2013

Predicting commitment for those in military relationships

Darrina Sofia Bledsoe

University of Northern Iowa

Copyright ©2013 Darrina Sofia Bledsoe
Follow this and additional works at: https://scholarworks.uni.edu/etd

Let us know how access to this document benefits you

Recommended Citation
Bledsoe, Darrina Sofia, "Predicting commitment for those in military relationships" (2013). Electronic Theses and Dissertations. 546.
https://scholarworks.uni.edu/etd/546

This Open Access Thesis is brought to you for free and open access by the Graduate College at UNI ScholarWorks. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
PREDICTING COMMITMENT FOR THOSE IN MILITARY RELATIONSHIPS

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Darrina Sofia Bledsoe

University of Northern Iowa

May 2013
ABSTRACT

Little research has been conducted concerning how deployments affect spouses’ and service members’ commitment to their relationships (Merolla, 2010). The current study investigated relationship commitment of military spouses and service members in long-distance relationships (LDR) and geographically close relationships (GCR). The investment model (IM; Rusbult, Martz, & Agnew, 1998) predicts that relational commitment is influenced by three factors: satisfaction, alternatives, and investment. Additionally, the perceived stress scale (PSS; Cohen, Kamarack, & Mermelstein, 1983), which focuses on levels of stress influenced by daily hassles, major events, and changes in coping resources, was utilized as a means to predict commitment in conjunction with the IM. It was hypothesized that one’s level of stress may also predict commitment as military life involves several unique stressors.

Military spouses and service members (n = 247) completed an online survey evaluating levels of satisfaction, alternatives, investments, and stress. Hierarchical regressions were executed to test the hypotheses. As expected, satisfaction, alternatives, and investments predicted commitment. However, stress did not predict commitment over and above the IM variables. Relationship length also predicted commitment. Additionally, an independent-samples t-test was conducted to investigate relationship type on the IM and PSS variables. Results indicated those in GCRs reported more investments than those in LDRs. However, no significant differences were found in commitment, satisfaction, alternatives, or stress levels based on relationship type.
The IM appears to be applicable to military relationships, as satisfaction, alternatives, and investments were predictive of one’s commitment for those in military relationships. Unaccounted factors (i.e., social support, preparedness, resiliency, modern technology) may contribute to why stress did not predict commitment. Overall, these findings expanded on military romantic relationship research and provide information regarding elements contributing to military spouses’ and service members’ commitment.

As the military lifestyle threatens the course of one’s relationship, this research has implications of preparing couples and families in amplifying their resiliency against foreseeable military-based separations. In doing so, military couples can work on increasing their satisfaction and investments while decreasing their alternatives to promote commitment in their relationship. Furthermore, this is of clinical use as practitioners can help clients maintain appropriate IM variable levels in order to sustain their relationship over the course of their military experience.
PREDICTING COMMITMENT FOR THOSE IN MILITARY RELATIONSHIPS

A Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Master of Arts

Darrina Sofia Bledsoe
University of Northern Iowa
May 2013
This Study by: Darrina Sofia Bledsoe

Entitled: Predicting commitment for those in military relationships

has been approved as meeting the thesis requirement for the

Degree of Master of Arts

3/28/13
Date
Dr. Helen C. Barton, Chair, Thesis Committee

3/14/2013
Date
Dr. Sunde Nesbit, Thesis Committee Member

3/14/13
Date
Dr. Mary Losch, Thesis Committee Member

5/21/13
Date
Dr. Michael J. Licari, Dean, Graduate College
DEDICATION AND ACKNOWLEDGEMENTS

God

Darrell & Dolores Bledsoe

Helen Harton, Ph.D.

Carolyn Hildebrandt, Ph.D.

Christopher Edgington, Ph.D.

Colonel Robert Stavnes, Ph.D.

And all others who participated in my snowball sample = )
TABLE OF CONTENTS

LIST OF TABLES............................................................................................................. vi

CHAPTER 1. PREDICTING COMMITMENT FOR THOSE IN MILITARY RELATIONSHIPS

Military Relationship Literature Review.................................................................1
Definitions of Relationship Terms........................................................................4
LDRs and GCRs: Military Relationships...............................................................5
  Deployed-Based Relationships/LDRs.................................................................6
  Non-Deployed Relationships/GCRs.................................................................8
Summary..............................................................................................................10
The Investment Model......................................................................................10
Satisfaction.......................................................................................................11
Alternatives......................................................................................................13
Investments......................................................................................................15
IM Variables....................................................................................................17
Perceived Stress..............................................................................................19
Overview of Study..........................................................................................23
Hypotheses......................................................................................................24

CHAPTER 2. METHOD.............................................................................................25
Participants.......................................................................................................25
Procedure.........................................................................................................28
Measures.........................................................................................................29
Demographics ........................................................................................................ 29
Investment Model: Facet and Global Items ........................................................... 29
Investment Model: Commitment Items ................................................................. 30
Investment Model: Satisfaction, Alternatives, and Investment Items ................... 30
Perceived Stress Scale ............................................................................................ 32

CHAPTER 3. EXPECTED RESULTS ......................................................................... 33
Plan of Analysis ........................................................................................................ 33
Correlations ........................................................................................................... 34
GCRs ...................................................................................................................... 34
LDRs ...................................................................................................................... 34
Univariate Comparisons ........................................................................................... 35
Regression Analyses ............................................................................................... 36

CHAPTER 4. DISCUSSION ..................................................................................... 44
Limitations and Future Research ............................................................................ 48
Implications and Conclusion ................................................................................... 53

REFERENCES ....................................................................................................... 55
APPENDIX A: CONSENT FORM .......................................................................... 69
APPENDIX B: ONLINE POSTS .............................................................................. 70
APPENDIX C: ONLINE SURVEY ......................................................................... 72
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demographic Variables for those in Geographically Close Relationships and Long-Distance Relationships</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>Correlations for Investment Model Predictors, Perceived Stress, Demographic Variables, and Commitment for those in GCRs</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>Correlations for Investment Model Predictors, Perceived Stress, Demographic Variables, and Commitment for those in LDRs</td>
<td>38</td>
</tr>
<tr>
<td>4</td>
<td>Correlations for Investment Model Predictors and Perceived Stress for those in LDRs and GCRs</td>
<td>39</td>
</tr>
<tr>
<td>5</td>
<td>Correlations for Commitment and Demographic Variables for those in LDRs and GCRs</td>
<td>40</td>
</tr>
<tr>
<td>6</td>
<td>Relationship Type Differences for the Investment Model Predictors, Perceived Stress, and Commitment</td>
<td>41</td>
</tr>
<tr>
<td>7</td>
<td>Crosstabulation of Relationship Type and Deployment Status</td>
<td>41</td>
</tr>
<tr>
<td>8</td>
<td>Military Involvement Comparisons for the IM Predictors, PSS variable, and Commitment</td>
<td>42</td>
</tr>
<tr>
<td>9</td>
<td>Gender Differences for the Investment Model Predictors, Perceived Stress, and Commitment</td>
<td>42</td>
</tr>
<tr>
<td>10</td>
<td>Hierarchical Multiple Regression Analyses Predicting Commitment For Relationship Type</td>
<td>43</td>
</tr>
</tbody>
</table>
CHAPTER 1
PREDICTING COMMITMENT FOR THOSE IN MILITARY RELATIONSHIPS

Military Relationship Literature Review

Military couples are challenged with considerable stressors. During wartime, those at home experience persistent fears that their partner will encounter dangers that could leave their partner mentally or physically injured, or worse, dead. Combat involves exposure to violent, horrifying, dangerous events where emotions of extreme fear, anxiety, and despair are not only experienced by the service member deployed, but their loved ones who remain at home anticipating the day they return (Basham, 2008).

On August 31, 2010, President Barack Obama announced a timeline regarding the end of the wars in Iraq and Afghanistan. In June 2011, he presented a plan that would withdraw military forces only out of Afghanistan by 2014 (Radin, 2012). During the spring of 2012, nearly 68,000 to 90,000 soldiers deployed in 2009, were transferred out of Afghanistan and returned to the States. However, throughout this year, 88,000 additional service members were deployed to Afghanistan for Operation Enduring Freedom (OEF; Bingham, 2012). The current plan for 2013 includes shifting and advancing full responsibility for security to the Afghan National Security Forces while continuing to return deployed American soldiers to the U.S. There appears to be a vague plan in 2014; however, the U.S. forces anticipate returning between 10,000 and 20,000 troops and leaving troops in the Special Forces, counterterrorism forces, and military training.
Over the course of Obama's plan, many soldiers returned to the U.S. and sought treatment for post-traumatic stress disorder (PTSD). Based on the annual new PTSD diagnoses in all services report, as of May 7, 2012, the number of deployed service members diagnosed has increased dramatically from 1,610 in 2000 to 14,875 in 2011 (Fischer, 2012). Since then the number has radically decreased, with the number of soldiers returning from deployment experiencing PTSD being 4,279 in 2012. Although a decline has occurred in the number of those suffering from PTSD since the wars began, there continues to be a U.S. presence in the Middle East.

According to President Obama, our troops must continue “advising and assisting Iraq’s Security Forces, supporting Iraqi troops in targeted counterterrorism missions, and protecting our civilians” (Fischer, 2012). U.S. troops are now being deployed to what is called Operation New Dawn (OND). According to the Commanding General Lloyd Austin of the U.S. Forces-Iraq, the mission is to demonstrate the U.S. nation’s dedication to the people of Iraq in hopes of creating an environment that will produce a sovereign, stable, self-reliant, and unified partnership within Iraq (Cirdesman & Khazai, 2012). Yet, with the continuation of military members experiencing deployments, it can be assumed that the number of reported cases regarding combat-related stress disorders, such as PTSD, depression, and substance abuse, will also increase.

These disorders affect military members negatively in regards to their social and occupational functioning as well as their social and romantic relationships (Dekel, Solomon, & Bleich, 2005; Evans, McHugh, Hopwood, & Watt, 2003; Gallagher, Riggs, Byrne, & Weathers, 1998; Hendrix, Erdmann, & Briggs, 1998; Jordan et al., 1992; Lev-
Deployments also produce psychological distress that affect one’s intimate relationship (Allen, Rhoades, Stanley, & Markman, 2010; Erbes, Meis, Polusny, & Compton, 2011; Newby et al., 2005; Renshaw, Rodrigues, & Jones, 2008; Taft, Watkins, Stafford, Street, & Monson, 2011). For example, combat veterans with high levels of PTSD exhibit lower levels of intimacy and self-disclosure, and influence psychological symptoms in their spouses, which include stress, anxiety, and depression (Renshaw et al., 2008; Solomon, Dekel, & Zerach, 2008). Military research suggests that husbands’ war trauma negatively impacts satisfaction in their relationships (Goff, Crow, Reisbig, & Hamilton, 2007), military members’ wives experience psychological distress when their husbands exhibit symptoms of PTSD (Renshaw et al., 2011), and husbands with more PTSD symptoms engage in more negative communication and have lower satisfaction upon return from deployment (Allen et al., 2010; Hendrix et al., 1998; Riggs et al., 1998; Taft et al., 2011). Thus far, little research has examined the implications of military deployment on romantic relationships from both the service member and the spouses’ points of view.

According to Merolla (2010), there is little research addressing how deployments and separations affect spouses’ and service members’ commitment to their romantic relationships. Knowing these deployment-based separations have the ability to promote personal and relational distress (Figley, 1993; Vormbrock, 1993) and how commitment levels vary depending on distance (Rusbult, Martz, & Agnew, 1998), it is important to
determine what spouses and service members experience during deployments in order to reduce and prevent these factors from negatively influencing the commitment to their relationship. In this study, the investment model (IM; Rusbult et al., 1998) and perceived stress scale (PSS; Cohen, Kamarack, & Mermelstein, 1983) variables were utilized to predict military spouses' and service members' levels of commitment to their relationship in geographically close and long-distance relationships.

Definitions of Relationship Terms

In this study, no definition of a geographically close relationship (GCR) or a long-distance relationship (LDR) were given due to the absence of a consistent definition in past research. A number of studies evaluating the differences experienced in LDRs and GCRs found it more appropriate to allow respondents to self-define their relationship type due to the difficulty in conceptualizing LDRs (Dellmann-Jenkins, Bernard-Paolucci, & Rushing, 1994; Ficara & Mongeau, 2000; Guldner & Swensen, 1995; Maguire, 1999). There even seems to be difficulty in developing a definition for the term “relationship” (Berscheid & Reis, 1998, p. 197). For instance, romantic relationships have been defined as “on-going voluntary interactions that are mutually acknowledged, rather than identified by only one member or pair” (Collins, 2003, p. 2). Others define a relationship as having a certain intensity that is indicated by expressions of affection, such as physical or sexual relations (Brown, Feiring, & Furman, 1999; Reis & Shaver, 1988). Some define a relationship based on the rate of face-to-face contact between partners (Dainton & Aylor, 2002). Due to the inconsistency, no description or definition was provided for
the participants in determining their type of relationship. Participants reported their type of relationship based on their interpretation of LDRs and GCRs.

LDRs and GCRs: Military Relationships

During deployments, military members may leave their loved ones at home for what is often anticipated as a few months but may turn into several years. Deployments cover a period of time where the service member is physically absent from the spouse or family (Wiens & Boss, 2006). There are combat-related deployments, which include being deployed to a different country in order to protect and serve during times of peace, combat, or war. There are also deployments where service members are deployed in the U.S. for training or occupational purposes. Typically, this type of deployment does not comprise high levels of combat or danger.

Because of the fluid nature of deployments and the differences among them, in this study I chose to focus on categorizing relationships in terms of those in GCRs versus those in LDRs. GCRs and LDRs are easier for participants to classify and allow for links to previous research on non-military relationships. It is assumed that many relationships in which a person is deployed will be a LDR, but it is important to note that those terms are not synonymous.

Additionally, the military was broadly defined to include all individuals who previously or currently serve in the military. No restrictions were provided in terms of military status as a means to obtain a sufficient sample size. Thus, the sample consisted of active duty service members as well as non-active duty members, such as veterans, retirees, and reserves.
Deployed-Based Relationship/LDRs

Deployed-based relationships/LDRs have qualities different from those in non-deployed or GCR relationships. Among non-military romantic relationship couples, findings suggest that partners separated by distance tend to develop superior communication skills and have stronger emotional connections with one another, which in turn progress to higher levels of commitment (Dainton & Aylor, 2002). However, transitions from GCRs to LDRs can bring feelings of uncertainty, ambiguity, anxiety, and loneliness (Burrell, Adams, Durand, & Castro, 2006; Lydon, Pierce, & O’Regan, 1997; Wood, Scarville, & Gravino, 1995). Transitions from GCRs to LDRs are commonly experienced among military couples; therefore, it can be inferred that these negative feelings may influence one’s commitment to the relationship.

Military romantic relationship research suggests that deployments can become overwhelming, stressful, and upsetting for spouses at home, and contribute to marital problems (Caliber Associates, 1993; Orthner, 2002). Deployments that require more time and occur in more dangerous, hostile zones are related to increased problems and stress to relationships (Hobfoll, Figley, & Sandier, 1991; Kelley, 1994). During these times, the family experiences emotional disorganization and destabilization (MacDermind, Olson, & Weiss, 2002; Pincus, House, Christnesen, & Adler, 2005). More specifically, the spouse experiences several stressors including shifts in the family dynamics and roles, role overload, financial concerns, increased parenting demands, and changes in community support that are intensified by fear for the safety and return of the deployed
Furthermore, children are an additional source of strain, especially among spouses who are pregnant, have more than one child, or care for young children (Haas, Pazdemik, Olsen, 2005; Kelley, 1994). Of the military personnel, fifty-three percent of service members are married and over 43% of these personnel have dependent children (National Military Family Association, 2004; Office of the Deputy Under Secretary of Defense, 2012). During deployments, the spouse takes the role of a single parent temporarily, which may elicit or worsen mental health issues and affect the spouse’s psychological status, welfare of the children, support system, and the reintegration back into the family of the deployed service member (Mansfield et al., 2010). Some additional stressors that impact and intensify marital problems during deployed-based relationships include the unpredictability of counterinsurgent warfare (Spera, 2009), length of deployment which usually spans from 6 to 18 months, and multiple deployments (Sheppard, Malatras, & Israel, 2010). Overall, these stressors are suggested to negatively impact one’s commitment to one’s relationship.

Although these factors negatively influence a deployed-based relationship, social support may help spouses cope with the experienced stressors (SteelFisher, Zaslavsky, & Blendon, 2008). Frequent communication and daily contact through utilization of modern technology, such as e-mail, webcam, FaceTime, Skype, Facebook, etc., can help sustain a strong relationship and morale; however, they can also elicit feelings of anxiety and panic about danger if this daily form of communication is broken (National Military
Family Association, 2005). Resiliency, which is referred to as the ability to preserve or adapt in the context of risk adversity in spite of ongoing stresses (Meichenbaum, 2011), and preparedness are other factors found to help cope with this type of LDR (Spera & Jones, 2004). For instance, military families or spouses who are more resilient were more able to deal with the stressors brought on when a loved one was deployed. Being provided prior notice and preparing for the deployment also improves one’s ability to cope with the LDR (Spera & Jones, 2004). In general, these factors appear to uniquely promote commitment to one’s relationship during a deployed-based relationship/LDR.

Non-Deployed Relationships /GCRs

Non-deployed relationships/GCRs may include individuals who have returned from a deployment or never were deployed. Those in GCRs typically have the opportunity to see their partner often, provide basic physical needs for one another (e.g., hugs and kisses), and soothe emotional distress from a close proximity. Recent military romantic relationship research suggests that these experiences do occur in non-deployed relationships; however military couples in GCRs encounter unique obstacles, specifically after the service member has returned from his or her deployment (National Military Family Association, 2005).

Military couples go through the post-deployment phase, which is the period when the service member returns from being deployed and transitions from a LDR back into a GCR. This phase is reported as being a challenge, because partners and families must work together to be successful in their intimate and family relationships (Lincoln, Swift, & Shorteno-Fraser, 2008). During this period, the family roles and routines must be
redefined among the spouse, service member, and children as a means to reintroduce and involve the recently deployed service member into the new family dynamics (Pincus et al., 2005). Throughout this phase, spouses may experience a loss of independence and have difficulty adjusting and transitioning back into a co-parenting style (Faber, Willerton, Clymer, MacDermid, & Weiss, 2008; Pincus et al., 2005).

In the course of this phase, service members entering back into a GCR may experience a sense of isolation and loss of control during their reintegration back into the family. Moreover, one-third of service members returning from OIF and OED suffer from psychological issues interfering with their ability to adjust to family life and impacting their romantic relationship (Johnson et al., 2007; Milliken, Auchterlonie, & Hoge, 2007). These mental health problems include depression, PTSD, and substance abuse following a tour of duty (Goff et al., 2007; Milliken et al., 2007; National Institute of Mental Health, 2008; Renshaw et al., 2008). It appears as if enduring any psychological problem is associated with experiencing more distress and dissatisfaction in one's relationship and may negatively influence one's commitment to the relationship (Davila, 2001; Rehman, Gollan, & Mortimer, 2008; Whisman, 2001).

There are variables that help improve and sustain military partners' relationships during this reintegration period. As mentioned with those in LDRs, social support can maintain and benefit both spouses and service members in GCRs (Rosen & Maghadam, 1990). For instance, military wives report less stress reintegrating their partner back into the family when they receive social support from other military wives. Similarly, preparing for the return of the service member helps the military couple withstand and
cope with the hardships typically encountered during this experience (Spera & Jones, 2004).

Summary

In general, those in military LDRs may encounter challenges unlike those in GCRs, such as the threat of a spouse falling victim to the misfortunes of war. Additionally, couples in LDRs must maintain their relationship through the utilization of modern technology as they are unable to address their partner’s physical needs. Unlike those in LDRs, couples in GCRs are physically present and able to work on their relationship from a closer proximity. However, reintegrating challenges arise among those in GCRs when military personnel begin to transition back into their lives upon returning from a deployment. Regardless of type of relationship, certain factors may increase or decrease couples’ relationship commitment. The investment model utilizes three factors, satisfaction, alternatives, and investments, to predict relational commitment.

The Investment Model

The investment model (IM) is used to predict persistence, commitment, and stability in relationships (Pistole, Roberts, & Mosko, 2010; Rusbult et al., 1998). It was developed to “account for some relationships enduring or persisting despite difficulties or dissatisfaction” (Pistole et al., 2010, p. 147). This model argues that persistence is psychologically experienced as commitment, which is the primary quality that accounts for relational stability. Stability in a relationship is uniquely influenced by three factors in the model: (1) satisfaction, such as happiness in a relationship, (2) alternatives, as in other attractive partners and, (3) investments, such as items and relationships that would
be lost if the relationship ended. These variables predict commitment and are interrelated, with higher satisfaction and investments and fewer alternatives leading to greater commitment to one’s relationship.

The IM was originally grounded in the interdependence theory, which suggests that a relationship continues as a result of developing dependence to a partner (Kelley, 1979; Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). Dependence is regarded as one’s need for fulfillment and is based on one’s level of satisfaction and alternatives (Le & Agnew, 2001). It differs from commitment because it is thought to be explained by one’s structural state of the relationship versus one’s personal and psychological experience of the relationship (Agnew, Van Lange, Rusbult & Langston, 1998; Rusbult et al., 1998).

Similar to the interdependence theory, the IM predicts that commitment is strengthened by one’s experience of satisfaction derived from the relationship and weakened by alternatives to the relationship. Yet, the IM expanded on the interdependence theory by introducing the concept of investments to help explain one’s commitment to the relationship even when satisfaction may be low and alternatives may be high. Therefore, the outcome of one’s relationship is hypothesized to be based on one’s level of satisfaction, alternatives, and investments.

Satisfaction

The commitment of separated couples can be threatened in several ways. A general assumption regarding romantic relationships is that when couples are satisfied, they tend to become more committed to their relationship (Rusbult et al., 1998;
Satisfaction refers to negative versus positive experiences that occur in one's relationship (Rusbult et al., 1998). It can be influenced by how partners fulfill their needs and what they expect in relationships may differ depending on relationship type. For instance, individuals involved in GCRs are more readily available to spend time together, satisfy physical needs, and provide emotional support (Pistole et al., 2010). Because the rate of availability and the level of satisfaction they acquire from one another (e.g., physical satisfaction) are higher, the experienced satisfaction may influence one's level of commitment to the relationship. Although it would appear that those in GCRs experience more satisfaction in their relationship than those in LDRs, research indicates that satisfaction levels do not appear to differ for couples in LDRs versus GCRs (Le & Agnew, 2003; Pistole et al., 2010; Rusbult et al., 1998; Schwebel et al., 1992; Timmerman, 2001). In an online study (Pistole et al., 2010), higher commitment was predicted when satisfaction levels were high in both LDRs and GCRs.

Moreover, a meta-analysis reviewing 52 studies utilizing the IM to predict commitment in various types of relationships determined that high satisfaction predicts greater commitment among all relationship types (Le & Agnew, 2003). Furthermore, satisfaction appears to be the most robust predictor of commitment across all relationship types (Le & Agnew, 2003). These relationship types include interpersonal relationships...
(e.g., abusive relationships, heterosexual relationships, homosexual relationships, non-white relationships, married relationships) and non-interpersonal relationships (e.g., job commitment, school commitment, sports commitment, club commitment).

Overall, these findings support the idea that satisfaction levels will not differ based on relationship type and are consistent with other relationship research in regards to higher satisfaction predicting greater commitment to the relationship (Le & Agnew, 2003; Pistole et al., 2010; Rubult et al., 1998; Schwebel et al., 1992; Timmerman, 2001).

Although no difference seems to exist concerning one's level of satisfaction between either relationship types, there are differences regarding levels of alternatives for those in LDRs and GCRs.

**Alternatives**

The quality of alternatives is also found to affect one's level of commitment to the relationship. The common notion in terms of romantic relationships is when one is not attracted to potential alternatives, one appears to be more committed to the relationship (Rusbult et al., 1998). In contrast, one tends to be less committed to the relationship when one is interested in alternatives outside of the relationship.

Alternatives include the perceived desirability of the next obtainable partner (Rusbult et al., 1998). Potential alternatives are not limited to romantic partners, however. They can consist of friends, family members, or other individuals outside of one's relationship. Additionally, alternatives can also be non-social or not involving another individual (Pistole et al., 2010). For instance, non-social alternatives may consist of hobbies, playing sports, going to events, and traveling the world. Essentially, these
non-social alternatives also have the capability to meet one's needs outside of the relationship.

The attractiveness of alternatives can lead one away from the current partner and the relationship (Le & Agnew, 2003; Pistole et al., 2010; Rusbult et al., 1998). This may be influenced by the perspective of a superior relationship with someone else and/or not being satisfied with the current relationship. However, the absence of alternatives appears to influence individuals to persist in their relationships, especially if they are satisfied with that partner and the relationship.

In a meta-analysis evaluating the ability of the IM variables to predict commitment, results supported that lower levels of alternatives predict greater interpersonal commitment (Le & Agnew, 2003). Alternatives predicted commitment better when applied to romantic relationships versus work, school, and sports relationships. The type of relationship one is involved in also contributes to one's overall commitment to the partner and the relationship.

According to Pistole et al. (2010), alternatives impact those in GCRs uniquely. Participants in GCRs reported low levels of alternatives relative to those in LDRs, meaning the respondents were not attracted to the idea of being with a different partner, seeking out friends, or engaging in non-social alternatives as an alternative to their partner. It appears that those in LDRs experience more relational uncertainty, which may influence seeking alternatives (Emmers & Canary, 1996). Inattentiveness to one's relationship can also increase the temptation of alternatives and decrease one's commitment to one's relationship (DeWall, Maner, Deckman, & Rouby, 2011; Rusbult et
al., 1998). Overall, these findings suggest alternatives (e.g., appeal of another lover) occur less frequently among couples in GCRs.

However, there is also research suggesting that those in LDRs may seek out alternatives less frequently (Pistole et al., 2010). These couples may decide to rule out any alternatives before they began their LDR. Support is also provided by other relationship researchers who found married and college partners in LDRs divide their lives into two categories: relationship time and work time (Jackson, Brown, & Patterson-Stewart, 2000; Sahlstein, 2004). It appears that couples who report being committed to their relationship are more focused on work; therefore, seeking out alternatives or committing infidelity may be less likely to occur (Gerstel & Gross, 1984; Guldner, 1996; Jackson et al., 2000; Sahlstein, 2004; Stafford, 2005). Those who were committed to their relationship were motivated to work, worked more consistently, and attended work in order to earn money to visit their partner (Guldner, 1996). When one has a work-oriented mindset, infidelity and the attractiveness of being with a different partner may be minimized.

Investments

One’s investments also influence how committed one is to the partner and relationship (Rusbult et al., 1998). The usual conjecture is when couples invest more in the relationship, they tend to be more committed to the relationship. Conversely, when they invest less, they may not be as committed to their partner, which may end in a failed relationship.
As previously mentioned, the concept of investments was added to the IM to further explain relationship commitment (Le & Agnew, 2003). This occurred because satisfaction and alternatives did not appear to fully explain dependence. The interdependence theory did not appear to explain how one can persist in the relationship when tempted by alternatives and experiencing fluctuating levels of satisfaction (Le & Agnew, 2003; Rusbult, 1980; Rusbult, 1983; Rusbult, Drigotas, & Verette, 1994; Rusbult et al., 1998). For example, some relationships endure even when the relationship is not satisfactory and when alternatives are available. This phenomenon appeared difficult to explain; therefore investments were included to help determine what influences one to continue being committed to the relationship.

Investments refer to the importance and magnitude of resources that are attached to one's relationship (Becker, 1960; Rubin & Brockner, 1975; Staw, 1976; Teger, 1980; Tropper, 1972). These resources give value to the relationship as a relationship develops. For instance, if the resources invested in the relationship decline, the value of the relationship would also decline and be more susceptible of ending or failing. Consistently, if the resources increase, so does the value of the relationship and the commitment to the relationship.

Partners invest several indirect and direct resources in order to improve the quality of their relationship (Rusbult et al., 1998). Indirect investments are described as extraneous variables that strengthen the relationship and include sharing mutual friends, material possessions, and social status. Direct investments tend to be more concrete and reflect greater effort into the relationship; these include disclosing private thoughts and
feelings and investing more time into their partner. These investments serve as a powerful psychological tool in influencing an individual to persist or continue the relationship during both distressing and joyous times (Rusbult et al., 1998).

A meta-analysis investigating IM variables supported the ability of investments to predict commitment better for those in interpersonal relationships than in non-interpersonal relationships (Le & Agnew, 2003). This finding is consistent to alternatives predicting commitment better for those in these types of relationships. Investments are thought to differ depending on relationship type. For example, resources for couples in LDRs that influence and connect partners to their relationship include saving money for communication and traveling, maintaining two living spaces, and having children together (Arditti & Kauffman, 2003; Knox, Zusman, Daniels, & Brantley, 2002; Magnuson & Norem, 1999; Sahlstein, 2004). Without these resources, the relationship may end in a breakup. These may be different than those in GCRs where investments include sharing possessions, payments, and transportation (Rusbult et al., 1998). Due to the differences in investments for each romantic relationship, those in LDRs tend to invest more in their relationship than those in GCRs (Pistole et al., 2010; Rusbult et al., 1998).

**IM Variables**

Investments, alternatives, and satisfaction contribute independently and simultaneously to predict commitment for those in romantic relationships. These IM variables successfully predict commitment for many types of relationships, including abusive (Rusbult & Martz, 1995), heterosexual (Rusbult, 1983), homosexual (Duffy &
Rusbult, 1986), parental (Kenrick, Sadalla, Groth, & Trost, 1990), and job relationships (Rusbult & Farrell, 1983). Furthermore, the IM variables have been used to detect and predict relational infidelity (Drigotas, Safstrom, & Gentilia, 1999), risky sexual behavior (Davidovich, De Wit, & Strobbe, 2006), and response to conflict (i.e., voice, loyalty, exit, and neglect) in one's relationship (Rusbult, Zembrodt, & Gunn, 1982).

Satisfaction consistently is found to be the most robust predictor of commitment in comparison to alternatives and investments (Agnew et al., 1998; Carpenter & Coleman, 1998; Carpenter & Scanlan, 1998; Choice & Lamke, 1999; Davidovich et al., 2006; Drigotas et al., 1999; Duffy & Rusbult, 1986; Farrell & Rusbult, 1981; Kenrick et al., 1990; Koslowsky & Kluger, 1986; Kurdek, 1991; Le & Agnew, 2003; Lyons & Lowery, 1989; Oliver, 1990; Ping, 1997; Pisiole et al., 2010; Putnam, Finney, Barkley, & Bonner, 1994; Raedeke, 1997; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult et al., 1982; Rusbult & Martz, 1995; Rusbult et al., 1998; Schmidt & Stein, 1991). For example, a meta-analysis investigating the ability of the IM variables to predict commitment showed that satisfaction was the strongest predictor of commitment and relational outcome (Le & Agnew, 2003). Moreover, satisfaction ($r = .68$, std $\beta = .510$) was reported to be more predictive of commitment than the quality of alternatives ($r_s = -.48$, std $\beta_s = -.217$) and investments ($r_s = .46$, std $\beta_s = .240$).

There is evidence that moderators exist impacting the ability of the IM variables to predict commitment (Davis & Strube, 1993; Feingold, 1992; Kenrick et al., 1990; Le & Agnew, 2003; Lin & Rusbult, 1995; Sanderson & Kurdek, 1993; Strube & Davis, 1998; Tanaka, Panter, & Winborne, 1988). For instance, the IM variables predict
commitment better for Caucasian, heterosexual couples (Le & Agnew, 2003; Sanderson & Kurdek, 1993; Strube & Davis, 1998) and women (Feingold, 1992; Pautsch, 1999; Sanderson & Kurdek, 1993; Tanaka et al., 1988) than for non-white, homosexual couples and men. Additionally, investments appear to be a stronger predictor of commitment for those in shorter duration relationships than those in longer duration relationships (Le & Agnew, 2003).

In addition to the IM, utilization of a supplementary instrument measuring negative emotion typically experienced in relationships may help in predicting one’s level of commitment to their relationship (Bledsoe, Meyers, & Harton, 2010). This assumption stems from the multiple stressors experienced by service members and spouses involved in the military. Military stressors vary depending on whether one is deployed or non-deployed (Drummet et al., 2003; MacDermind et al., 2002; National Military Family Association, 2004; Pincus et al., 2005); however they are somewhat unique to these individuals due to their chosen military lifestyle. Based on this information, it is suggested that stress brought on by the military lifestyle may impact one’s level of commitment to the relationship.

**Perceived Stress**

Stress is viewed as psychological, behavioral, or physiological reactions to anxiety-provoking situations (Seyle, 1975). The perceived stress scale (PSS) is a psychological instrument used to measure one’s perception of stress. Stressors caused by one’s psychosocial and environmental factors are supposed to have an influential role in developing both physical and psychological illnesses (Cohen et al., 1983). Previous work
examining specific stressful events, such as bereavement (Stroebe, Stroebe, Gergen, & Gergen, 1982) and unemployment (Cobb & Kasl, 1977; Dooley & Catalano, 1980; Gore, 1978) support this idea of stress as a potential risk factor for one’s health.

Before the development of the PSS, it was originally theorized that the impact of stressful events determined how one perceived their stressfulness; which was also thought to affect pathology (Lazarus, 1966, 1977). Without an instrument, no information regarding perceived stress could be measured to explain the relationship between perceived stress and pathology. Research concerning the influences of objective (i.e., bereavement, unemployment, high levels of population density) and subjective stressors (i.e., family, occupational, health stress) found these stressors help explain one’s global level of perceived stress and its relationship to pathology (Cohen et al., 1983). For instance, higher levels of perceived stress are related to failures to quit smoking, failures in diabetics’ ability to control blood sugar levels, regularly experiencing colds, being vulnerable to stressful life-events, and depressive symptoms (Cohen et al., 1983; Cohen & Williamson, 1988; Leung, Lamz, & Chan, 2010).

The PSS focuses on global levels of stress influenced by daily hassles, major events, and changes in coping resources, including family, partner, and social support (Cohen et al., 1983). The PSS has not been commonly utilized with romantic relationships, although it is assumed that one’s level of stress affects factors that maintain relationships. For instance, Arditti and Kauffman, (2003) determined that the autonomy one experiences in a LDR may compensate for or eliminate stressors within the relationship. In contrast, one can experience feelings of loneliness, anxiety, and doubt in
what one is capable of doing without one’s partner, resulting in elevated levels of stress (Arditti & Kauffman, 2003).

Additional factors, such as levels of avoidance, anxiety, and emotional support also contribute to one’s overall level of perceived stress. For example, lower levels of stress were found among individuals who were highly avoidant because they consistently avoided or disregarded certain situations they believed would be stressful (Mikulincer & Shaver, 2007). Furthermore, they suppressed or ignored stress cues (i.e., less physical contact, absence of partner, financial problems), which resulted in lower levels of reported stress. In addition to high avoidance, emotional support helps facilitate and reduce stress, even if the support is from “one reliable source” (Cohen, 2004, p. 677).

On the other hand, stress levels are higher among individuals who are highly anxious (Mikulincer & Shaver, 2007). These individuals tend to intensify, exaggerate, or deepen negative emotions. Moreover, these individuals are often not comforted by their partners when looking to them for support. For instance, levels of stress are high among individuals who are anxious and avoidant and have a weak emotional support system (Cohen, 2004; Mikulincer & Shaver, 2007). These high levels of stress influence how one behaves, resolves tough situations, interacts with one’s partner, and feel about one’s relationship.

All couples have to deal with stress; however, stressors differ depending on whether the individual is experiencing a LDR or GCR. Commonly experienced stressors in LDRs include relational disturbances (i.e., work or school stress), extra expenses, and
lengthy separations (Mietzner & Lin, 2005). However, GCR stressors include daily hassles and relational stress (Mietzner & Lin, 2005).

Although there are unique stressors by relationship type (Mietzner & Lin, 2005), there are added stressors for those involved in the military. Previous military research reports that typical stressors for those in LDRs include conflict between the military and family, mobile lifestyles, anticipating dangers (i.e., combat), sustaining mental or physical injuries, and death (Basham, 2008; Bray, Fairbank, & Marsden, 1999). Even though military couples in GCRs experience stress, stressors among those in LDRs are suggested to be stronger and more apparent than stressors for those in GCRs due to one’s partner potentially being deployed.

In general, although little research has utilized the PSS to examine military romantic relationships, it is expected that experienced stress can affect one’s level of commitment to the relationship. As previously indicated, several factors contribute to one’s level of stress depending on one’s relationship type. Based on the different experiences for those in LDRs and GCRs, it is assumed the stressors brought on by the military lifestyle will also impact one’s level of commitment to one’s relationship. Furthermore, a similar study utilizing the IM in conjunction with a different measure of negative emotions predicted relational commitment among college couples (Bledsoe et al., 2010).

In Bledsoe et al. (2010), the instrument utilized was the negative affectivity scale, and it was used to measure one’s level of depression, pessimism, and self-esteem as a means to predict commitment. College students in GCRs reported more commitment
when satisfaction and investments were high and alternatives and negative affectivity were low. Furthermore, students in LDRs reported more commitment only when satisfaction and investments were high. Overall, satisfaction and investments predicted commitment for both types of relationships, but negative affectivity only predicted commitment for those in GCRs, suggesting that negative emotions may affect people's commitment differently, depending on relationship type.

**Overview of Study**

The IM has consistently been utilized and supported in predicting commitment for various types of relationships (Bledsoe et al., 2010; Davidovich et al., 2006; Drigotas et al., 1999; Drummet et al., 2003; Duffy & Rusbult, 1986; Kenrick et al., 1990; Le & Agnew, 2003; MacDermind et al., 2002; National Military Family Association, 2004; Pincus et al., 2005; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult & Martz, 1995; Rusbult et al., 1982), therefore it is expected to continue doing so in the current study. Because stress is frequently encountered and appears to be a core aspect of the military lifestyle, it is supposed the PSS will have the ability to predict commitment above the IM. This is supposed because the PSS reveals one's current level of stress influenced by objective and subjective stressors while being associated to pathology (Cohen et al., 1983). Also, it appears more applicable to military couples as stress is commonly experienced in comparison to factors evaluated by the negative affectivity scale, which predicted commitment for GCR couples in a previous study (Bledsoe et al., 2010). Furthermore, the PSS was chosen as a result of being a shorter scale in order to reduce the rate of missing values influenced by fatigue and boredom.
Due to the differences in relational experiences, the responses concerning these predictors are expected to be reported differently based on relationship type, but similar in terms of what predicts greater commitment. Satisfaction is expected to be reported at similar levels for both those in LDRs and GCRs (Le et al., 2003; Pistole et al., 2010; Rubult et al., 1998; Schwebel et al., 1992; Timmerman, 2001). Additionally, alternatives, investments and stress are expected to be reported at lower levels for those in GCRs and higher levels for those in LDRs. Research on alternatives has shown mixed results in GCRs versus LDRs. For both couples in LDRs and GCRs, those with higher levels of satisfaction and investments, and low levels of alternatives and stress should report greater commitment to the relationship.

Hypotheses

It is hypothesized that:

H1. Those in LDRs will report higher levels of investments than those in GCRs.

H2. Those in GCRs will report lower levels of stress than those in LDRs.

H3. The IM will predict commitment for those in GCRs and LDRs.

H4. The PSS will predict commitment over and above the IM.

Additionally, as a result of mixed findings regarding alternatives for those in LDRs (Emmers & Canary, 1996; Jackson et al., 2000; Pistole et al., 2010; Sahlstein, 2004), a research question was posed as:

R1. Will those in LDRs or GCRs report higher alternative levels?
CHAPTER 2

METHOD

Participants

To participate in the full-version of the study, participants needed to be currently involved in a romantic relationship and affiliated with the military. Those who fit these criteria responded to the survey in its entirety, which included responding to the IM and PSS. Participants were recruited online via email, Facebook, and military support sites (e.g., militarywives.com, cafemom.com, milwives.com, militarysos.com). Furthermore, respondents were asked to forward the email received to other individuals they believed to be affiliated with the military who might be interested in participating. Respondents who were emailed were asked to click on a link that took them to the beginning of the survey, whereas other respondents viewed a post providing a public link on Facebook and the military support sites.

Initially, 301 respondents completed the survey. Approximately, 54 respondents' data were excluded because they did not meet the criteria of either being in a romantic relationship and/or affiliated with the military. The final sample consisted of 247 military spouses and service members who were currently deployed \((n = 21)\) or non-deployed \((n = 226)\). Of the sample, 53.0% of participants and their partners were active duty while the remaining 47.0% were veterans, retirees, or reserves.

One-hundred and two respondents were military spouses whose ages ranged from 21 to 67 \((M = 40.03, SD = 12.74)\), 88 were service members whose ages ranged from 18 to 58 \((M = 30.60, SD = 10.52)\), 44 reported both they and their partner were service
members whose ages ranged from 21 to 63 ($M = 37.79$, $SD = 11.47$), and 13 did not specify their military affiliation although they reported being associated to the military. One-hundred and forty-nine of the respondents were female. In regards to ethnicity, 81.2% were Caucasian/White, 7.4% were African-American/Black, 7.8% were American Indian/Alaskan Native, Native Hawaiian/Other Pacific Islander or other, and 3.3% preferred not to respond.

Concerning education level, two respondents had less than a high school degree (0.8%), 20 were high school graduates (8.1%), 83 completed one or more years of college (33.6%), 37 had Associate degree (15.0%), 68 had Bachelor’s degree (27.5%), 32 had Master’s degree (13.0%), three had Professional and Doctorate degrees (1.2%), and two did not respond (0.8%). Exactly 123 of the respondents had children (49.8%); 52 had two children (20.6), 43 had one child (17.4), 14 had three children (5.7), and 15 had four or more children (6.0%). When regarding employment, 116 respondents were full-time employees (47.0%), 46 were part-time employees (18.6), and 85 preferred not to answer (34.7%). Additionally, 19.8% of participants and their partners reported suffering from PTSD, substance abuse, and/or depression.

Two-hundred and four respondents were involved in a GCR and 43 were involved in a LDR. The mean age for those in GCR’s was 37.19 years ($SD = 12.20$). They had been in a relationship for an average of 3.60 years ($SD = 1.48$). Similarly, the mean age for those in LDRs was 28.03 years ($SD = 10.76$). Individuals in these relationships have been in the relationship for an average of 2.47 years ($SD = 1.18$) (Table 1).
Table 1. 
Demographic Variables for those in Geographically Close Relationships and Long-Distance Relationships

<table>
<thead>
<tr>
<th>Relationship Type</th>
<th>GCR</th>
<th>LDR</th>
<th>t</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>37.19</td>
<td>28.03</td>
<td>-4.25**</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td>(12.20)</td>
<td>(10.76)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>4.08</td>
<td>3.93</td>
<td>-.22</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>(1.27)</td>
<td>(1.42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Children</td>
<td>1.25</td>
<td>.37</td>
<td>-5.29**</td>
<td>.75</td>
</tr>
<tr>
<td>Living at Home</td>
<td>(1.41)</td>
<td>(.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Length in Months</td>
<td>71.56</td>
<td>46.14</td>
<td>-4.29**</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td>(46.20)</td>
<td>(32.53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from Partner in Miles</td>
<td>82.70</td>
<td>1343.95</td>
<td>4.00**</td>
<td>-.93</td>
</tr>
<tr>
<td></td>
<td>(335.36)</td>
<td>(1890.18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military Service Length in Years</td>
<td>14.77</td>
<td>7.54</td>
<td>-4.00**</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>(10.35)</td>
<td>(9.28)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Length of Deployment in Months (Participant)</td>
<td>2.76</td>
<td>.66</td>
<td>-.97</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>(14.11)</td>
<td>(1.40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Length of Deployment in Months(Partner)</td>
<td>1.59</td>
<td>1.01</td>
<td>-1.90</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>(2.67)</td>
<td>(1.61)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * = p < .05, ** = p < .001. Standard deviations appear in parentheses below means.

Findings presented significant differences among the demographic variables based on relationship type. There were significant differences in age as participants in GCRs were older than those in LDRs. Additionally, those in GCRs reported having more children living at home as well as longer relationship and military service length as compared to those in LDRs. Furthermore, those in LDRs lived further away from their partner than those in GCRs, confirming the validity of people’s self-categorizations.
Procedure

Upon beginning the survey, respondents gave their consent to participate, then began answering questions associated with their demographics. Subsequently, they responded to the items on the IM concerning their relationship. First, they responded to items regarding their commitment, then their satisfaction, their alternatives, and their investments (Appendix C). Administration of the items occurred in this order because the developers of the IM and most authors administered their surveys in this way (Agnew et al., 1998; Carpenter & Coleman, 1998; Carpenter & Scanlan, 1998; Choice & Lamke, 1999; Davidovich et al., 2006; Drigotas et al., 1999; Duffy & Rusbult, 1986; Farrell & Rusbult, 1981; Feingold, 1992; Kenrick et al., 1990; Koslowsky & Kluger, 1986; Le & Agnew, 2003; Love, 2003; Lyons & Lowery, 1989; Oliver, 1990; Ping, 1997; Pistole et al., 2010; Putnam et al., 1994; Raedeke, 1997; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult et al., 1982; Rusbult & Martz, 1995; Rusbult et al., 1998; Schmidt & Stein, 1991; Truman-Schram, Cann, Calhoun, & Vanwallendael, 2000).

Next, participants completed items on the PSS. Upon completing the measures, a comment box was provided giving the respondents the opportunity to ask questions, share experiences, and express concerns regarding the survey. Lastly, participants were debriefed and provided with several links concerning (1) relationship advice, (2) ways to prepare for a deployment-based relationship/LDR, (3) how to constructively deal with stress, and (4) where to go to seek additional help if needed.
Measures

Demographics

Participants provided their age, sex, marital status, education, race, children, number of children, relationship status, type, and length, employment status and type, military involvement, branch of service, deployment status and length, and presence of mental health disorders. Participants selected LDR or GCR to describe their relationship type by reporting whether they lived in the same town or house as their partner (GCR) or lived in a long-distance relationship (LDR). Military involvement included whether the participant was a service member, whether their partner was a service member, or whether both the participant and their partner served in the military. In addition, deployment-related variables included whether the participant, their partner, or both were deployed or non-deployed, the number of deployment(s) experienced, and the length of the deployment(s).

Investment Model: Facet and Global Items

The IM consists of facet and global items used to measure satisfaction, alternatives, and investments. Facet items are concrete exemplars of constructs that prepare respondents to answer global items (Rusbult et al., 1998). These items activate respondents' thoughts about the constructs being measured and enhance the comprehensibility of the global items. Essentially, the facet items are answered first as a priming method to answer the global items.

Global items are general, broad measures of the constructs that appears to be difficult to answer (Rusbult, 1980; Rusbult, 1983; Rusbult, Verette, Whitney, Slovik, &
Lipkus, 1991; Rusbult et al., 1998). For instance, one investment global item reads as, “I have invested a great deal in my relationship.” This item can be interpreted several ways, such as investing time into a romantic, job, and/or social relationship. The difficulty of responding to these items resulted in having participants respond to the facet items before the global items, consistent with previous research (Rusbult, 1980; Rusbult, 1983; Rusbult et al., 1991; Rusbult et al., 1998).

Investment Model: Commitment Items

Commitment ($\alpha = .84$) was the key dependent variable measured using a scale that was included in the IM. Previous alpha levels of commitment ranged from .91 to .95 (Rusbult et al., 1998). The commitment construct appeared in the survey as seven global items which were scored using a 9-point Likert-type scale rated from 0 (do not agree at all) to 8 (agree completely). A statement reflecting commitment read as: “I want our relationship to last forever.” (Rusbult et al., 1998). Higher scores indicated greater commitment to one’s relationship.

Investment Model: Satisfaction, Alternatives, and Investment Items

Satisfaction ($\alpha = .91$) was measured using five facet items scored using a 4-point Likert-type scale rated from 0 (do not agree at all) to 3 (agree completely). Previous alpha levels of satisfaction facet items ranged from .79 to .93 (Rusbult et al., 1998). Participants indicated how much they agreed with facet statements such as, “My partner fulfills my needs for companionship.” In addition, satisfaction ($\alpha = .96$) was measured using five global items scored using a 9-point Likert-type scale rated from 0 (do not agree at all) to 8 (agree completely). Previous alpha levels of satisfaction global items
ranged from .92 to .95 (Rusbult et al., 1998). Participants indicated how much they
agreed with global statements such as, “I feel satisfied with our relationship.” Higher
scores indicated greater satisfaction in one’s relationship.

Similarly, alternatives (α = .95) were measured with five facet items rated on a
scale using a 4-point Likert-type scale rated from 0 (do not agree at all) to 3 (agree
completely). Previous alpha levels of alternative facet items ranged from .88 to .93
(Rusbult et al., 1998). Participants rated how much they agreed with statements such as
the following, “My need for intimacy could be fulfilled in alternative relationships.” In
addition, alternatives (α = .89) were measured using five global items scored using a 9-
point Likert-type scale rated from 0 (do not agree at all) to 8 (agree completely).
Previous alpha levels of alternative global items ranged from .82 to .84 (Rusbult et al.,
1998). Participants rated how much they agreed with statements such as, “The people
other than my partner with whom I might become involved are very appealing.” Lower
scores indicated fewer alternatives in one’s relationship.

Additionally, investments (α = .75) were measured with a five facet items rated on
a scale using a 4-point Likert-type scale rated from 0 (do not agree at all) to 3 (agree
completely). Previous alpha levels of investment facet items ranged from .73 to .84
(Rusbult et al., 1998). Participants reported how much they agreed with statements, for
example, “I have invested a great deal of time in our relationship.” In addition,
investments (α = .79) were measured using five global items scored using a 9-point
Likert-type scale rated on a scale from 0 (do not agree at all) to 8 (agree completely).
Previous alpha levels of investment global items ranged from .82 to .84 (Rusbult et al.,
1998). Participants rated how much they agreed with statements such as, “I have put a great deal into our relationship that I would lose if the relationship were to end.” Higher scores indicated greater investments in one’s relationship.

**Perceived Stress Scale**

Participants completed 10-items on the PSS (Cohen et al., 1983) which measures the degree to which one’s current life encounters are experienced as stressful. The items were created to measure how individuals observe their lives by looking at how uncontrollable, unpredictable, and overloaded they perceive their current stress to be. Stress ($\alpha = .85$) was measured using a 5-point Likert-type scale rated from 0 (*Never*) to 5 (*Very Often*). Previous alpha levels of stress ranged from .84 to .86 (Cohen et al., 1983). A statement reflecting stress includes, “In the last month, how often have you been upset because of something that happened unexpectedly?” Higher scores indicated greater levels of perceived stress.
CHAPTER 3

EXPECTED RESULTS

Plan of Analysis

First, correlational analyses were conducted to determine how related the IM variables were among one another, and to the PSS variable, demographic variables, and commitment for each relationship type. In addition, univariate analyses were completed to evaluate relationship type (testing H1, H2, H3, and R1), military involvement, and gender differences on the IM and PSS variables. Furthermore, a test was conducted to examine the extent to which currently deployed participants were involved in LDRs and GCRs. Lastly, regression analyses were executed in order to test the levels of satisfaction, alternatives, investments, and stress (testing H4 and H5) and whether the PSS added to the IM in predicting commitment. Unfortunately, the sample size for those in LDRs was small (n = 43) compared to those in GCRs (n = 204). For this reason, I did an overall regression equation predicting commitment rather than using a moderated regression analysis.

Furthermore, 7.0% of the participants quit responding during the study and about 9.0% had missing values. Because those missing values seemed to be random, all of the analyses were evaluated with the largest sample size possible; therefore, the samples sizes for some analyses differed slightly. Additionally, the global and facet items were interrelated (global and facet satisfaction $r = .78$; alternatives $r = .39$; investments $r = .65$), therefore the standardized global variables were averaged with their corresponding standardized facet variables.
Correlations

The relationship between the averaged IM predictor variables, the PSS variable, demographic variables, and commitment were investigated using a Pearson product-moment correlation coefficients separately by relationship type.

GCRs

For those in GCRs, participants who reported higher levels of commitment also reported higher levels of satisfaction and investments, and lower levels of alternatives (Table 2). Also, those who reported higher levels of satisfaction reported higher levels of investments and lower levels of alternatives. Additionally, those who reported higher levels of investments reported lower levels of alternatives (Table 4). Participants in GCRs who reported being in a relationship for a longer length of time were older, had fewer children living at home with them, and had higher levels of commitment, investments, and education, and lower levels of alternatives (Table 5).

LDRs

Participants in LDRs who were more highly committed reported high levels of investments (Table 3). Also, those that reported higher levels of investments also reported higher levels of satisfaction, and lower levels of alternatives, and tended to have fewer children (Tables 3 and 4). Additionally, participants who were older tended to have higher levels of education, be in a relationship for a longer length of time, and had fewer children living at home (Table 5).
Univariate Comparisons

Independent-samples *t*-tests were conducted to investigate the effects of relationship type on the IM and PSS variables. Those in GCRs reported more investments than those in LDRs. There were no significant relationship type differences in commitment, satisfaction, alternatives, or stress (Table 6).

A Chi-square test for independence was conducted to examine the extent to which LDRs involved deployments. Fourteen percent of those in LDRs were currently themselves, their partner, or both deployed, whereas 7.4% of those in GCRs had one or both partners currently deployed. Therefore, it cannot be assumed that individuals who are currently deployed are always involved in LDRs (Table 7).

A one-way between-groups analysis of variance was conducted to explore the impact of military involvement on the IM and PSS variables. Participants were separated into three groups according to their military involvement (participant involved in military; partner involved in military; participant and partner involved in military). There was a statistically significant difference at the *p* < .001 level in alternative scores for the three types of military involvement: *F* (2, 208) = 7.30, *p* < .001, η² = .05. Post-hoc comparisons using Tukey HSD test reported alternatives for participants in the military were higher than those for participants whose partners were in the military. However, these two groups did not differ significantly from the alternatives reported by participants and their partners were both involved in the military (Table 8).

Additional *t*-tests were conducted to compare gender differences on the IM and PSS variables. Women reported fewer alternatives than men. Furthermore, men reported
less stress than women. However, there were no significant gender differences in commitment, satisfaction, or investment levels (Table 9).

**Regression Analyses**

A hierarchical multiple regression was utilized to evaluate the ability of IM and PSS to predict commitment for both relationship types. First, control variables were regressed on commitment, the variance explained was not significant, $\Delta F(12, 183) = 1.02, p = .44$. The control variables include relationship length, age, whether they had children, number of children, education, employment status, military service length, military status, past and current deployments, past LDR, and mental health. Relationship length was the only significant individual predictor; therefore, this variable was retained in the hierarchical regression.

To assess the ability of the IM and PSS to predict commitment, relationship length was entered at Step 1, and the variance explained was significant, $\Delta F(1, 190) = 10.23, p = .02$. After entry of the IM variables (satisfaction, alternatives, and investments) at Step 2, the total variance explained by the model as a whole was significant and, $\Delta F(3, 187) = 18.28, p < .001$. Only satisfaction and relationship length were statistically significant in predicting commitment, although investments and alternatives predicted commitment in the predicted direction and with small effect sizes. After entry of the PSS variable (stress) in Step 3, the total variance explained by the model as a whole was not significant, $\Delta F(1, 186) = .00, p = .95$ (Table 10).

Overall, the findings did not support H1 as those in GCRs reported higher levels of investments than those in LDRs. The results also did not support H2 as those in GCRs
reported similar levels of stress as those in LDRs. However, the findings answered R1 by showing the levels of alternatives do not differ among those in GCRs and LDRs. The findings also provided support for H3 as the IM predicted commitment for those in GCRs and LDRs. Yet, H4 was not supported because the PSS did not have the ability to predict commitment above the IM.
### Table 2.
Correlations for Investment Model Predictors, Perceived Stress, Demographic Variables, and Commitment for those in GCRs

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Alternatives</th>
<th>Investments</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>.44**</td>
<td>-.38**</td>
<td>.40**</td>
<td>-.07</td>
</tr>
<tr>
<td>Age</td>
<td>-.05</td>
<td>-.06</td>
<td>.04</td>
<td>-.12</td>
</tr>
<tr>
<td>Sex</td>
<td>.02</td>
<td>.25**</td>
<td>-.02</td>
<td>.16*</td>
</tr>
<tr>
<td>Education</td>
<td>.06</td>
<td>.06</td>
<td>.05</td>
<td>-.12</td>
</tr>
<tr>
<td>Children</td>
<td>.13</td>
<td>.10</td>
<td>-.06</td>
<td>-.03</td>
</tr>
<tr>
<td>Employment</td>
<td>.07</td>
<td>-.08</td>
<td>.04</td>
<td>-.08</td>
</tr>
<tr>
<td>Relationship Length</td>
<td>.01</td>
<td>.23**</td>
<td>.22**</td>
<td>-.11</td>
</tr>
</tbody>
</table>

** p < .01 (2-tailed), * p < .05 (2-tailed). n's range from 146 to 204.

### Table 3.
Correlations for Investment Model Predictors, Perceived Stress, Demographic Variables, and Commitment for those in LDRs

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Alternatives</th>
<th>Investments</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>.24</td>
<td>-.31</td>
<td>.53**</td>
<td>.15</td>
</tr>
<tr>
<td>Age</td>
<td>-.19</td>
<td>.16</td>
<td>-.32</td>
<td>-.29</td>
</tr>
<tr>
<td>Sex</td>
<td>-.06</td>
<td>-.26</td>
<td>.19</td>
<td>.30</td>
</tr>
<tr>
<td>Education</td>
<td>.02</td>
<td>.22</td>
<td>-.28</td>
<td>-.19</td>
</tr>
<tr>
<td>Children</td>
<td>.31</td>
<td>-.16</td>
<td>.32*</td>
<td>.24</td>
</tr>
<tr>
<td>Employment</td>
<td>-.01</td>
<td>-.05</td>
<td>-.08</td>
<td>-.20</td>
</tr>
<tr>
<td>Relationship Length</td>
<td>-.13</td>
<td>-.24</td>
<td>.14</td>
<td>.16</td>
</tr>
</tbody>
</table>

** p < .01 (2-tailed), * p < .05 (2-tailed). n's range from 32 to 43.
Table 4. Correlations for Investment Model Predictors and Perceived Stress for those in LDRs (top) and GCRs (bottom)

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Alternatives</th>
<th>Investments</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>-</td>
<td>-.24</td>
<td>.57**</td>
<td>-.18</td>
</tr>
<tr>
<td>Alternatives</td>
<td>-.40**</td>
<td>-</td>
<td>-.54**</td>
<td>-.18</td>
</tr>
<tr>
<td>Investments</td>
<td>.55**</td>
<td>-.42**</td>
<td>-</td>
<td>.06</td>
</tr>
<tr>
<td>Stress</td>
<td>-.08</td>
<td>-.03</td>
<td>-.10</td>
<td>-</td>
</tr>
</tbody>
</table>

**p < .01 (2-tailed), * p < .05 (2-tailed). n’s range from 35 to 37 for LDRs and 159 to 170 for GCRs.
<table>
<thead>
<tr>
<th></th>
<th>Commitment</th>
<th>Age</th>
<th>Sex</th>
<th>Education</th>
<th>Child</th>
<th>Employment</th>
<th>Relationship Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>-</td>
<td>.06</td>
<td>.13</td>
<td>-.08</td>
<td>.24</td>
<td>-.16</td>
<td>.15</td>
</tr>
<tr>
<td>Age</td>
<td>.14</td>
<td>-</td>
<td>-.47**</td>
<td>.59**</td>
<td>-.38*</td>
<td>.13</td>
<td>.45**</td>
</tr>
<tr>
<td>Sex</td>
<td>-.05</td>
<td>-.31**</td>
<td>-</td>
<td>-.28</td>
<td>.34*</td>
<td>-.41**</td>
<td>-.22</td>
</tr>
<tr>
<td>Education</td>
<td>.05</td>
<td>.27**</td>
<td>-.13</td>
<td>-</td>
<td>-.19</td>
<td>.15</td>
<td>.35*</td>
</tr>
<tr>
<td>Child</td>
<td>-.03</td>
<td>-.00</td>
<td>-.13</td>
<td>-.07</td>
<td>-</td>
<td>-.22</td>
<td>-.14</td>
</tr>
<tr>
<td>Employment</td>
<td>.02</td>
<td>-.14</td>
<td>.08</td>
<td>-.11</td>
<td>-.03</td>
<td>-</td>
<td>.09</td>
</tr>
<tr>
<td>Relationship Length</td>
<td>.23**</td>
<td>.56**</td>
<td>-.11</td>
<td>.23**</td>
<td>-.36**</td>
<td>-.05</td>
<td>-</td>
</tr>
</tbody>
</table>

**p < .01 (2-tailed), * p < .05 (2-tailed). n's range from 33 to 43 for LDRs and 159 to 204 for GCRs.
Table 6.  
**Relationship Type Differences for the Investment Model Predictors, Perceived Stress, and Commitment**

<table>
<thead>
<tr>
<th>Relationship Type</th>
<th>LDR</th>
<th>GCR</th>
<th>t</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>-.09</td>
<td>.01</td>
<td>-.59</td>
<td>-.08</td>
</tr>
<tr>
<td></td>
<td>(.97)</td>
<td>(.95)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>-.05</td>
<td>.01</td>
<td>-.42</td>
<td>-.06</td>
</tr>
<tr>
<td></td>
<td>(.72)</td>
<td>(.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>-.36</td>
<td>.08</td>
<td>-2.76</td>
<td>-.30*</td>
</tr>
<tr>
<td></td>
<td>(.94)</td>
<td>(.88)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>3.13</td>
<td>3.05</td>
<td>.92</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>(.34)</td>
<td>(.47)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.56</td>
<td>6.70</td>
<td>-.85</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>(.64)</td>
<td>(.97)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * = p < .05, ** = p < .001. n’s range from 37 to 39 for LDRs and 162 to 185 for GCRs. Standard deviations appear in parentheses below means.

---

Table 7.  
**Crosstabulation of Relationship Type and Deployment Status**

<table>
<thead>
<tr>
<th>Deployment Status</th>
<th>Non-Deployed</th>
<th>Deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDR</td>
<td>86.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>GCR</td>
<td>92.6%</td>
<td>7.4%</td>
</tr>
<tr>
<td>n</td>
<td>226</td>
<td>21</td>
</tr>
</tbody>
</table>

$\chi^2 (1, n=247) = .90, p = .27$. 
### Table 8.
**Military Involvement Comparisons for the IM Predictors, PSS variable, and Commitment**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Participant</th>
<th>Partner</th>
<th>Both</th>
<th>$F$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>.01</td>
<td>-.01</td>
<td>-.07</td>
<td>.12</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>(.77)</td>
<td>(1.05)</td>
<td>(1.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>.19&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.21&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.08&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>5.50*</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(.71)</td>
<td>(.88)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>-.01</td>
<td>.06</td>
<td>-.14</td>
<td>.67</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>(.97)</td>
<td>(.87)</td>
<td>(.86)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>3.01</td>
<td>3.15</td>
<td>3.02</td>
<td>2.46</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>(.47)</td>
<td>(.42)</td>
<td>(.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.68</td>
<td>6.71</td>
<td>6.59</td>
<td>.27</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>(.95)</td>
<td>(.85)</td>
<td>(1.03)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * = $p < .05$, *** = $p < .001$. Standard deviations appear in parentheses below means. Means with differing subscripts within rows are significantly different at the $p < .05$ based on Tukey's HSD post hoc paired comparisons.

### Table 9.
**Gender Differences for the Investment Model Predictors, Perceived Stress, and Commitment**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>$t$</th>
<th>$d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>-.01</td>
<td>-.01</td>
<td>-.01</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(1.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>.25</td>
<td>-.17</td>
<td>3.63</td>
<td>.51**</td>
</tr>
<tr>
<td></td>
<td>(.90)</td>
<td>(.73)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>.03</td>
<td>-.02</td>
<td>.39</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>(.92)</td>
<td>(.90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>2.97</td>
<td>3.14</td>
<td>-2.69</td>
<td>-.39*</td>
</tr>
<tr>
<td></td>
<td>(.45)</td>
<td>(.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.73</td>
<td>6.65</td>
<td>.60</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>(.94)</td>
<td>(.91)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * = $p < .05$, ** = $p < .001$. n's range from 81 to 89 for Males and 118 to 135 for Females. Standard deviations appear in parentheses below means.
Table 10. Hierarchical Multiple Regression Analyses Predicting Commitment For Relationship Type

<table>
<thead>
<tr>
<th>Variable</th>
<th>ΔR²</th>
<th>B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Length</td>
<td>.04*</td>
<td>.20</td>
<td>.12*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.23**</td>
<td>.24</td>
<td>.23*</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
<td>-.14</td>
<td>-.16</td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td>.22</td>
<td>.22</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>.00</td>
<td>-.02</td>
<td>-.04</td>
</tr>
</tbody>
</table>

* p < .05 (two-tailed), ** p < .001 (two-tailed).
CHAPTER 4
DISCUSSION

Previously, the investment model has not been applied to those in military relationships. This study showed that, consistent with research on other types of romantic relationships (Agnew et al., 1998; Carpenter & Coleman, 1998; Carpenter & Scanlan, 1998; Choice & Lamke, 1999; Davidovich et al., 2006; Drigotas et al., 1999; Duffy & Rusbult, 1986; Farrell & Rusbult, 1981; Kenrick et al., 1990; Koslowsky & Kluger, 1986; Kurdek, 1991; Le & Agnew, 2003; Lyons & Lowery, 1989; Oliver, 1990; Ping, 1997; Pistole et al., 2010; Putnam et al., 1994; Raedeke, 1997; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult et al., 1982; Rusbult & Martz, 1995; Rusbult et al., 1998; Schmidt & Stein, 1991) and my hypothesis, the investment model successfully predicted commitment for those in military relationships. Of the IM variables, only satisfaction significantly predicted commitment. This finding is consistent with previous research as satisfaction is typically found to be the strongest predictor of commitment. Relationship length predicted commitment as well. Unexpectedly, investments and alternatives did not significantly predict commitment, but they were in the expected direction and represented small effect sizes, suggesting that the issue may have been one of power rather than inconsistent findings.

The perceived stress scale did not significantly predict commitment. This scale measures stress and was hypothesized to predict commitment when used with the IM. This hypothesis was based on previous research showing that the negative affectivity scale added to the IM variables in predicting commitment in college students (Bledsoe et
al., 2010). In this study, I chose the PSS instead because stress is so commonly experienced among military affiliates in comparison to factors evaluated by the negative affectivity scale. Additionally, I wanted to utilize an instrument that measured one variable (stress) versus three (depression, pessimism, and self-esteem). Because the negative affectivity scale evaluated three variables, the scale itself had more items for participants to answer and took longer to complete. The idea behind this change from the negative affectivity scale to the PSS was to provide a shorter scale for participants, reducing fatigue, while focusing on the ability of one factor predicting commitment instead of three.

However, the PSS did not predict commitment. The PSS was developed to measure one’s perception of current stress, whereas the negative affectivity scale was developed to reflect individual negative emotionality and has been used to predict relational breakup (Watson & Clark, 1984). The difference between the two instruments is that the PSS measures aspects in one’s life that can change with time, whereas the negative affectivity scale measures traits that typically remain stable over time. These stable traits may be more likely to predict relational outcomes.

In terms of relationship type, investment levels were higher for those in geographically close relationships than for those in long distance relationships. This finding was inconsistent with the hypothesis as previous research shows those in LDRs experience higher levels of investments than those in GCRs (Pistole et al., 2010). A possible reason why the results show the opposite may be due to relationship length. Results indicated that those in military GCRs who had been in a relationship for a longer
time reported more investments. However, relationship length for those in military LDRs did not relate to more investments. This difference in relationship length may have influenced why investment levels were higher for those in military GCRs than those in military LDRs.

Satisfaction levels did not differ among those in LDRs and GCRs. This was consistent with previous research, as satisfaction levels are shown to be equally high among couples in LDRs and GCRs (Bledsoe et al., 2010; Pistole et al., 2010). Furthermore, alternative levels did not differ among those in military LDRs versus GCRs. Based on previous literature (Bledsoe et al., 2010; Pistole et al., 2010), it was hypothesized that those in GCRs would report lower levels of alternatives that those in LDRs. More than half of the current sample reported being married. It is possible that alternatives may not be as appealing for these participants because of legal, verbal, and emotional agreement these individuals made to be with that partner for the rest (or the majority) of their lives. Those in LDRs also tended to be in relatively newer relationships, which may have also led to their being less interested in alternatives.

Additionally, stress levels did not differ for those in LDRs versus GCRs. Stress was hypothesized to be lower for those in GCRs than those in LDRs and the means were in that direction. Yet, the effect size for stress levels was small ($d = .13$), suggesting there may have been a problem with power. One of the main reasons that more stress was predicted in LDRs is because they were assumed to be more likely to involve deployments; however, this was not true as most participants in LDRs were not currently deployed.
Previous military relationship research has shown that there are differences in stressors when one is deployed versus non-deployed (Caliber Associates, 1993; Drummet et al., 2003; MacDermind et al., 2002; Orthner, 2002; Pincus et al., 2005; Sheppard et al., 2010; Spera, 2009). Those who were in relationships in which at least one partner was deployed ($M = 3.38, SD = .45$) did report higher levels of stress than those who were non-deployed ($M = 3.04, SD = .35$); $t(197) = -2.97, p = .003, d = -.42$.

Initially, it was assumed that all individuals who reported being deployed would be involved in LDRs. However, 7.4% of those who identified their relationship as a GCR had at least one partner who was deployed. Deployment location may affect how participants experienced their deployed-based LDR or GCR. For example, deployed-based LDRs usually consist of being sent to a dangerous location outside the U.S. where service members are more prone to sustaining injuries and/or becoming a victim of warfare. Yet, deployed-based GCRs entail the service member being sent to a low-casualty location inside the U.S. These differences in the dangers associated with the deployment locations may affect relationship variables and commitment.

Participants involved in the military reported higher levels of alternatives in comparison to when the participant's partner was involved in the military. Service members may be more attracted to the idea of an alternate partner or interested in non-social alternatives than spouses of partners serving in the military. It is important to note that 94 of the service members were men, whereas the 102 of the spouses of service members were women. Gender differences were also found in terms of men reporting higher levels of alternatives than women. As previous research indicates, men tend to be
more attracted to the idea of being with an alternate partner more than women do (Berkow, 1989; Buss, 1989; Feingold, 1990, 1991; Kenrick et al., 1990; Le & Agnew, 2003; Trivers, 1972, 1985). Additionally, women reported more stress than men, consistent with previous research (Leung et al., 2010; Pistole et al., 2010).

Limitations and Future Research

There was an uneven distribution of participants in terms of relationship type and deployment status. Approximately 204 respondents reported to being involved in a GCR as a military spouse and/or service member, whereas only 43 reported to being in a LDR. However, 21 participants were involved in deployed LDRs and GCRs. As a result, relationship type was chosen for analyses over deployment status due to the even smaller sample of deployed participants. In addition, using relationship type links this study more directly to previous research that has predicted commitment based on one’s relationship type. Future research should further examine the effects of deployment, and especially dangerous vs. non-dangerous deployment, on commitment.

Another limitation refers to the small sample size of those in military LDRs, which led to reduced power to detect differences by relationship type. Additionally, the process of gathering data was executed by having participants forward the study to other military affiliates they believed would be interested in participating. The process of collecting data from a military sample is extremely difficult as the military limits access to communication with its members. The snowball sampling technique may have led to a less representative or generalizable sample, although the research is still useful as one of
the first studies to apply the IM to military relationships. Better access to military samples would strengthen future research.

An additional limitation concerns the rate of missing values. Participants frequently skipped questions and quit responding midway and toward the end of the survey. This may have occurred as a result of fatigue or boredom as the survey on average took 10 to 15 minutes to complete. Another reason may have been due to the invasive nature of the items being asked. Even though the participants were warned about the study heightening their awareness of their own relationships, the items may have been too personal or overwhelming for them to answer. Although this occurred, the majority of the participants responded to the entire questionnaire, making it possible to predict commitment overall. However, it is recommended that future research include techniques to reduce skipped items or statistically estimate their effects (Graham, 2009).

Perhaps because most (73%) of participants were married, there was restriction of range in the relationship variables. Most participants reported high levels of commitment, investments, and satisfaction. Again, this finding may also relate to the snowball sampling technique. Participants may have been less likely to forward the survey to others they believed were unhappy in their relationships. This restriction of range may have also led to the lower than typical percentage of variance explained by the IM variables. Future research with a broader sample of military participants may help reduce this limitation.

Another possible limitation concerns the items in the IM. It is important to note that the IM has never been previously used with the military population; therefore, the
items may be not valid for this population. For example, one item reads as, “My relationships with friends and family would be complicated if my partner and I were to break up.” This item may not be as relatable for military couples who consistently relocate, move, or deploy as this aspect of the lifestyle may hinder one in developing strong relationships with the spouses’ family or friends. However, in terms of face validity, the majority of the items appear to be applicable to military couples. For instance, one item reads as, “Many aspects of my life have become linked to my partner, and I would lose all of this if we were to break up.” This item may be more relatable as some spouses of service members invest their lives adhering to the military lifestyle, which may include constantly moving or relocating, being the primary caregiver during deployments, enduring financial hardships, and facing changes in the support system. Although the IM items appear fairly broad, perhaps some may relate even more to the military population. Future research should investigate how related the items may be by comparing the satisfaction, alternatives, and investments of non-military and military couples.

Resiliency may have also influenced participant’s reported responses. The IM is consistently used among non-military couples, which presents the ability of the IM variables all having the ability to predict commitment (Agnew et al., 1998; Carpenter & Coleman, 1998; Carpenter & Scanlan, 1998; Choice & Lamke, 1999; Davidovich et al., 2006; Drigotas et al., 1999; Duffy & Rusbult, 1986; Farrell & Rusbult, 1981; Kenrick et al., 1990; Koslowsky & Kluger, 1986; Kurdek, 1991; Le & Agnew, 2003; Lyons & Lowery, 1989; Oliver, 1990; Ping, 1997; Pistole et al., 2010; Putnam et al., 1994;
Raedeke, 1997; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult et al., 1982; Rusbult & Martz, 1995; Rusbult et al., 1998; Schmidt & Stein, 1991). However, in this study, only satisfaction was found to predict commitment for military couples. Because the military lifestyle is unique, it is possible that this sample was particularly resilient, making potential stressors easier to adapt to. In addition, this sample may have been more prepared as the military lifestyle is notorious for deploying most service members as part of their commitment to the military. Therefore, one may be more resilient and prepared when deployments or other unpredictable occurrences arise. However, future research should examine how resiliency and preparedness affect one’s level of commitment to the relationship.

Also, it must be acknowledged that there was no way of knowing what type of participant responded to the survey. As with virtually any online survey, there is a possibility that a non-military affiliate or adolescent responded to the survey. This serves as a limitation because no personally identifying information was asked of the participant. Therefore, it cannot be assumed that the responses were all answered by adult, military affiliates. Nevertheless, this is unlikely as research was done on the military support and Facebook sites carefully chosen as the most appropriate for distribution of the survey. Also, the posts were e-mailed and forwarded to private e-mail addresses of known military personnel who were asked to forward it to others who might be interested.

No definition of a LDR or a GCR was provided for participants due to the absence of a consistent definition existing among research. However, one individual may
perceive her one-hour distance-apart relationship as geographically close, whereas another may consider it long-distance. On the one hand, this study used participants’ definitions of the type of relationship, which may have psychological effects on their relationship experience; however, examining actual distance may also be important.

Additionally, no definition of the military was provided. It was operationalized broadly to include all active duty and non-active duty military affiliates as a method to attain an adequate sample size for data analysis. As a result, it is difficult to generalize the results to the military population as a whole. No differences were found in this study between active and non-active duty members commitment levels, suggesting there may not be any distinctions between the groups in terms of their commitment. However, future research should determine whether these groups do differ by obtaining a larger sample size to evaluate the effects of the active duty status on relationship commitment.

Other factors not evaluated in the study, but that may influence respondents’ commitment to the relationship include their type of contact and amount of time spent with their partner, emotional support system and who it consists of, the level of danger based on deployment location, and past deployment experiences. For example, the actual distance between partners may be important in maintaining a relationship (Carpenter & Knox, 1986), and increased satisfaction is associated with greater face-to-face interaction (Dainton & Aylor, 2002; Holt & Stone, 1988). Future research should investigate the effects of these variables on relationship commitment.
Implications and Conclusion

These findings expand on military romantic relationships as little research has investigated the impact of deployments on military spousal and service members’ commitment to their relationship (Merolla, 2010). Additionally, no research has been conducted utilizing the IM or PSS in predicting commitment for those in military relationships, although most service members are involved in romantic relationships (Office of the Deputy Under Secretary of Defense, 2012). Moreover, this research adds to romantic relationship literature as the majority of the research consists of samples involved in non-military, interpersonal, and non-interpersonal relationships (Agnew et al., 1998; Carpenter & Coleman, 1998; Carpenter & Scanlan, 1998; Choice & Lamke, 1999; Davidovich et al., 2006; Drigotas et al., 1999; Duffy & Rusbult, 1986; Farrell & Rusbult, 1981; Kenrick et al., 1990; Koslowsky & Kluger, 1986; Kurdek, 1991; Le & Agnew, 2003; Lyons & Lowery, 1989; Oliver, 1990; Ping, 1997; Pistole et al., 2010; Putnam et al., 1994; Raedeke, 1997; Rusbult, 1983; Rusbult & Farrell, 1983; Rusbult et al., 1982; Rusbult & Martz, 1995; Rusbult et al., 1998; Schmidt & Stein, 1991).

Although not a causal experiment, it is proposed that the findings can be applied to clinical settings. Provided with the information regarding variables that predict commitment, practitioners may be able to help clients find ways to increase their satisfaction and investments and decrease their alternatives in order to promote commitment in the relationship. Furthermore, couples can benefit in helping their relationship by determining which factors in their relationship to work on as a means to improve commitment.
In conclusion, the military consists of individuals willing to risk their lives to protect their country. Those on the battleground are challenged not only by encountering dangers and life-threatening situations, but by thoughts, feelings, and emotions of wanting to return to their families and loved ones. Military families and couples encounter experiences untypical of those not associated or a part of the military. Therefore, developing an understanding of what they experience has implications of preparing couples and families in amplifying their resiliency against combat-related separations. Insight, awareness, and knowledge are viable not only in assisting military couples prepare for unpredictable situations, but to strengthen their commitment to their relationship in order to maintain the focus on protecting their fellow Americans and their country.
REFERENCES


Informed Consent

You are invited to participate in a research study conducted at the University of Northern Iowa about relationships. You were selected as a possible participant in the study because you have experience within the military either yourself or through your partner and have volunteered for the study.

If you decide to participate, we will ask you to answer questions about how you feel about your current romantic partner and relationship. We expect the study to last between 10 to 15 minutes.

Items in the study could possibly heighten the awareness of your own relationship; however, the risks are no greater than in day-to-day life. There are no direct benefits to participation. This study is completely anonymous. Any report of the data will not identify you in any way. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Your decision whether or not to participate will not prejudice your future relation with the Psychology Department at the University of Northern Iowa or the researchers. If you decide to participate, you are free to discontinue participation at any time for any reason.

If you have any questions, please do not hesitate to contact us. You may contact Darrina Bledsoe at bledsoed@uni.edu for questions about this study or her faculty advisor, Helen Harton, at Helen.harton@uni.edu. You may contact the University of Northern Iowa Institutional Research Board administrator at anita.gordon@uni.edu for questions about your rights as a research participant.

You may print a copy of this page if you wish.

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have been offered a copy of this consent statement. I am 18 years of age or older.

_________________________________________  __________________________
Signature of Participant                        Date

_________________________________________  __________________________
Signature of Researcher                        Date
APPENDIX B

ONLINE POSTS

E-mail to be sent to people with a military association

Hi!

My name is Darrina Bledsoe. I am working on my thesis for my graduate program at the University of Northern Iowa. My project focuses on people who have experience with the military that have been in a romantic relationship. Because there is a limited amount of research found within the field of military and relationship studies, I am hoping that you will participate in my study.

The study is completely anonymous. If you are interested please click the link below:

LINK

This will take you to LINK where you will proceed to take my survey.

Also, if you know anyone who would be interested or willing to participate in my study, please forward this exact email. Please do not add anything before the email (e.g. an explanation of the study or association to me) as it may have an effect on the study.

Again, it is completely anonymous!

Thank you for taking the time out to consider your participation, it is greatly appreciated!

Darrina Bledsoe

Post on Facebook and other online websites (copy/paste of email sent to military associates)

My name is Darrina Bledsoe. I am working on my thesis for my graduate program at the University of Northern Iowa. My project focuses on people who have experience with the military that have been in a romantic relationship. Because there is a limited amount of research found within the field of military and relationship studies, I am hoping that you will participate in my study.

The study is completely anonymous. If you are interested please click the link below:

LINK

This will take you to LINK where you will proceed to take my survey.
Also, if you know of any sites that would be willing to repost this to participate in my study, please copy this exact post. Please do not add anything (e.g. an explanation of the study) as it may have an effect on the study.

Again, it is completely anonymous!

Thank you for taking the time out to consider your participation, it is greatly appreciated!
APPENDIX C

ONLINE SURVEY

You are invited to participate in a research study conducted at the University of Northern Iowa about relationships. You were selected as a possible participant in the study because you have experience within the military either yourself or through your partner and have volunteered for the study.

If you decide to participate, we will ask you to answer questions about how you feel about your current romantic partner and relationship. We expect the study to last between 10 to 15 minutes.

Items in the study could possibly heighten the awareness of your own relationship; however, the risks are no greater than in day-to-day life. There are no direct benefits to participation. This study is completely anonymous. Any report of the data will not identify you in any way. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Your decision whether or not to participate will not prejudice your future relation with the Psychology Department at the University of Northern Iowa or the researchers. If you decide to participate, you are free to discontinue participation at any time for any reason.

If you have any questions, please do not hesitate to contact us. You may contact Darrina Bledsoe at bledsoed@uni.edu for questions about this study or her faculty advisor, Helen Harton, at Helen.harton@uni.edu. You may contact the University of Northern Iowa Institutional Research Board administrator at anita.gordon@uni.edu for questions about your rights as a research participant.

You may print a copy of this page if you wish.

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have been offered a copy of this consent statement. I am 18 years of age or older.

Demographics

Please answer the following.

1. Age
2. Sex
3. Marital Status
4. Highest level of education completed
5. Race
6. Do you have children living at home with you?
7. If yes, how many children do you have?
8. Are you employed or work outside of your home (not including military service)?
9. If yes, what type of employment do you work?
10. Are you currently in a romantic relationship?
11. If yes, which best describes your relationship?
12. How long have you and your current partner been together?
13. How far away do you live from your significant other? Fill in with your own answer in miles. Please skip if living in same house.
14. If you are currently living together, was your relationship long distance in the past?
15. Have you been in a previous relationship?
16. If yes, what type of relationship was it?
17. Have you or your partner ever served in the U.S. military?
18. If yes, which one of you is in the military?
19. Currently, how would you describe your military service? Choose more than one if needed.
20. Currently, how would you describe your partners' service? Choose more than one if needed.
21. If yes, which branch of service were you and/or your partner involved in? Fill in with your own answer.
22. How long have you and/or your partner been in the military? Fill in with your own answer in years.
23. Are you currently deployed?
24. Is your partner currently deployed?
25. Have you ever been deployed?
26. Has your partner ever been deployed?
27. If yes, list how many times you and/or your partner have been deployed and for how long in months?
28. Have you and/or your partner ever been treated or diagnosed with PTSD, depression, or substance abuse? Check more than one if needed.

Investment Model Items
Satisfaction Facet Items

Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
Don’t Agree At All, Agree Slightly, Agree Moderately, Agree Completely

My partner fulfills my needs for intimacy (sharing personal thoughts, secrets, etc.)
My partner fulfills my needs for companionship (doing things together, enjoying each other’s company, etc.)
My partner fulfills my sexual needs (holding hands, kissing, etc.)
My partner fulfills my needs for security (feeling trusting, comfortable in a stable relationship, etc.)
My partner fulfills my needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.)
Satisfaction Global Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
0-8 Likert-type scale; 0- Do not agree at all, 4- Agree somewhat, 8- Agree completely

I feel satisfied with our relationship.
My relationship is much better than others' relationships.
My relationship is close to ideal.
Our relationship makes me very happy
Our relationship does a good job of filling my needs for intimacy, companionship, etc.

Alternative Facet Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
Don't Agree At All, Agree Slightly, Agree Moderately, Agree Completely

My needs for intimacy (sharing personal thoughts, secrets, etc.) could be fulfilled in alternative relationships.
My needs for companionship (doing things together, enjoying each other’s company, etc.) could be fulfilled in alternative relationships.
My sexual needs (holding hands, kissing, etc.) could be fulfilled in alternative relationships.
My needs for security (feeling trusting, comfortable in a stable relationship, etc.) could be fulfilled in alternative relationships.
My needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) could be fulfilled in alternative relationships.

Alternative Global Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
0-8 Likert-type scale; 0- Do not agree at all, 4- Agree somewhat, 8- Agree completely

The people other than my partner with whom I might become involved are very appealing.
My alternatives to our relationship are close to ideal.
If I weren't dating my partner, I would do fine--I would find another appealing person to date.
My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.).
My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship.

Investment Facet Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
Don’t Agree At All, Agree Slightly, Agree Moderately, Agree Completely

I have invested a great deal of time in our relationship.
I have told my partner many private things about myself (I disclose secrets to him/her).
My partner and I have an intellectual life together that would be difficult to replace.
My sense of personal identity (who I am) is linked to my partner and our relationship.
My partner and I share many memories.

Investment Global Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
0-8 Likert-type scale; 0- Do not agree at all, 4- Agree somewhat, 8- Agree completely

I have put a great deal into our relationship that I would lose if the relationship were to end.
Many aspects of my life have become linked to my partner (recreational activities, etc.), and I would lose all of this if we were to break up.
I feel very involved in our relationship—like I have put a great deal into it.
My relationships with friends and family members would be complicated if my partner and I were to break up (e.g. partner is friends with people I care about).
Compared to other people I know, I have invested a great deal in my relationship with my partner.

Commitment Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
0-8 Likert-type scale; 0- Do not agree at all, 4- Agree somewhat, 8- Agree completely

I want our relationship to last for a very long time.
I am committed to maintaining my relationship with my partner.
I would not feel very upset if our relationship were to end in the near future.
It is likely that I will date someone other than my partner within the next year.
I feel much attached to our relationship—very strongly linked to my partner.
I want our relationship to last forever.
I am oriented toward the long-term future of my relationship.

Perceived Stress Scale Items
Please indicate the degree to which you agree with each of the following statements regarding your current romantic relationship.
0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often 5 = N/A

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Your responses are much appreciated. If you have some worries about your own relationship, here are some links that give advice, tips, and suggestions to maintain stability in your relationship:

http://www.lovingfromadistance.com/military-relationships.html

http://www.100bestdatingsites.com/blog/2008/50-best-relationship-resources-and-sites-for-military-couples/

http://www.military.com/opinion/0.15202.149876.00.html

http://health.howstuffworks.com/relationships/advice/making-your-long-distance-relationship-work.htm


http://www.datingonline.org/dating/long-distance/

http://www.myrelationshipadvice.com/

If you have any questions about the study itself, you may contact:

Darrina Bledsoe
bledsoed@uni.edu

Thank you for your participation!!!!