alcohol use was negatively correlated with males' reported relationship strategies at the bivariate level. Perhaps alcohol, while not impacting one's perceived effort in their marriage, does impair one's ability to employ effective relationship strategies. This may be due to a number of factors, such as cognitive impairment or distraction. If a husband is cognitively impaired or distracted this would certainly impact his ability to employ specific relationship strategies, however, at the same time, may have no influence on his perceived effort expended in the relationship. In addition, findings pertaining to the study's control variables were noteworthy. In the path analysis, neuroticism was negatively associated with the behavioral intent element of commitment, namely relationship strategies and effort, but not psychological attachment (personal dedication commitment). Similarly, religiosity was positively related to behavioral intent, but not psychological attachment.

Psychological Attachment and Behavioral Intent

Several findings in the current study offer support for the proposition that psychological attachment and behavioral intent are empirically different and should be examined separately (Schoebi et al., 2012). First, relationship length was significantly related to psychological attachment but not behavioral intent. Psychological attachment, or feelings of commitment, is likely to be high in the early stages of a marriage but typically declines with time. According to the findings of the current study, there is no indication that this same pattern of decline exists for behavioral intent. Second, several control variables differed in their association with psychological attachment and behavioral intent. Education and religiosity were each significantly associated with relationship self-regulation, but not personal dedication commitment. Specifically, religiosity was related to both relationship strategies and effort. Education was only significantly related to relationship strategies. It might be that higher education, through courses in communication or relationship skills, provide a context in which "ideas about effective relationships" can be taught and learned. In addition, religious settings may provide venues in which marital skills and/or effort are promoted, making sense that those with more exposure to these venues would have increased levels of marital skills and/or effort. For example, religious environments often place a focus on family relationships, providing encouragement for strengthening one's marriage. Furthermore, higher education may also be associated with higher income, providing economic stability, and allowing for a greater focus on relationship development. On the other hand, the importance of marriage was significantly related to personal dedication commitment, but not to relationship effort. Importance of marriage had a significant association with relationship strategies, although that association was weak (see Figure 3). One's belief in the importance of marriage may lead some to feel that they *need* to be "committed" to marriage, or in other words, psychologically attached. However, a belief that marriage is

important may have much less of an impact on whether or not one is actually behaviorally committed.

As it pertains to personality, results of the path analysis found that neuroticism was related to relationship strategies and effort but not personal dedication commitment. In other words, neuroticism had a negative association with perceived marital behavior, but not attitudes. Neuroticism is a personality trait that has strong empirical associations with romantic relationships (Malouff, et al, 2010). However, although previous research has linked neuroticism with poor marital processes (Donnellan, Conger, & Bryant, 2004) and outcomes (White, Hendrick, & Hendrick, 2004), we know much less about how neuroticism impacts marriage. Some research findings have suggested that neuroticism predicts lower levels of sexual satisfaction (Fisher & McNulty, 2008) and higher levels of negative interactions (Donnellan et al., 2004; Karney & Bradbury, 1995), both of which would negatively impact marital satisfaction. These findings still leave an important question unanswered: what is it about neuroticism that leads to an unsatisfactory sexual relationship and negative interactions? The findings of the current study propose one potential insight into the mechanism in which neuroticism could negatively impact marital processes and outcomes: those high in neuroticism engage in lower levels of relationship strategies and effort. In other words, the current study found that individuals who reported key neurotic personality traits were less likely to work on their marriage. A lack of marital work would inevitably have an impact on a couple's sex life and communication patterns. What is more interesting about this finding is that in this same sample, those high in neuroticism were not less likely to say they were psychologically committed to their marriage. There was a difference between what they believed (e.g., "I want my relationship to stay strong no matter what rough times we may encounter") and what they reported doing

(e.g., "If my partner doesn't appreciate the change efforts I am making, I tend to give up"). As mentioned previously, it is one thing to feel committed (or think you are committed) but is another thing to behave like a committed individual. For some reason, those high in neuroticism reported greater disparity between the commitment they felt (psychological attachment) and their intent to engage in behaviors indicative of committed individuals. It may be that those high in neuroticism, or those who are less emotionally stable, are more prone to think about themselves rather than their partner and their marriage. While this may have limited impact on their *feelings* of commitment, it would likely have a significant impact on their ability to engage outwardly in marital work. These findings, as well as the other findings in this study pertaining to psychological attachment and behavioral intent, suggest there seems to be something inherently different between these two elements of commitment and should therefore be examined and tested separately.

The investment model has received extensive empirical support for its tenets, namely that relationship satisfaction, quality of alternatives, and relationship investment influence relationship commitment, which in turn predict relationship stability. Why, then, were these findings only partially supported in the current study?

Attractive Alternatives and Marital Commitment

Several potential reasons exist for the lack of support in this study for the hypothesis that attractive alternatives would have a negative association with marital commitment. First, in the present examination two major adaptations were made to the investment model: quality of alternatives was defined more specifically as alternatives to marital work (i.e., alcohol use and video gaming) rather than alternatives to the marriage (alternative partners) and marital commitment was framed as both psychological attachment *and* behavioral intent. It is possible

that alcohol use and video gaming do not serve as attractive alternatives to marital work. Or, in other words, playing video games and drinking alcohol do not entice individuals to spend excessive time away from working on their marriage. This reason would leave questions pertaining to *why* both alcohol use (for review see Marshal, 2003) and excessive video gaming (Ahlstrom et al., 2012; Coyne et al., 2012) have a demonstrated negative effect on romantic relationships, as the current study proposed that alcohol use and video gaming would be negatively associated with marital outcomes through marital work. However, the bivariate finding that alcohol use was negatively correlated to males' reported relationship strategies suggests that alcohol use may have an effect on behavioral intent worthy of further examination.

Other possible reasons for the lack of empirical support for the hypothesized model pertain to the data used in this study. In the current sample, mean levels of both alcohol use and video gaming were relatively low. Because of this there was limited variability within the study participants, inhibiting our ability to detect significant differences among the subjects. The results might also suggest that alcohol use and video gaming are only detrimental to marital success when they reach high levels. This would be consistent with previous studies that have documented higher levels of alcohol use to have more deleterious effects on marriages than lower levels of alcohol use (Leonard & Roberts, 1998). In summary, the results of this study could be due to the homogeneous nature of the sample, considering previous marital research on the effects of alcohol use (Marshal, 2003) and video games (Coyne et al., 2012). Additionally, the bivariate relationship demonstrated in this study between male's alcohol use and relationship strategies indicate the potential importance of these variables when examined with more heterogeneous data.

Relationship Investments and Marital Commitment

Like attractive alternatives, relationship investments did not predict commitment as hypothesized. In fact, while relationship length had no significant association with relationship self-regulation, it had a negative association with personal dedication commitment. It was hypothesized that the amount of time individuals had invested into their marriages would increase their levels of commitment, but rather the results found that as relationship length went up, personal dedication commitment went down. Although contrary to the hypotheses, this finding provides clarification regarding the idea of "time spent" with a partner as a relationship investment. Previous research has found time invested into a relationship to be related to relationship commitment (Rusbult et al., 1998). However, historically this time investment has been measured differently than it was in this study. Previous studies have assessed time investment more subjectively with statements such as "I have invested a great deal of time in our relationship" (Rusbult et al., 1998) rather than objectively, such as "how long have you been married." There were two potential problems with the way time investment was measured in the current study. First, it is certainly possible for someone to be married to an individual for a substantial amount of time and yet not invest very much "time" into the marriage. This is perhaps one reason why the findings in the current study did not support the hypothesis that relationship length would predict marital commitment. Second, only one item was used to assess time investment. Previous research has used a variety of questions to capture how much someone feels they have invested in the relationship. In addition, like the item mentioned above, these questions gather data on one's perceptions of "time investment." It may be that, for whatever reason, as couples increase in the *length* of their relationship they may be investing less *time* into the marriage. This idea would make sense considering the decline in marital satisfaction that

often occurs over time (Bradbury & Karney, 2010). If this is the case, then relationship length would not be an adequate indicator of how much time is invested in a marriage and therefore other, more subjective measures, should be utilized.

In addition to measurement issues in assessing time investment, the items of commitment (personal dedication commitment) may be more indicative of the feelings couples have in earlier phases in their marriage. For instance, the statement: "I want my relationship to stay strong no matter what rough times we may encounter" may be answered more affirmatively by individuals who have not yet experienced significant trials in their marriage, trials which often come with time. Another item which may be more prevalent among individuals in younger marriages is the idea that "My relationship is more important to me than almost anything else in my life." It is common for individuals to place more emphasis on their marriages in the early stages, as "newer" marriages often include high levels of novelty, satisfaction, and excitement. As time goes on, and levels of excitement decrease, individuals may find other "important" aspects of life, such as careers and children, which detract from the prior "importance" placed on a marriage.

Although the use of relationship investments, as defined in this study (relationship length and presence of children), did not appear to adequately capture what is meant by relationship investments in Rusbult's original model, it still provided interesting information pertaining to relationship self-regulation. First, the presence of children was not associated with the level at which partners were inclined to work on their marriage. Although research suggests that children might no longer serve as a protective factor against divorce (McDermott et al., 2013) the findings of the current study indicate that the presence of children do not have a negative association with the degree to which individuals work on their marriage. Second, unlike personal dedication

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commitment, relationship self-regulation was not significantly associated with the length of the relationship, suggesting that behavioral intent is irrespective of relationship length. This finding is refreshing, in that although feelings of marital commitment tend to wane with time, an inclination to work on one's marriage may be more influenced by the individual than the length of the relationship.

Finally, the findings in the current study suggest that further examination would be beneficial in understanding the role of relationship self-regulation as an element of commitment. With its focus on marital work, RSR conceptually appears like a suitable measure to capture the idea of behavioral intent. However, the findings of the current study lack support for the idea of RSR as a form of behavioral intent when relationship investments are defined as the presence of children and relationship length and alcohol use and video gaming as attractive alternatives. It is possible that these results are a factor of the measurement of attractive alternatives and relationship length. Therefore, to further assess the proposition of RSR as a type of marital commitment, future research should examine RSR in the context of relationship investments and attractive alternatives as measured in the investment model historically (e.g., Rusbult, Martz, & Agnew, 1998).

Limitations, Future Research, and Clinical Implications

There were several limitations in the current study. First, the data used in this study were from a single time point, and therefore correlational in nature. As a result, the temporal ordering of the variables in the model could only be based on sound theory, but longitudinal data is needed in order to properly test the temporal ordering of the relationships under study. Having longitudinal data might also allow for including marital satisfaction and stability in the same

model, as they were too highly correlated when measured at the same time point. Second, several key variables in the model had limited variability, namely video gaming and alcohol use. Because of this, it was difficult to determine whether or not alcohol use and video gaming could serve as attractive alternatives to marital work. Considering the widespread use of alcohol and the frequent engagement in video gaming in the United States, and the potentially negative impact they can have on marriages (for review on the effects of alcohol use on marriage see Marshal, 2003; Coyne et al., 2012), future research should examine further the relationship between marital work and attractive alternatives with samples that have greater variability on these key variables. Third, relationship length and presence of children did not seem to be adequate examples of relationship investment, therefore, future research could include investment measures devised by Rusbult and colleagues (1998) to capture this facet of the investment model. Finally, the sample in the current study consisted primarily of White, educated individuals. This is hardly representative of married individuals in the United States and future research should examine these variables with a more diverse sample.

Although not an intended result of the current study, the findings that neuroticism predicts lower levels of relationship strategies and effort, but not personal dedication commitment, warrant further attention. Future research might continue to explore the differences between psychological attachment and behavioral intent. By so doing, additional insight might be gained into how those who exhibit enduring neurotic tendencies can more effectively cope with the struggles that may present themselves in marriage. In addition, further research is still needed into how to adequately define the behavioral intent element of commitment. Because of strong theoretical rationale and face validity (see Wilson et al., 2005) future researchers might consider the relationship self-regulation scales as measurement tools in assessing behavioral

intent. In doing so, it is recommended that more traditional measures of attractive alternatives and relationship investments are used (Rusbult et al., 1998) and a more diverse sample be examined.

The results of this study have potential clinical implications for working with couples. First, an individual's commitment to their romantic relationship should be examined as more than their psychological attachment. In a clinical setting, it is not uncommon for a therapist to hear someone express a "commitment" to their marriage and yet observe limited behavioral evidence that this is the case. In order to assist the therapist-client conversation on this issue, clinicians might consider utilizing the Behavioral Self-Regulation for Effective Relationships Scale (BSRERS; Wilson et al., 2005) in their therapeutic assessments. This measure can increase a clinician's understanding of a client's behavioral intent in their marriage. For example, a therapist might administer this assessment to a couple after several sessions where little to no progress has been reported. A conversation can then ensue concerning what it looks like to "apply effective ideas" in improving their relationship or why they "cannot seem to change [their] behavior." According to the findings of this study, this assessment might be most beneficial in working with client's who exhibit neurotic personality traits.

Conclusion

This was the first study to examine the investment model of relationship commitment, with commitment defined as a commitment to marital work and attractive alternatives defined as alternatives to marital work. The results of this study failed to confirm the adaptations I proposed to the investment model, yet did offer additional evidence for the idea that there is a difference between one's psychological attachment to a marriage and one's behavioral intent in a marriage. Most notably, those high in neuroticism were less inclined to engage in relationship strategies

and effort, whereas no such impact was found on personal dedication commitment. Like the findings of Schoebi et al., (2012), these results suggest that marital commitment should be examined as more than a psychological attachment to a partner, but also one's behavioral intent to act committed in a marriage.

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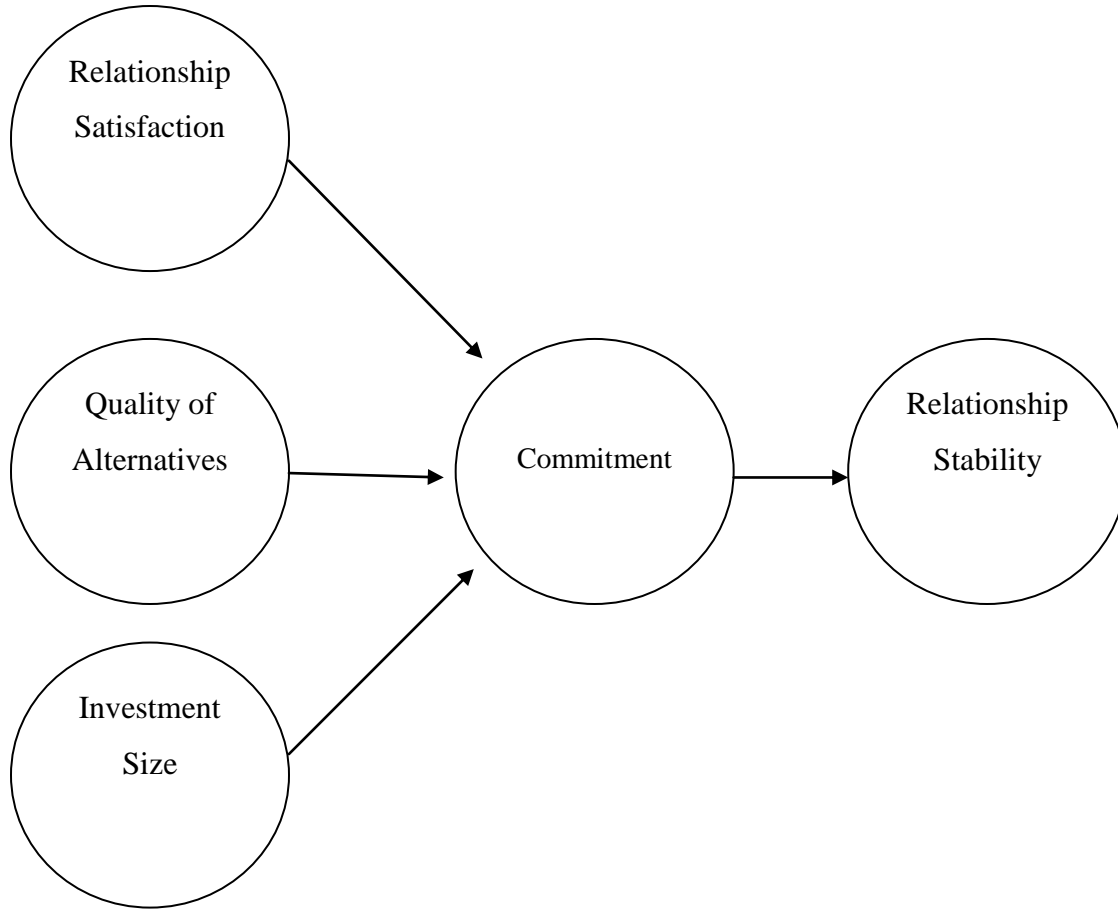
Figure 1. Rusbult's (1983) Investment Model.

Figure 2. Proposed Model for Study.
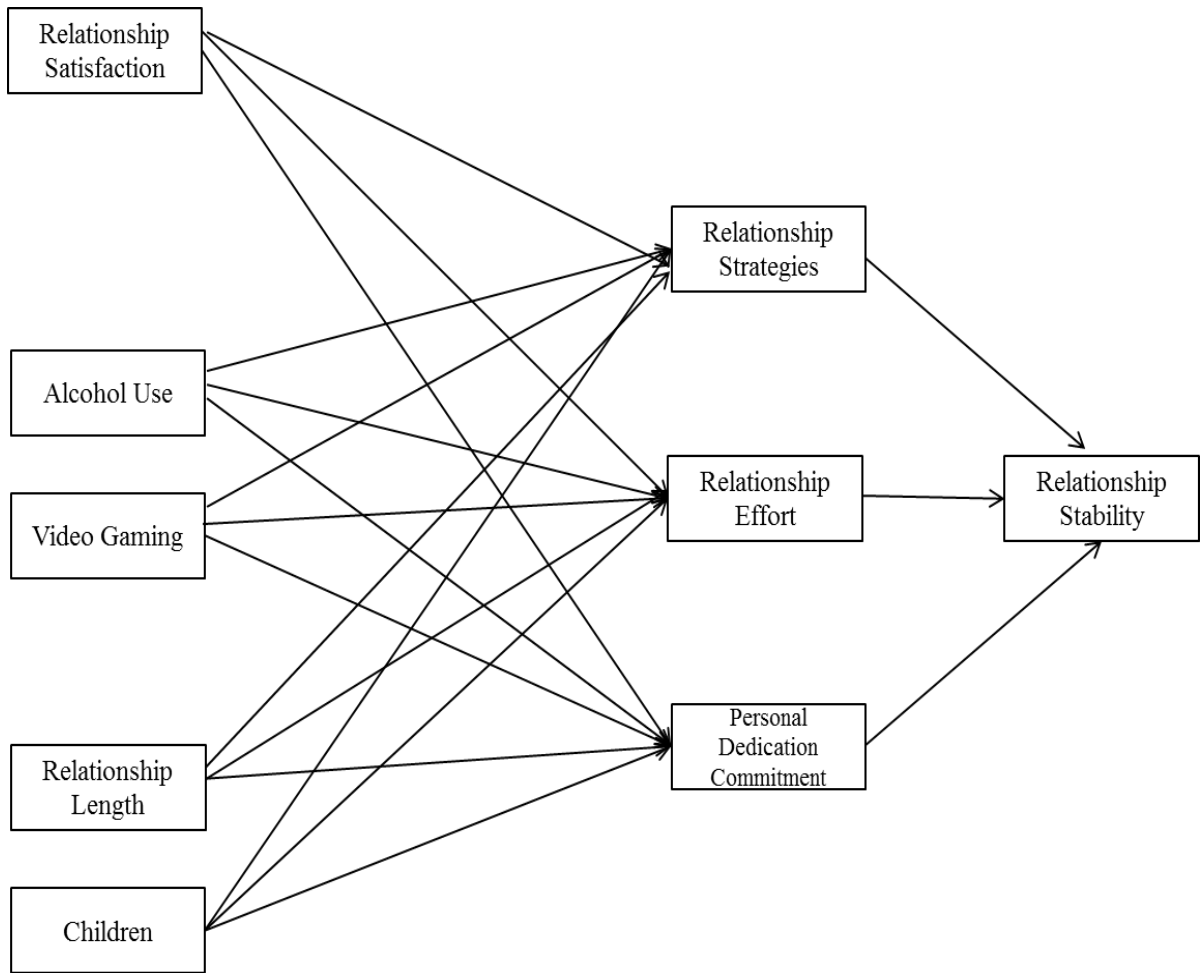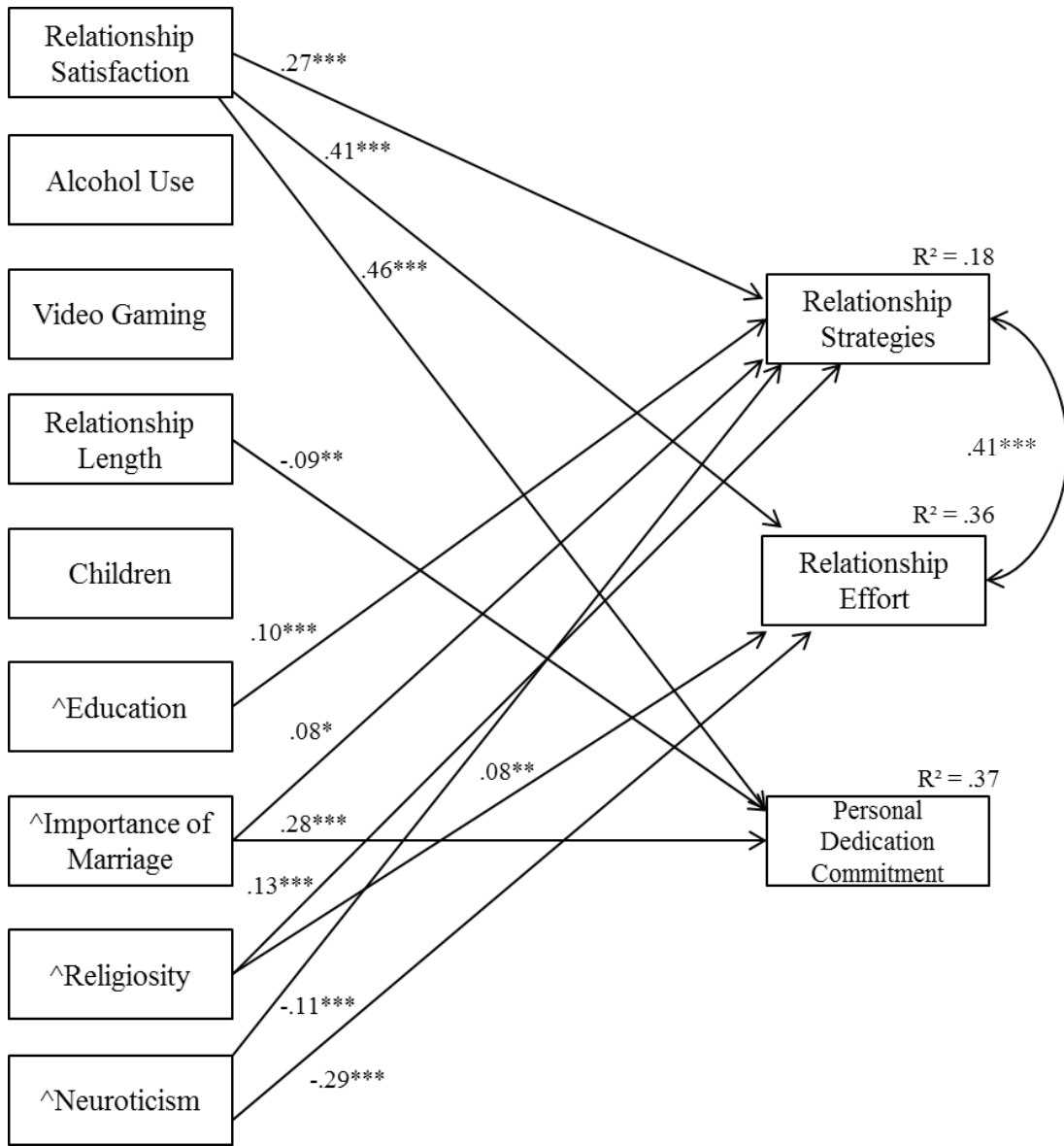
Figure 3. Path Analysis for Predictors of Relationship Commitment ($N = 875$)

*$p < .05$. **$p < .01$. ***$p < .001$. ^ indicates study control variable.

Appendix B - Tables

Table 1

Correlations Among Variables of Interest for Males (N = 306)

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Rel Satisfaction	–											
2. Alcohol Use	-.07	–										
3. Video Gaming	.08	.01	–									
4. Rel Length	-.21***	-.10	-.13*	–								
5. Children	-.14*	-.16**	-.09	.62***	–							
6. Education	.05	.07	-.12*	.05	-.00	–						
7. Imp of Marriage	.14*	-.11	-.07	.02	-.01	-.15*	–					
8. Religiosity	.14*	-.41***	-.10	.25***	.28***	-.01	.24***	–				
9. Neuroticism	-.33***	.06	-.12*	.03	-.08	-.03	-.04	-.18**	–			
10. Rel Effort	.46***	-.01	-.00	-.04	.02	.09	.09	.19**	-.46***	–		
11. Rel Strategies	.32***	-.15*	-.04	-.05	-.03	.11*	.20***	.22***	-.21***	.55***	–	
12. P/D Commit	.51***	-.05	.06	-.15**	-.08	.06	.35***	.15*	-.16**	.33***	.24***	–

*$p < .05$. **$p < .01$. ***$p < .001$. (two-tailed).

Table 2

Correlations Among Variables of Interest for Females (N = 569)

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Rel Satisfaction	–											
2. Alcohol Use	-.04	–										
3. Video Gaming	.06	-.05	–									
4. Rel Length	-.28***	-.08	-.02	–								
5. Children	-.21***	-.14**	.02	.61***	–							
6. Education	.06	.11**	-.07	.01	-.10*	–						
7. Imp of Marriage	.10*	-.13**	-.00	-.02	.06	-.10*	–					
8. Religiosity	.04	-.34***	-.00	.15**	.20***	-.04	.13**	–				
9. Neuroticism	-.39***	.06	-.03	.04	-.00	-.07	-.02	-.16***	–			
10. Rel Effort	.55***	-.07	.01	-.06	-.07	.07	.03	.15***	-.48***	–		
11. Rel Strategies	.37***	-.08	-.01	-.12**	-.09*	.05	.10*	.15***	-.29***	.54***	–	
12. P/D Commit	.54***	-.08	.01	-.22***	-.12**	.01	.32***	.10*	-.24***	.28***	.25***	–

*p < .05. **p < .01. ***p < .001. (two-tailed).

Table 3

Results of Independent Samples t-test for Model Variables by Gender

| Variable | Male (*n* = 306) | | Female (*n* 569) | | | |
	M	SD	*M*	SD	*Range*	*t*
Marital Satisfaction	3.35	.94	3.36	1.04	1 – 4	-.10
Alcohol Use	2.63	1.10	2.37	.99	1 – 5	3.37**
Video Gaming	3.01	3.08	2.02	2.98	0 – 7	4.55***
Relationship Length	5.59	2.44	5.31	2.40	1 – 11	1.61
Children	1.24	1.27	1.20	1.33	0 – 7	.46
Education	6.74	2.22	7.23	1.69	1 – 9	-3.34**
Importance of Marriage	4.05	.95	3.87	1.05	1 – 5	2.55*
Religiosity	2.73	1.36	3.00	1.28	0 – 5	-2.90**
Neuroticism	2.54	.70	2.75	.69	1 – 5	-4.15***
Relationship Effort	3.07	.71	3.17	.72	1 – 5	-2.40*
Relationship Strategies	3.40	.70	3.65	.59	1 – 5	-5.38***
Personal Dedication Commitment	4.37	.74	4.27	.75	1 – 5	1.88

Note: Means which were significantly different at the $p < .05$ (*), $p < .01$ (**), and the $p < .001$ (***) levels are so indicated.