COMMUNICATION IN COMBAT THROUGH THE OPTICS OF INTERNAL WORKING MODELS

by

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First I need to thank my Lord and Savior, Jesus Christ, without Him none of this would be possible. Now let's take this in chronological order. I am extremely grateful and aware that I was very lucky to be born into a stable and productive family. Spending a lot of time in the bayous of Louisiana and back woods of Mississippi visiting family as a child has given me extremely fond memories of that time period.

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After seeing the battle of Fallujah on TV in early 2004, I decided to enlist in the US Army. After basic training and AIT at Fort Benning, I was shipped to Fort Lewis Washington where I met Melissa "Missy", my better half. Missy you have kept me close to sanity for almost a decade. The whole reason for studying marriage and family among veterans is because you stuck by me through thick and thin. I have always wondered why we made it while almost every other relationship in the platoon dissolved. After almost seven years of graduate coursework, a MSSW, and a PhD my best answer is because of love! I owe the world and literally my life to you, they simply do not make women like you any more, I love you!

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women! Travis, you are a gift from God that I am extremely grateful for you. Whether you choose to pursue academics or another discipline, I will support and help you like "Papa" has helped me. A memory I will never forget will be watching you run the bases for the first time in little league. Matthew you have more energy than any two year old I have met. You will put gray hair on mom and me a little early, but we would not have it any other way.

When I started work at the Fort Worth Vet Center, I had no idea that I would meet so many veterans and family members that would challenge the way I look at life. The group of veterans that taught me the most is the Vietnam combat veterans. The stories of heroism and valor from a group of people that were mostly drafted speak volumes of their upbringing and patriotism. In my opinion there has never been a group of people that have been so misunderstood. After being educated by the Vietnam veterans about what really happened over there and the way they were treated upon return makes me sick to my stomach. If anyone ever approaches and thanks me for my service, I politely direct them to a National Cemetery or tell them to go find a Vietnam vet.

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It does not matter if you are a Green Beret or British SAS; there is a lot of luck involved in combat. There are things that should have happened that did not and I am alive today because of it. The fifteen months I spent in Iraq was at times the worst and best experiences of my life. I am closer to my brothers in combat than the biological ones. I still do not understand why Attalai was killed, I probably will never know. This project is my best attempt to pay it forward; I hope that I have done enough.

I suppose this is where I ride off into the sunset and the movie ends...I do hope to spend more time in-front of my family than in-front of a computer like the past 7 years...

April 21, 2014

Abstract

COMMUNICATION IN COMBAT THROUGH THE OPTICS OF INTERNAL WORKING MODELS

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This dissertation asserts that communication between a committed dyad during a deployment affects post-deployment functioning. Historical communication patterns among veterans and their families are examined from WWII, Korea, Vietnam, Grenada and the Global War on Terror (GWOT) among others. Recent research has delineated different forms of communication: interactive and delayed. Communication is conceptualized in the three phases of a deployment cycle: pre, during, and post-deployment. However, the largest gap in the current literature is the identification of one theory that explains dyadic communication during a deployment. It is posited that attachment theory is the best orientation available.

An online questionnaire that collected data on demographic variables and twelve assessments was commissioned to investigate dyadic communication during GWOT deployments. Research on undergraduate students' long-distance relationships was used as a starting point for conceptualizing attachment theory as applied to a dyad in a war-time setting. Results revealed that the war-time dyad had similar dynamics as compared to undergraduate students in long-distance relationships including attachment and mobile communication trends.

Using the SPSS Version 22 mixed model procedure, the Actor/Partner

Interdependence Model (APIM) for distinguishable dyads was used to explain behavior in terms

of attachment theory (anxiety and avoidance). For this dissertation, actor/partner was with the variable ROLE as the distinguishing variable of the dyad. For the initial attachment model, main effects (veteran and spouse) and all 2-way interactions with ROLE were conducted. After the statistical significance of the initial model was established there were five dependent variables (DAS, PCL-5, SFI, PHQ-9, and IES-R) added.

Some key findings were that as partner avoidance increased the veterans stress and depression decreased whereas spouses increased. When partner avoidance increased, the spouse perception of the veterans PTSD increased. Additionally, as partner anxiety increased, the veteran's relationship satisfaction decreased, whereas the spouse's increased. An unexpected finding was the significant relationship that interactive and delayed maintenance behaviors have on depression, family functioning, and relationship satisfaction. Lastly, results and implications for theory, lay person's interpretation of findings, proposed intervention: moving from CLOSED to OPEN communication, practice and future research are reviewed.

Table of Contents

Acknowledgements			iii
Abstract			vi
List of Illustrations			xiv
List of Tables			xv
Chapter 1 Introduction	on		1
1.1	Casualty	and Suicide Rates of U.S. Wars	1
1.2	GWOT R	elationship Issues	2
1.3	The Globa	al War on Terrorism	5
	1.3.1	Communication	5
	1.3.2	Post Traumatic Stress Disorder (PTSD)	5
	1.3.3	Economic Impact of the GWOT	6
1.4	Synthesis	of Research from Vietnam to the GWOT	7
	1.4.1	Purpose Statement and Research Question	8
1.5	Relevance	e in Social Work	9
Chapter 2 Literatu	re Review		11
2.1	History of	Communication and War	11
	2.1.1	Delayed Communication	12
	2.1.2	Interactive Communication	13
2.2	Deployme	ent Cycle	14
2.3	Communi	cation During GWOT	15
	2.3.1	Qualitative Research	15
	2.3.2	Quantitative Research	25
2.4	Treatmen	ts	32
2.5	Gaps in th	ne Literature	34
2.6	Conclusio	on	35

Chapter 3 A	attachment Theory		36
	3.1 Beginning	gs	36
	3.1.1	Description of Attachment Theory	38
		3.1.1.1 Infant Attachment	39
		3.1.1.2 Adult Attachment	40
	3.1.2	Activation of the Attachment Behavioral System	41
	3.1.3	Critiques and Strengths of Attachment Theory	44
	3.1.4	Summarizing Key Assumptions of Attachment Theory	44
	3.2 Creating	a Profile from Undergraduate Students	45
	3.2.1	Long Distance Relationships (LDR) and Geographically Close Relationship (GCR)	47
	3.2.2	Attachment and Emotional Regulation	53
	3.2.3	Attachment Style: Support Seeking and Coping in Stressful Events	54
		3.2.3.1 Attachment and Emotional Communication	59
		3.2.3.2 Attachment and Mobile Communication	63
	3.3 Synthesis	and Extrapolation to Veterans	69
	3.3.1	Long Distance Relationships (LDR) and Geographically Close Relationship (GCR)	70
	3.3.2	Attachment and Emotional Regulation	73
		3.3.2.1 Attachment and Emotional Communication	73
		3.3.2.2 Attachment and Mobile Communication	74
Chapter 4	Research Question	on	77
	4.1 Protection	n of Human Subjects	77
	4.1.1	Research Design	77
		4.1.1.1 Sample	78

		4.1.2	Instrumentation	80
	4.2	Standard	zed Assessment Instruments	81
		4.2.1	Experiences in Close Relationships (ECR)	81
		4.2.2	Dyadic Adjustment Scale (DAS)	82
		4.2.3	Positive and Negative Affect Schedule (PANAS)	82
		4.2.4	Relationship Maintenance Behavior Measure (RMBM)	83
		4.2.5	Dyadic Sexual Communication Scale (DCS)	84
		4.2.6	Relationship Construction Units (RCCU)	84
		4.2.7	Combat Experience (CE)	85
		4.2.8	PTSD Checklist 5 (PCL-5)	86
		4.2.9	Patient Healthcare Questionaire-9 (PHQ-9)	86
		4.2.10	Impact of Event Scale Revised (IES-R)	87
		4.2.11	Self-Report Family Inventory: Version II (SFI)	88
		4.2.12	2 Global Measure of Sexual Satisfaction (GSMEX)	89
	4.3	Data Coll	ection	89
		4.3.1	Threats to Research Credibility	91
	4.4	Data Ana	lyses	92
Chapter 5	Results			93
	5.1	Dyadic D	escriptive Statistics	93
		5.1.1	Orientation, Age, Length of Relationship, Children,	
			Ethnicity	93
		5.1.2	Marital Status of Parents	94
		5.1.3	Spouse Hours Work Per Week	94
		5.1.4	Geographic Proximity to Family Post-Deployment	95
		5.1.5	Familial Income	95

	5.1.6	Wounded or Injured During Deployment	95
5.2 Ve	eteran [Description Data	96
	5.2.1	Rank	96
	5.2.2	Number of Deployments	96
	5.2.3	Length of Deployment	96
	5.2.4	Location of Most Recent Deployment	97
	5.2.5	Length of Months Stateside	97
	5.2.6	Branch and Component of Military	97
5.3 Co	mmun	ication Descriptive Data	98
	5.3.1	Mode of Communication	98
	5.3.2	Frequency of Communication	99
5.4 St	andard	ized Assessment Instruments	101
	5.4.1	Assessment Instruments That Have Been Excluded	101
	5.4.2	Experiences in Close Relationships (ECR)	102
	5.4.3	Dyadic Adjustment Scale (DAS)	103
	5.4.4	Positive Affect and Negative Affect Schedule (PANAS)	103
	5.4.5	Relationship Maintenance Behavior Measure (RMBM)	106
	5.4.6	Relationship Continuity Constructional Units (RCCU)	108
	5.4.7	Combat Experience (CE)	109
	5.4.8	PTSD Checklist-5 (PCL-5)	110
	5.4.9	Patient Healthcare Questionnaire-9 (PHQ-9)	110
	5.4.10	Impact of Events Scale- Revised (IES-R)	111
	5.4.1	1 Self-Report Family Inventory: Version II (SFRI)	112
5.5 Ur	ndergra	duate Replication	113
	5.5.1	LDR and GDR Review	113
	552	Attachment and Emotional Communication Review	115

		5.5.3	Attachment and Mobile Communication Review	115
	5.6	Actor Par	tner Interdependence (APIM)	117
		5.6.1	Initial Model Main Effects on Dependent Variables	117
		5.6.2	APIM Model on LOG(IES-R)	119
		5.6.3	APIM Model on PHQ-9	121
		5.6.4	APIM Model on PCL-5	123
		5.6.5	APIM Model on SFI	126
		5.6.6	APIM Model on DAS	129
Chapter 6 Discu	ssio	n		133
	6.1	Purpose \$	Statement	133
	6.2	Hypothes	es	133
	6.3	Methods		133
	6.4	Undergrad	luate Replication	134
		6.4.1 LDF	R vs. GCR	134
		6.4.2 Mok	pile Communication	137
	6.5	APIM Ma	in Effects and 2-way Interactions	138
		6.5.1	LOG(IES-R)	139
		6.5.2	PHQ-9	139
		6.5.3	PCL-5	139
		6.5.4	SFI	139
		6.5.5	DAS	140
	6.6	Attachme	nt and the Deployment Phases	140
		6.6.1	Pre-Deployment	140
		6.6.2	Deployment	141
		6.6.3	Post-Deployment	143
	67	Implicatio	ne	145

	6.7.1 Theory		145
	6.7.2 Lay Person's	Interpretation of Findings	146
	6.7.3 Proposed Inte	ervention: Moving from CLOSED to OPEN	
	communication	on	148
	6.7.4 Practice		151
	6.7.5 Future Resea	rch	152
	6.8 Limitations		153
	6.9 Concluding Remarks		154
Appendix A	Letters of Support from Variou	s Organizations	155
Appendix B	Email, Internet, and Social Me	edia Introduction	163
Appendix C	Recruitment Letters for Vetera	an Organizations	165
Appendix D	Survey for Veteran		168
Appendix E	Survey for Partner		230
Appendix F	Assessment Instruments		294
Appendix G	Acronyms and Definitions		302
References			309
Riographical	Information		326

List of Illustrations

Figure 3.1 A Model of Attachment-System Activation and Functioning in Adulthood	43
Figure 5.1 Interaction Plots of Partner Avoidance x ROLE (Veteran) for LOG(IES-R)	120
Figure 5.2 Interaction Plots of Partner Avoidance x ROLE (Spouse) for LOG(IES-R)	121
Figure 5.3 Interaction Plots of Partner Avoidance x ROLE (Veteran) for PHQ-9	122
Figure 5.4 Interaction Plots of Partner Avoidance x ROLE (Spouse) for PHQ-9	123
Figure 5.5 Interaction Plots of Actor Avoidance x ROLE (Veteran) for PCL-5	124
Figure 5.6 Interaction Plots of Actor Avoidance x ROLE (Spouse) for PCL-5	125
Figure 5.7 Interaction Plots of Actor Avoidance x ROLE (Veteran) for PCL-5	125
Figure 5.8 A Interaction Plots of Actor Avoidance x ROLE (Spouse) for PCL-5	126
Figure 5.9 Interaction Plots of Actor Anxiety x ROLE (Veteran) for SFI	127
Figure 5.10 Interaction Plots of Actor Anxiety x ROLE (Spouse) for SFI	128
Figure 5.11 Interaction Plots of Partner Anxiety x ROLE (Veteran) for SFI	128
Figure 5.12 Interaction Plots of Partner Anxiety x ROLE (Spouse) for SFI	129
Figure 5.13 Interaction Plots of Actor Anxiety x ROLE (Veteran) for DAS	130
Figure 5.14 Interaction Plots of Actor Anxiety x ROLE (Spouse) for DAS	131
Figure 5.15 Interaction Plots of Partner Anxiety x ROLE (Veteran) for DAS	131
Figure 5.16 Interaction Plots of Partner Anxiety x ROLE (Spouse) for DAS	132

List of Tables

Table 1.1 Casualty Rates of U.S Wars	2
Table 1.2 NVVRS disorders	3
Table 1.3 Impact of PTSD on Marriage and Employment	4
Table 2.1 Merolla (2010) Findings	18
Table 2.2 Renshaw et al. (2009) Intercorrelations	28
Table 2.3 Allen et al. (2010) Intercorrelations	29
Table 3.1 Gilbertson et al. (1998)	49
Table 3.2 Pistole et al. (2010)	51
Table 3.3 Roberts & Pistole (2009)	52
Table 3.4 A Summary of Findings Concerning Attachment Orientation and Support-Seeking Tendencies	55
Table 3.5 Studies Linking Attachment Orientation with Patterns of Coping with Stressful Events	57
Table 3.6 Guerrero et al. (2009)	61
Table 3.7 Timm & Keiley (2011)	62
Table 3.8 Jin & Pena (2010)	63
Table 3.9 Weisskirch (2012)	65
Table 3.10 Weisskirch & Delevi (2011)	66
Table 3.11 Drouin & Landgraff (2012)	68
Table 3.12 LDR and GCR Review	73
Table 3.13 Attachment and Emotional Regulation Review	74
Table 3.14 Attachment and Mobile Communication Review	76
Table 4.1 Target Demographics	80
Table 4.2 Variable Roles	81
Table 5.1 Ethnicity of the Sample	93
Table 5.2 Parental Marital Status of Sample	Q ₄

Table 5.3 Hours Worked Per Week by Spouse	94
Table 5.4 Geographic Proximity to Family	95
Table 5.5 Military Rank During the Most Recent Deployment	96
Table 5.6 Number of Deployments	96
Table 5.7 Length of Deployments	97
Table 5.8 Location of Most Recent Deployment	97
Table 5.9 Branches in the military	97
Table 5.10 Overall Modes of Communication	98
Table 5.11 Veteran and Spouse Modes of Communication	99
Table 5.12 Overall Frequencies	99
Table 5.13 Veteran Frequency	100
Table 5.14 Spouse Frequency	101
Table 5.15 Overall PANAS Descriptive Statistics	103
Table 5.16 Veteran PANAS Pre-Mean Imputation and Descriptive Statistics	104
Table 5.17 Spouse PANAS Pre-Mean Imputation and Descriptive Statistics	104
Table 5.18 Overall PANAS Mean Imputation Descriptive Statistics	105
Table 5.19 Veteran PANAS Mean Imputation Descriptive Statistics	105
Table 5.20 Spouse PANAS Mean Imputation Descriptive Statistics	106
Table 5.21 Overall RMBM Raw Descriptive Data	106
Table 5.22 Raw RMBM Spouse Descriptive Statistics	107
Table 5.23 Overall RMBM Imputed Means	107
Table 5.24 Veteran RMBM Imputed Outside the Range of Normality	107
Table 5.25 Spouse RMBM Imputed Outside the Range of Normality	108
Table 5.26 Overall RCCU Descriptive Statistics	108
Table 5.27 Veteran RCCU Descriptive Statistics	108
Table 5.28 Spouse RCCU Descriptive Statistics	108

Table 5.29 Overall LOG(RCCU) Descriptive Statistics	109
Table 5.30 Veteran LOG(RCCU) Descriptive Statistics	109
Table 5.31 Spouse LOG(RCCU) Descriptive Statistics	109
Table 5.32 SFI Health/Competence	112
Table 5.33 Veteran and Spouse Correlation with Stress	114
Table 5.34 Veteran and Spouse Multiple Regression Replication	114
Table 5.35 Veteran Hierarchical Regression Analyses on Frequency of Text Message	115
Table 5.36 Spouse Hierarchical Regression Analyses on Frequency of Text Message	116
Table 5.37 Inter-correlations from Jin and Pena (2010)	117
Table 5.38 Replicated Mobile Communication Correlations	117
Table 5.39 Initial Model Main Effects on Dependent Variables.	118
Table 5.40 Final LOG(IES-R) Model	119
Table 5.41 Final PHQ-9 Model	121
Table 5.42 Final PCL-5 Model	123
Table 5.43 Final SFI Model	126
Table 5.44 Final DAS Model	130
Table 6.1 Pistole et al. (2010) vs. Ponder Overall Anxious Attachment Correlations with RMBM	136
Table 6.2 Jin and Pena (2010) vs. Ponder Dissertation Communication Frequency Correlations	137
Table 6.3 Main Effects During Deployment	142
Table 6.4 Avoidance Interactions Post-Deployment	144
Table 6.5 Anxious Interactions Post-Deployment	144

Chapter 1

Introduction

The Global War on Terrorism (GWOT) has produced new and innovative research on Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans and their families. Posttraumatic Stress Disorder (PTSD) has been shown to negatively affect spouse/partner and family relationships (Jordan et al., 1992). Additionally, healthy spouse/partner and family relationships buffer against suicide and is an important variable in military retention. The aim of this dissertation is to merge many theoretical frameworks into one paradigm that can help predict future outcomes of deployment on an individual and dyadic level. Chapter one is an examination of the toll that the GWOT has cost the American fighting force related to deaths and relationship issues. Data from the National Vietnam Veteran Readjustment Study (NVVRS) provides modern researchers a starting point for studying the impact combat has on the veteran and family. Chapter two provides a review of the historic and current literature of the impact of interactive and delayed forms of communication on a dyad during deployment. Chapter three draws on research of University undergraduate students' long-distance relationship communication and argues that attachment theory is the best fit for conceptualizing emotional regulation of couples.

1.1 Casualty and Suicide Rates of U.S. Wars

Most conflicts, with the exception of the Civil and Mexican Wars (which had about a 16% mortality rate), have produced a casualty rate of less than 3% for military personnel killed in action (KIA). Currently, approximately 2,500,000 military personnel have been deployed in support of the GWOT (Cost of War, 2013a; Iraq and Afghanistan Veterans of America [IAVA]). Approximately 6,728 GWOT veterans (Department of Defense [DoD], 2013b) and at least 3,000 contractors (Cost of War, 2013a) have been killed as of June 2013. Without counting contractors, 0.2% of GWOTs were KIA and if contractors are counted, 0.39% was KIA. Please see Table 1.1 for casualty rate for American wars or conflicts.

Table 1.1 Casualty Rates of U.S Wars

War	Years A	ggregate People in Military	Casualty Po	ercentage KIA
Revolutionary War	1775-83	N/A	4,435	N/A
War of 1812	1812-15	286,730	2,260	0.700
Mexican War	1846-48	78,718	13,283	16.800
Civil War	1861-65	2,213,363	364,511	16.400
Spanish American		306,760	2,446	0.700
World War I	1917-18	4,734,991	116,513	2.400
World War II	1941-46	16,112,556	405,339	2.500
Korean War	1950-53	5,720,000	36,574	0.600
Vietnam War	1964-73	8,744,000	58,220	0.600
Persian Gulf	1990-91	2,225,000	383	0.017
GWOT	2001-present	2,500,000	6,728*	0.200
Note: Department	of Defense casualty	analysis center (20	113a) *Denartment	of Defense

Note: Department of Defense casualty analysis center (2013a), *Department of Defense (2013b) as of June 27, 2013 (includes military KIA, DoD contractor KIA, and self-inflicted mortal wounds)

Though the KIA statistics are reasonably low compared to other wars, suicide is a major problem for OIF/OEF veterans. In calendar year 2011, 301 service members completed suicide and 915 attempted suicide (DoD, 2012). Of those that attempted suicide: 896 attempted once, 18 twice, and one person three times (DoD, 2012). Those who completed suicide usually had mental health disorders: mood disorders (19.86%), anxiety disorders (16.38%), and substance abuse disorders (24.04%). Social support but more specifically a satisfied dyadic relationship has been shown to buffer against suicide (Goldsmith, Pellmar, Kleinman, & Bunney, 2002; Ponder, Aguirre, Smith-Osborne, & Granvold, 2012). For example, those who were divorced had a 55% higher suicide rate than those who were married (DoD, 2012). Though most did not communicate to others about their plans of suicide, those who did most frequently cited communications with spouses, friends, and family members (DoD, 2012).

1.2 GWOT Relationship Issues

Though dyadic relationships can act as a protective factor against negative outcomes such as suicide, the dyadic relationship can also be impacted as a result of the veterans' combat experiences, most commonly by PTSD. Before OIF and OEF literature can be reviewed, it is important to first acknowledge and discuss past research about veterans'

readjustment to civilian life. The NVVRS completed in 1988 was at the time the most thorough and rigorous empirical review ever completed about veterans. At the time of data collection, 15.2% of Vietnam veterans had PTSD while the lifetime prevalence of Vietnam veterans with PTSD was 30.6% or approximately one-third of all those who served in Vietnam (Kulka et al., 1988).

Vietnam veterans with PTSD were at greater risk for affective, anxiety, and substance abuse disorders than civilians (Kulka et al., 1988). The most common lifetime disorders were alcohol abuse or dependence (39.2%) and generalized anxiety disorder (14.1%). Please see Table 1.2.

Table 1.2 NVVRS Disorders

Disorder	Lifetime	Current (past six months)
Alcohol Abuse or Dependence	39.2%	" 11.2%
Generalized Anxiety Disorder	14.1%	4.5%
Antisocial Personality Disorder	9.5%	2.0%
Drug Abuse or Dependence	5.7%	1.8%
Major Depressive Episode	5.1%	2.8%
Dysthymia	4.2%	
Obsessive Compulsive Disorder	1.8%	1.5%
Panic Disorder	1.8%	0.9%
Manic Episode	0.8%	0.7%
Note: Data from Kulka et al. (1988)		

After the 1988 report, several authors continued to analyze the collected data. A review by Jordan et al. (1992) is probably the most detailed account explaining the impact of the Vietnam War on the veterans and their family members. At the time of data collection, most of the respondents were approximately 40 years old. The veterans with and without PTSD reported some similar characters of age and educational attainment. Current work status was statistically significantly different among those with and without PTSD. Specifically, among those with PTSD 69.4% were working and of those without PTSD, 94.5% were working. Please see Table 1.3.

Table 1.3 Impact of PTSD on Marriage and Employment

With PTSD

Currently working	94.5%	69.4%	
Current Marital Status	77.8%	62.7%	
Still in first marriage	65.1%	30.4%	
Divorced twice or more	8.1%	22.4%	
Currently unemployed	2.5%	13.3%	
Note: Data frama Jardan a	(4000)	Fook call raflocts the	

Without PTSD

Note: Data from Jordan et al. (1992), Each cell reflects the aggregated percentage of that variable with or without PTSD

In addition to PTSD having a deleterious impact on employment, it can also have a negative impact on a dyadic relationship (Jordan et al., 1992). Aside from ones vocation veterans' self-reporting showed that those with PTSD had more severe outcomes on several instruments (family adjustment, parental and marital index scores) than those without PTSD (Jordan et al., 1992). Partners/spouses of Vietnam veterans also revealed that those with PTSD have lower life function scores, more marital problems, and lower family adjustment scores than those without PTSD. This suggests that PTSD negatively impacted family adjustment, parental and marital index scores. Upon examination of the partners'/spouses' descriptive statistics showed that veterans with PTSD (45.5%) were more likely than without PTSD (19.6%) to be in a relationship between 1 and 6 years (Jordan et al., 1992). These results from the partners/spouses' confirm the veteran's self-report regarding marriage and/or family.

For people without PTSD, the veteran and spouse/partner self-reported equitable perceived family violence, thus both rate the severity of symptoms similarly. However for those with PTSD a different trend emerged. On the veterans self-report of standard and alternate family violence they consistently marked lower levels of perceived family violence as opposed to their spouse/partner. Partner/spouses' self-report revealed that those with PTSD have lower subjective well-being, higher demoralization, and higher social isolation, are more likely to report

a breakdown than those without PTSD. Partner/spouses' self-report also noted that children of those with PTSD have more negative outcomes as opposed to those without PTSD.

1.3 The Global War on Terrorism

This GWOT section is divided into several areas of emerging, innovative research: communication, PTSD, and the estimated economic impact through the 2050s.

1.3.1. Communication

Communication during war has always been important to service members. Over the years, the preferred method has changed with the times. For example, the most frequent mode of communication in World War I (WWI) and World War (WWII) was the US mail (Schumm, Bell, Ender, & Rice, 2004). The Korean and Vietnam Wars allowed for different modes of communication such as the Military Auxiliary Radio System (MARS). In the late 1980s and early 1990s, more interactive instead of delayed forms of communication modalities emerged (e.g., commercial telephone lines, tactical satellite [TACSAT]) (Applewhite & Segal, 1990; Ender & Segal, 1990). More recently, in Bosnia, Somalia, and Haiti, interactive forms of communication became the norm (e.g., email, telephone, and sometimes teleconferencing were available) (Ponder & Aguirre, 2012a; Schumm et al., 2004). Ponder and Aguirre (2012a) found that the more frequently a dyad communicated, the higher their post-deployment marital satisfaction. Additionally, Carter, Loew, Allen, Stanley, Rhoades, and Markman (2011) were able to show that, for some, greater frequency of communication resulted in lower post-deployment PTSD scores on the PCL-M.

1.3.2 Post Traumatic Stress Disorder (PTSD)

PTSD is the most well known mental health problem facing veterans of the GWOT. Hoge et al. (2004) were some of the first to study PTSD among OIF/OEF veterans. In their cross-sectional study, roughly 11.5% of those in OEF and 18 to 19.9% in OIF reported PTSD as measured by the PCL-M. Since then research has consistently shown 20% of veterans have PTSD symptoms (Seal et al., 2008); some studies have had upwards of 37.8% of their sample

with a score of 50 or greater on the PCL-M suggesting a PTSD diagnosis, requiring further clinical assessment for confirmation (Ponder & Aguirre, 2012b). More recently, Cifu et al. (2013) found that from 2009 to 2011; PTSD was present in 27 to 30% of their samples.

Recently, the American Psychiatric Association (APA) updated the Diagnostic and Statistical Manual (DSM) in 2013 to create the DSM-5. In the DSM-5, a major change was the acknowledgement that avoidance and emotional symptoms in PTSD were separate and distinct. Miller et al. (2012) used confirmatory factor analysis and item response theory to investigate the prevalence and latent structure of PTSD in US national and veteran samples. The DSM IV-TR had three symptom clusters: re-experiencing, avoidance/emotional numbing, and hypervigilance. Miller et al. (2012) concluded that four symptom clusters provided a sufficient and adequate fit. The DSM-5's four symptom clusters are intrusions, avoidance, negative alterations in cognitions and mood, and arousal.

Using the DSM-5 proposed criteria (1B, 1C, 3D, 3E) over the past twelve months, there was a civilian estimated PTSD prevalence of 5.4% and 10.4% over the course of a lifetime (Miller et al., 2012). However, the revised changes (1B, 1C, 2D, 2E) to the DSM-5 criteria 9.1% over the last twelve months and 16.6% of civilians would have PTSD (Miller et al., 2012). Within their veteran sample, using the DSM-5 proposed criteria (1B, 1C, 3D, 3E), currently 30.3% and 67.5% of veterans would have PTSD. Using the revised changes (1B, 1C, 2D, 2E), 38.7% of vets currently and 75.2% over the course of their lifetime will have PTSD (Miller et al., 2012).

1.3.3 Economic Impact of the GWOT

Historically, the monetary cost of war is overlooked. On March 13, 2013, Dr. Neta C. Crawford, a political science professor at Boston University, published a comprehensive report for the Costs of War project about the cost of the GWOT. Historical costs from Fiscal Year (FY) 2001 to FY 2013 entailed two general categories: cumulative direct war appropriations and spending along with categories of additional war related spending. Cumulative direct war

appropriations and spending for Iraq, Afghanistan, Pakistan, and Operation Nobel Eagle total 1,510,410,000,000.00 or 1.51 trillion dollars. Categories of additional war related spending include Department of Veterans Affairs (VA) Medical, Social Security Disability, VA Disability, and other related VA costs for OEF/OIF veterans estimates were between 804.94 to 914.74 billion dollars. Future estimates from 2014 to 2053 for veterans' care, which includes VA Medical, Social Security Disability, and VA disability, total approximately 754.4 billion dollars.

Aggregating the total Department of Defense, Afghanistan, Iraq, Operation Noble
Eagle, estimated additions to the Pentagon, State and US AID (Afghanistan, Iraq, and
Pakistan), total medical and disability for veterans, additions to Homeland Security, and interest
on Pentagon War Appropriations from FY2001 to FY2013, the total cost to date is 3.102.85B or
a little over three trillion dollars. Accounting for future expenditures at the Pentagon and
State/USAID (Afghanistan, Iraq, Pakistan, and Operation Noble Eagle), increase to the
Pentagon base budget, future veterans' costs for medical and disability from FY2014 to FY
2053, future costs are 884.4B or almost 1 trillion dollars. In sum, the overall cost to date and
future costs of the GWOT through 2053 is 3,987.25B or approximately four trillion dollars.

1.4 Synthesis of Research from Vietnam to the GWOT

The NVVRS revealed information about PTSD's effect on the veteran, partner/spouse, and children. Specifically, the NVVRS study showed that Vietnam veterans with PTSD were at greater risk for affective, anxiety, and substance abuse disorders than Vietnam veterans without PTSD. Also, Vietnam veterans with PTSD self-reported poor marital quality and low family and parental adjustment scores on various assessment instruments. Those with PTSD were more likely to be unemployed or divorced as compared to those without PTSD. PTSD not only affects the veteran, but also their partner/spouse and children. Partners and/or spouses of Vietnam veterans with PTSD had lower subjective well-being, higher demoralization, higher social isolation, and were more likely to report an emotional breakdown than those without PTSD. Partner/spouse self-report indicated that children of those with PTSD had more behavioral

problems than those without PTSD. Also partners/spouses of Vietnam veterans with PTSD cited higher family violence as compared to those without PTSD.

The NVVRS paved the way for scholars investigating PTSD among GWOT veterans and their family members. Monson, Fredman, and Dekel (2010) illustrate that when an individual has PTSD, there are also interpersonal areas affected; secondary/vicarious traumatization, caregiver burden, ambiguous loss, and intergenerational transmission can develop in close relationships. Taft et al. (2011) showed that PTSD was significantly correlated with three relationship problem variables: intimate relationship discord, intimate relationship physical aggression, and intimate relationship psychological aggression. Also, marital discord was the most often cited trigger (37.3%) of domestic violence (McCarroll et al., 2008).

Spouses/partners have a large impact on the military. For example, those in a marital relationship have been shown to: have lower suicide rates than those who are separated or divorced (Goldsmith et al. 2002); have higher retention rates of service personnel (Burrell, Durand, & Fortado, 2003), and some even have reduce post-deployment PTSD (Carter, et al., 2011). In 2010, according to the Department of Defense, 56.4% of the Active Duty and 48.2% of the Reserve and Guard (Selected Reserve) were married. As of 2010, there were approximately 565,000 more dependents (spouses, children, and adults) than actual Active Duty service personnel (DoD, 2010). Given the number of dependents and influence a spouse/partner relationship has, it appears strengthening the service member's dyad is a logical and inexpensive place to build a healthier fighting force.

1.4.1 Purpose Statement and Research Question

The purpose of this dissertation was to increase positive outcome variables including family functioning and relationship satisfaction while decreasing negative outcome variables such as PTSD, stress, and depression experienced during and after a deployment. All too often therapeutic interventions start after the veteran has returned stateside. Using attachment theory, this researcher hoped to be proactive in identifying positive and negative communication

patterns during the deployment. By focusing on the dyadic communication during the deployment instead of waiting until after return stateside, the hope was for the family or couple to be starting the reunion using healthy emotional expression. The research question was how does attachment theory explain dyadic communication during a combat separation and its impact on post-deployment functioning?

1.5 Relevance in Social Work

Social workers have been working with veterans of war and treating PTSD symptoms since 1918 although the official diagnosis did not appear in the DSM until 1980 (Council on Social Work Education [CSWE], 2010). Social workers are in a unique position to help returning combat veterans and their families from the GWOT. This can be accomplished in direct practice, research, training, and policy implications.

Of the six social work core values, importance of human relationships is of paramount concern when providing services for a dyadic relationship (marital/romantic) or family unit in the military. When a service member deploys to a combat zone they have the ability to remain in daily contact with their loved ones. The well-being or mental stability of the service member deployed is extremely important so they can focus on their mission. Aside from combat exposure and the constant threat of death, they attempt to control communication and can become emotionally withdrawn from their stateside partner/family. Not to be overlooked the stateside partner/family well-being is affected as well. They are prone to loneliness, depression, picking up the duties of two parents, and lack of clarity about the safety of their loved one. By identifying strengths and deficiencies in communication during a combat separation the social worker is in a position to provide support to the service member and stateside partner/family.

Since the 9/11, there has been an uptick in social work research and training for Master of Social Work (MSSWs). As of June 2013, there are 28 MSSW programs with military social work curricula (Council on Social Work Education, 2013). Several of the 28 MSSW programs such as Fayetteville State University and University of Southern California with military social

work curricula are near DoD installations. Specifically at Fort Sam Houston the Army has started a MSSW program to meet the high demand for clinicians. By retraining current service members to become an MSSW the military can retain a great resource, a service member who has experienced a combat deployment.

Lastly, there are potential policy implications. Recently a think tank symposium dubbed *Enhancing the Well-Being of America's Veterans and their Families: A Call to Action for a National Veterans Policy* was convened June 12 and 13, 2013. The NASW Social Work Policy Institute and other partners hosted the event. The symposium convened organizations synergizing efforts to help veterans and their families by identifying federal, state, and local resources. If the military and specifically the Army can retain service members who become social workers they will be in a powerful position to advocate for effective programs based upon their anecdotal and professional experiences.

Chapter 2

Literature Review

Prior to the GWOT, most research about dyadic military relationships was conducted with Vietnam veterans and their partners (Kulka et al., 1988). Since 9/11, there has been an uptick in empirical research about the family and marriage. This chapter will provide a historical account of communication during wartime, the deployment cycle (pre, during, and post), and GWOT communication while deployed. Additionally, the interpersonal natures of combat exposure will be reviewed as these relate to PTSD and/or depression, which then in turn affect family functioning and marital satisfaction. Also, since there have been new, manualized treatments published since the GWOT began, two of the most researched are Prolonged Exposure (PE) (Foa, Hembree, & Rothbaum, 2007) and Cognitive Processing Therapy (CPT) (Resick, Monson, & Chard, 2008) will be discussed in this chapter. Lastly, it will be posited that by shifting from an intervention to a prevention model of communication during deployment, readjustment issues can be minimized. Therefore the biggest gap in the literature is an inclusive theory or paradigm that ties it all together. I assert that attachment theory is the most qualified to do that.

2.1 History of Communication and War

Communication with family and/or a partner during a war-time separation can occur in two forms: delayed and interactive. Delayed forms of communication are letters, care packages, and e-mails whereas interactive forms of communication are phone calls, instant messaging, and instant messaging with video. This coding strategy has been used studying GWOT veterans and their partners (Carter et al., 2011) and will allow for comparative analyses. The history of delayed and interactive forms of communication will be reviewed starting with World War II and up to the GWOT.

2.1.1 Delayed Communication

Delayed forms of communication are letters, care packages, and emails. Until the 20th century the only mode of communication for a service member was the mail system (Schumm, Bell, Ender, & Rice, 2004). Maguire (2007) conducted a qualitative inquiry using three couples and six individuals to study communication patterns during World War II (WWII), the Korean War, and the Vietnam War. One couple separated during the Korean War and two couples separated during the Vietnam War. Of the six individuals, one was a widow from the Vietnam War, three Vietnam veterans, and two veterans who served in the WWII, Korean, and/or Vietnam Wars. Results showed that the individuals "wrote one another several times a week, if not every day" (Maguire, 2007, p. 137). Of note, one participant wrote more than two letters a week to his stateside spouse. However the frequency of letters he received was dramatically less, one every couple months; they later divorced. It appears that the stateside partners may have reached saturation of topics covered when writing daily. Nearly all participants shared that they experienced a delay in getting mail. Spouses of Vietnam veterans shared that they had to start numbering the letters because some days there were upwards of eight letters in the mailbox. Participants shared "No matter when they got the letters, or in what order they arrived, all of the participants agreed that letter writing was the key to staying in touch while apart" (Maguire, 2007, p. 138).

Research on veterans of Operation Restore Hope (Somalia) during 1993 found that 76% of veterans cited the most frequently used mode of communication was US mail (Bell, Schumm, Knott, & Ender, 1999). Other forms of delayed communication that were used were the Army Community Service (ACS) email (26%) and unit email (23%). Schumm, Bell, Ender, and Rice (2004) continued to study delayed forms of communication of veterans deployed to Sinai in 1995. The following are the descriptive statistics (availability vs. used) of delayed modes of communication: US mail (available = 100%; used = 99%), Email (available = 63%; used = 38%), mailing videotapes (available = 95%; used = 29%), mailing audio tapes

(available= 97%; used = 26%) (Schumm et al., 2004). More recently, in an OIF/OEF sample, US mail was the least frequently cited mode of communication (Ponder & Aguirre, 2012a).

2.1.2 Interactive Communication

In line with Carter et al. (2011), interactive forms of communication were telephone use, instant messaging, and instant messaging with video. While the MARS was available during the Korea and Vietnam Wars, it was not a dyadic event but rather there was an operator who relayed the communication (Ender, 1995). The MARS was available to some service members; however, it was not used on a frequent basis. In Maguire's (2007) qualitative study, one participant divulged that he used MARS to let his partner know he was not Missing in Action (MIA).

Ender (1995, p. 437) asserted "the U.S. invasion of Grenada in 1983, was the first large-scale U.S. military operation in which soldiers had uncontrolled access to telecommunications." However, the first empirical investigation of interactive communication was conducted by Applewhite and Segal (1990) who studied commercial telephone and tactical satellite (TACSAT) use during a six-month peace keeping deployment to the Sinai in 1987. Descriptive results revealed 85% of service members exclusively used commercial telephone, 3% exclusively used TACSAT, and 12% used both (Applewhite & Segal, 1990). Respondents liked the interactive availability, reported little bickering, but displayed some negative affect (sadness and anger) after use of interactive forms of communication. Via principal components analyses, a three factor structure of attitude emerged: positive evaluation, negative experiences, and costs. Most found communication to be beneficial; however, a significant subset reported negative affect and/or experiences with telephone use. The American military invaded Panama in 1989 with Operation Just Cause (OJC). Schumm et al. (2004) presented descriptive statistics (availability vs. used) of interactive modes of communication with stateside family during OJC: telephone (available = 99%; used = 94%), MARS (available = 68%; used = 37%), and fax (available = 75%; used = 30%). Further investigation during Operation Restore

Hope (ORH) in Somalia showed a decrease in frequency of communication: telephone (31%), MARS (15%), and fax (30%) (Bell et al., 1999). Recently, 80% of OIF/OEF veterans reported they prefer computer and telephonic communication over US mail (Ponder & Aguirre, 2012a).

2.2 Deployment Cycle

Devoe and Ross (2012) presented three deployment phases and seven associated processes in the context of parenting and familial involvement. The three phases and seven associated processes commonly found in an OIF/OEF combat rotation were pre-deployment (looking ahead and saying good-bye), separation (parenting from the home front and parenting from the war zone, and surviving the home stretch: great expectations, real worries, all the way home), and reintegration (facing reality and moving forward). Studies reviewed for this dissertation present their findings in three deployment phases: pre-deployment, deployment, and post-deployment (e.g., Houston et al., 2013; Lapp, et al, 2010; Sahlstein, Maguire, & Timmerman, 2009). Therefore, for comparative analyses, this dissertation will use the three phases of deployment (pre, during, and post-deployment).

The deployment cycle can look differently for each branch and component of the military. The GWOT is the first war to consistently activate and redeploy non Active Duty units. In the pre-deployment phase, the service member is training for the mission they will be deployed to perform. In the Active component, this could be a one-month stint at the National Training Center (NTC) in Fort Irwin, CA or Joint Readiness Training Center (JRTC) in Fort Polk, LA. For Reserve personnel, they may be activated a couple months before their rotation at NTC or JRTC.

The deployment phase is when the service member deployed to the theatre of war—OIF or OEF. Typically, the unit spends a couple weeks in Kuwait adjusting to the weather and modifying any last minute training routines if their mission has been modified by their command. The Army generally has a 12-month tour. Tours are shorter for specialty units such as a

Ranger battalion or Special Forces detachment, typically 3 to 7 months. The Marine Corps traditionally has 6 to 7 month tours and sometimes 12-month rotations.

The post-deployment phase is the last phase of the deployment cycle. During the post-deployment phase the service member returns stateside. After all sensitive items are accounted for; the service member is physically reunited with their loved ones. Typically, they are given a couple days with their family before they report to their unit. Currently, there is a 90-day time period in which there is no block leave or Permanent Change of Station (PCS) orders authorized. The GWOT is different than previous wars because there are large numbers of people serving multiple combat tours. With the high operational tempo dyads have been going through the deployment phases multiple times in their military career.

2.3 Communication During GWOT

This section provides an in-depth examination of several studies focusing on how the veteran and partner/family communicated during the GWOT deployment cycle. Five qualitative articles and six quantitative articles will be examined.

2.3.1 Qualitative Research

Sahlstein, Maguire, and Timmerman (2009) used relational dialectics to qualitatively investigate contradictions and praxis contextualized by a combat deployment in the GWOT from 2003 to 2005. Their sample was 50 female spouses. Sahlstein et al. (2009) asserted most wartime separation literature about couples narrowly focuses on improving positive constructs such as resiliency (Wiens & Boss, 2006) and decreasing divorce, suicide, and mental health issues (McCubbin, 1979). Sahlstein et al. (2009) were able to identify themes associated with each part of the deployment cycle: pre deployment—uncertainty vs. certainty, deployment—autonomy vs. connection, and post deployment—openness vs. closedness.

During the pre-deployment phase, the uncertainty vs. certainty contradiction is a time that involves the stateside spouse's feelings of uncertainties, unknowns, no control, and a sense of powerlessness. Of note, the two main types of uncertainties were logistical and

relational. Logistical uncertainties involved deployment logistics: when and where in-country they will be what they should pack for their husband, finances, and how they would fill the role left by the deployed spouse. Sahlstein et al. (2009) asserted the ambiguity and lack of communication from the military increased the stateside spouse's feelings of powerlessness. Relational uncertainties were: if the deployed spouse will die in combat or return home with mental health issues; and lack of time together due to long training hours before deployment. During pre-deployment, due to the spouses having virtually no control over the logistical or relational uncertainties, they primarily used denial to cope, "by either (a) communicatively supporting their husbands excitement about going to war, or (b) communicatively distancing themselves from their spouse" (Sahlstein et al., 2009, p.428). Interestingly, 15 of the 50 spouses who usually ran the Family Readiness Group (FRG) or had experienced prior combat separation appeared to navigate uncertainty vs. certainty successfully.

During the deployment phase, the autonomy vs. connection contradiction emerged. From narrative analysis two themes emerged during this phase: role struggles and tensions between being together and being apart (Sahlstein et al., 2009). Role struggles involved the stateside spouse having to fill the role of the dad and some even opined this felt like being a single parent. The praxis of role struggles involved the need to be able to perform independently (such as daily activities of running the family) but also remain somewhat connected to the deployed spouse. Tensions between being together and being apart were a struggle between wanting their own independence but also wanting to stay connected to the deployed husband. The praxis of being together and being apart was achieved a variety of ways. Some couples hid notes around their own house so that the stateside partner would find it during the separation (deployment), staying connected around normal day-to-day non-significant things whereas other couples would basically place the relationship on hold.

During the post-deployment phase, the openness vs. closedness contradiction emerged. Sahlstein et al. (2009, p. 434) identified three praxis of managing openness vs. closedness:

(a) The marital partners were open with each other but not necessarily with others (nonantagonistic denial); (b) the husband was willing to be open, but his spouse did not want to listen (antagonistic denial); and (c) the wife was willing to hear, but her spouse remained closed (antagonistic denial).

Generally speaking, completely open or closed lines of communication reported a fairly seamless transition to post-deployment marital adjustment. There were times in which the soldier wanted to talk with their wife and they were ready to listen but combat related stories were a touchy subject. For soldiers, this might have been the first time they were able to have an uncensored conversation with their spouse and some knew they were going to deploy again so they did not share graphic details with their spouse. Also there were situations in which the spouse was ready to listen but the soldier was not ready to talk. Some spouses acknowledged they were ready to listen and hear their husband but for whatever reason he was not communicative about combat with her.

In conclusion, Sahlstein et al. (2009) asserted the military can influence communication in two ways: limits of what the deployed soldier can report and communication modes available for use (phone, internet, US mail, email, etc.). They went on to acknowledge future research should delineate the control the couple has vs. organizational communication constraints such as blackouts (after a Killed in Action [KIA]) or if the command is using communication frequency or mode to mold behavior.

Shifting from relational dialectics, Merolla (2010) investigated relational maintenance during a military deployment. The sample was 33 married civilian wives of US military personnel. Of note the sample included spouses whose partners were in or recently returned from a combat situation (i.e., Iraq, Kuwait) and non-combat (i.e., South Korea, Japan). The data resulted in three supra-ordinate (intrapersonal, mediated partner interaction, social network) and 24 subordinate forms. Please refer to Table 2.1.

Table 2.1 Merolla (2010) Findings

Maintenance categories	Number of participants referencing each category (percentage of participants)	Number of units coded into each category (percentage of total units)
Intrapersonal	33 (100%)	131 (26%)
1. sensory experiences	24 (73%)	52 (10%)
2. positive thinking and reminiscing	18 (55%)	26 (5%)
3. Focus on self	10 (30%)	16 (3%)
4. Prayer	9 (27%)	12 (3%)
5. Reflect on perceived advantages	7 (21%)	8 (2%)
6. Journaling	5 (15%)	5 (1%)
7. Imagined interaction	4 (12%)	6 (1%)
8. Future thinking	2 (6%)	4 (1%)
9. Visiting special locations	2 (6%)	2 (.5%)
Mediated partner interaction	33 (100%)	275 (55%)
Communication mode reference	28 (85%)	94 (19%)
Phone	20 (61%)	26 (5%)
Letters/care packages	18 (55%)	23 (5%)
E-mail (including digital photos)	17 (52%)	30 (6%)
Instant Messenger/message board	5 (15%)	6 (1%)
Video messages	3 (9%)	3 (1%)
Webcam	2 (6%)	6 (1%)
Debriefing talk	20 (61%)	36 (7%)
3. Topic avoidance	20 (61%)	29 (6%)
4. Affection and intimacy	19 (58%)	24 (5%)
5. Creating and keeping communication routines	18 (55%)	37 (7%)
6. Future planning	13 (39%)	16 (3%)
7. Openness	13 (39%)	16 (3%)
8. Reassuring safety	8 (24%)	11 (2%)
9. Positivity	6 (9%)	10 (2%)
10. Faith talk	2 (6%)	2 (.5%)
Social Network	30 (91%)	96 (19%)
Family, peer, and communality support	27 (82%)	52 (10%)
2. Family and peer updates	9 (27%)	13 (3%)
3. Preoccupation	8 (24%)	10 (2%)
4. Support drawn from children	8 (24%)	10 (2%)
5. Military-facilitated support	7 (21%)	11 (2%)
Other	3 (9%)	3 (1%)

Intrapersonal had nine subordinate forms: sensory experiences, positive thinking and reminiscing focus on self, prayer, reflect on perceived advantages, journaling, imagined interaction, future thinking, and visiting special locations (Merolla, 2010). Mediated partner interaction had ten subordinate forms: communication mode preference (e.g., phone, letters/care packages, email [including digital photos], instant messenger/message board, video messages, webcam), debriefing talk, topic avoidance, affection and intimacy, creating and keeping communication routines, future planning, openness, reassuring safety, positivity, and faith talk. Social network had five subordinate forms: family, peer, and community support, family and peer updates, preoccupation, support drawn from children, and military-facilitated support.

Merolla (2010) identified twenty-four maintenance categories, of which seven were referenced over 50% of the time. Only the seven cited as being used over 50% of the time will be reviewed because of the scope of this dissertation. The supraordinate intrapersonal category yielded two subordinate forms along with the percentage of the sample that referenced it: sensory experiences (73%) and positive thinking and reminiscing (55%) (Merolla, 2010). The supraordinate category mediated partner interaction yielded five subordinate forms along with the percentage of the sample that used them: communication mode reference (85%), debriefing talk (61%), topic avoidance (61%), affection and intimacy (58%), and creating and keeping communication routines (55%) (Merolla, 2010). The supraordinate category social network yielded one subordinate form: family, peer, and community support referenced by 82% of the sample.

One of the more interesting findings was the role sensory experiences played. Sensory experiences can be wearing dog tags or smelling a fragrance used by the service member (Merolla, 2010). Other research (Ponder & Aguirre, 2012a) has shown US mail is the mode of communication during deployment that was the most highly correlated mode of communication with post-deployment relationship satisfaction. Factors influencing maintenance can be

institutional or self-imposed by the dyad. Domains that can be influenced by the military are timing and content of communication (operational security [op sec]) whereas self-imposed could be topic avoidance or debriefing talk. Respondents also tried to consciously keep communication about more trivial things such as bringing each other up to speed on the daily activities of the stateside family. Clearly, there was a deliberate attempt to keep communication about daily activities and avoid others like combat. This study has provided a springboard for other research due in large part to descriptive use of maintenance categories. He suggested that future research should take into account the frequency of each maintenance category (Merolla, 2010).

Merolla (2010) focused on communication during a deployment separation whereas Faber, Willerton, Clymer, MacDermid, and Weiss (2008) investigated Boss's (2002) conception of ambiguous loss as applied to US Army Reservists' return stateside after a combat deployment to OIF. Ambiguous loss can be ambiguous absence or ambiguous presence.

Ambiguous absence is when a person is physically absent but psychologically present whereas ambiguous presence is when a person is physically present but psychologically absent. The sample was 16 Reservists and 18 family members that could include a spouse, significant other, or parent. In total, there were seven iterations of qualitative interviews occurring 3, 4, 6, 12, 24, 36, and 52 weeks after return stateside.

Faber et al. (2008) identified three themes about the separation during the deployment and boundary ambiguity: safety, redistribution of roles and responsibilities, and rejoining the family. Boundary ambiguity could spike when the stateside family member learned of attacks or bombings. The participants sought routine communication with the deployed family member. Stateside family members shared the most significant stressor was lack of control or knowledge regarding the potential for death or injury for the deployed individual. Redistribution of roles and responsibilities was especially hard for the stateside spouse. Household maintenance along with other decisions involving the family was made under the pretense of what the deployed

service member would want. Some partners attempted to involve the deployed person in household decisions but often got responses that were unclear as to what the deployed person wanted. This often led to disappointment for the stateside spouse. As the return stateside got closer, there were anxieties about the veteran rejoining the family. Specifically, the boundary ambiguity shifted from anxiety about safety to anxiety surrounding reunion. The possible personality or behavior changes in the veteran could have created anxiety for the stateside family as well as worry about conflict or potential negative consequences of deployment such as PTSD.

Family members tried various avenues in an attempt to cope with their heightened sense of uncertainty or lack of control. The main sources of information identified by the stateside partners were the media and Family Support Group (FSG) (Faber, et al., 2008). Families often felt that their deployed family member withheld information to keep them from worrying too much. Because of the guardedness of their service member, they turned to the media to quell their nerves but actually increased their anxiety and stress (Faber, et al., 2008). The stateside family members also turned to the FSG as a positive source of information and even emotional support.

Upon return stateside, Faber et al. (2008) found three themes as related to ambiguous presence: resumption of roles and responsibilities, relational communication and expectations, and the soldier-to-civilian transition. Stateside family members appeared reluctant to request that the service member resume tasks that were previously theirs. Also, the recently returned soldier was cautious to resume old roles so as to not interfere with roles that were used while s/he was deployed. Relational communication and expectations were not an issue for a parent-child relationship in which the child was the one who deployed. However, for couples, transitioning from a closed communication system during deployment to an open communication system post-deployment was hard. Closed communication was used by the service member while deployed so as not to disclose information related to operational security

(op-sec). Open communication, healthy for any dyad, was a difficult transition due to the needs, wants, or desires of the other. The longer the relationship life in terms of years, the easier the transition was to open communication. The soldier-to-civilian transition lasted approximately four weeks because after that wave of data collection it was not mentioned again.

There were several factors affecting boundary ambiguity levels. Personal characteristics of the service members themselves influenced boundary ambiguity. For example, those who needed control in their life experienced a longer time to adjust. Most participants cited returning to work as an event that reduces boundary ambiguity (Faber et al., 2008). The length of duration of ambiguity post-deployment was moderated by getting back to a civilian job and life events. Most did not report boundary ambiguity after six weeks.

Faber et al. (2008) were able to document the ambiguous loss among Reservists.

During the deployment, ambiguous absence was seen via safety, roles, and rejoining the family.

After reunification, ambiguous presence was found in roles, communication, and the soldier-to-civilian transition. In sum, safety and redistribution of roles and responsibilities were responsible for the majority of boundary ambiguity.

Unlike Faber et al. (2008), who included spouse and/or parent, Lapp et al. (2010) sampled 18 spouses (sixteen female and two male) of National Guard or Reservists using a phenomenological qualitative design to assess two things: the potential sources of stress and coping strategies for stateside spouses over all deployment phases. Pre-deployment analysis uncovered one stressor; the spouses felt like "their lives were on hold" (Lapp et al., 2010, p.51) and that there was lack of certainty or communication about deployment dates/times for the service personnel. This was a similar finding of Sahlstein et al. (2009). During the deployment phase, five stressors were identified: worrying, waiting, going at it alone, pulling double duty, and loneliness. Worrying or anxiety originally was about safety. However, this later turned into the general concern of what their partner would be like upon return stateside. The spouses consistently cited that they felt "captive" to the mode of technology they communicated with

(phone calls, emails). Going at it alone is an inclusive term for items that were once shared (e.g., household tasks, finances) but due to deployment were required of the stateside spouse. The most frequent statement of pulling double duty was lack of sleep and mirrored being a single parent. Loneliness drew comparisons to being abandoned and respondents mentioned social support helped buffer this to a degree. Post-deployment spouses reported stress surrounding re-assimilation back into roles.

Spouses also shared how they coped with pre, during, and post-deployment adjustment (Lapp et al., 2010). During the pre-deployment phase, the spouses highlighted social support as an aid for preparation, which could have entailed setting up communication devises (e.g., web cam). During deployments, the spouses shared four coping strategies: keeping busy, staying connected, managing personal needs, and seeking support. Specifically, spouses reported trying to find support from those in a similar situation, who currently has a deployed spouse. During the post-deployment phase, spouses read literature about reunions or went to unit family events hosted by the unit. The participants noted that the re-assimilating into family roles was difficult.

While Lapp et al. (2010) focused on spouses; Durham (2010) exclusively studied how deployed service personnel communicate with their stateside partners. This was one of the first studies probing veterans' experiences with new technologies and its impact on the veteran. The sample was six soldiers (two were enlisted and four were officers) who had completed a combat deployment. Interviews were conducted after they were discharged and ranged from about 30 to 60 minutes via telephone or in-person. In qualitative data analysis, Durham (2010) identified 314 significant phrases within 50 themes and then consolidated to four themes. The four themes were: need to control communication, need to limit communication with home, value of peer communication, and involvement in a traumatic event.

Durham (2010, p. 556) asserted "Most themes related directly to the barriers to honest communication in a combat environment." Need to control communication appeared to be an

attempt not to disclose any emotions about experiences in combat. Two officers hinted at structural issues within the military. For example, because they were officers, they could not go to a private to talk about their feelings. Even one enlisted soldier shared he could not go to a private and talk about issues. In sum, the need to control seemed to center around the need to buffer stateside family from anxiety they have about the service member's daily life.

Theme two was a need to limit contact with home and the ability to "compartmentalize" (Durham, 2010). Others referred to this as a distraction and were keen to limit frequency of contact because it could bring up emotions that they did not want to feel. One officer said that internet access allowed him to buffer or decrease the amount of emotion conveyed with stateside family. The third theme was the value of peer communication or in other words communication with other deployed personnel. The veterans cited peer-to-peer communication as a valuable resource. Some referenced that even in a military setting due to "military bearing" that allowed them to still have some control over their emotions allowing themselves not to experience the full array of emotions. However, it was still peer-to-peer communication meaning that platoon leaders talked with their counterparts much like non-commissioned officers (NCOs) leaned on each other.

The fourth theme was communication observed or involved in a traumatic incident. For op sec, there is usually a 24-hour blackout after a KIA so that the living family members are notified through official channels rather than another veteran or spouse. An officer mentioned that chaplains were ineffective due to no combat experience. Also participants shared they would compare their symptoms to others who they perceived had it worse. There were a myriad of reasons for the desire to control the messages sent home: op-sec, giving stateside family anxiety, the desire to be in control of their emotions, and compliance with unit/DoD policy (Durham, 2010).

2.3.2 Quantitative Research

Building upon the qualitative literature, Ponder and Aguirre (2012a) quantitatively examined communication between a deployed service member and stateside spouse. Descriptive statistics showed that fifty six percent of respondents divulged that their primary mode of communication was computer (i.e., email, instant messenger, webcam), twenty percent US mail, and twenty four percent reported telephone (Ponder & Aguirre, 2012a). Frequency of communication with a stateside spouse was significantly related to martial satisfaction (ρ = .24, ρ < .01). Dyads that communicated less than once per week had the lowest marital satisfaction, whereas those who communicated every day had the highest marital satisfaction. Of the three modes of communication (i.e., computer, US mail, telephone), US mail had the highest marital satisfaction and computer-based communication had the lowest marital satisfaction.

Moving from a post-deployment retrospective design (Ponder & Aguirre, 2012a),
Houston et al. (2013) used a sample of 26 dependents (13 female spouses and 13 children) of
Oklahoma National Guard personnel deployed to OIF and investigated family communication
across the deployment cycle. The average age of the children was 11. They quantified four
variables: communication frequency, communication quality, child emotion and behavior, and
emotional reactions to deployment. There were three research questions that were posed.
Research question one investigated frequency and quality of communication. Results showed
child and spouse report of telephone frequency with the deployed parent decreased from predeployment to deployment. However, child report of email frequency with deployed parent
increased. Additionally, self-report of children revealed that their general communication with
their mom increased during pre-deployment, went down during deployment, and at postdeployment went back to baseline (pre-deployment) levels. Also, via child report, the quality of
communication about deployment with their mother increased from pre-deployment to
deployment. Child report also showed that quality of communication with their father decreased
during deployment. Spouse self-report of quality of communication with their partner was worse

at post-deployment as opposed to pre-deployment. Spouses also reported that quality of communication about deployment decreased with children and spouse from deployment to post-deployment.

Next, research question two investigated if family frequency of communication and quality were related (Houston et al., 2013). During pre-deployment, general (r=.56, p < .05) and deployment (r=.70, p < .01) communication quality were significantly correlated with frequency of phone calls with the deployed parent. Communication quality and frequency were statistically significantly correlated (r=.49, p < .05) during the deployment phase as reported by kids. Interestingly, frequency of the deployed individuals' emails with their children depended on the child reports of communication quality of communication *about deployment* (r=.50, p < .05). Additionally, spouses' email frequency with their husbands was statistically significantly related to their ability to discuss *deployment* (r=.53, p < .05). Also, sent (r=.51, p < .05) and received (r=.59, p < .05) text messages from spouse to deployed husband were significantly dependent on the ability to communication about *deployment*.

Research question three probed frequency and quality of communication among child outcomes (Houston et al., 2013). Research question 3a looked at child emotional symptoms and behavioral problems. For children pre-deployment, their self-report indicated that frequent communication and quality was related to better personal adjustment. From child self-report during deployment, communication with their dad was significantly negatively correlated with several negative outcomes: their emotional symptoms (r = .49, p < .05), internalizing problems (r = .57, p < .05), and school problems (r = .60, p < .05). However, during post-deployment, quality communication with their siblings was related to a decrease in child-reported inattention/hyperactivity (r = -.56, p < .05), parent-reported child behavioral symptoms (r = -.62, p < .05), and child externalizing problems (r = -.61, p < .05).

Research question 3b investigated emotional reactions to deployment (Houston et al., 2013). Generally, over all the phases of the deployment cycle, spousal-reported family

communication decreased the frequency of losing their temper and being upset or stressed around their children. However, there were three exceptions. According to spouse self-report during pre-deployment, speaking on the phone with their spouse was significantly correlated with an increase in losing their temper with their partner (r = .56, p < .05). According to spouse self-report during the deployment, communication frequency with their spouse was significantly correlated with their loneliness (r = .64, p < .01). According to spouse self-report during the deployment, emails from their spouse were significantly correlated with being upset or stressed around their children (r = .53, p < .05).

In sum, Houston et al. (2013) completed a fairly thorough longitudinal study probing stateside spouses' and children's experiences of a combat deployment. There are two main conclusions. The first was that sibling-to-sibling communication appeared to serve as a protective factor against negative outcomes such as inattention/hyperactivity, parent-reported child behavioral symptoms, and child externalizing problems. Over the span of the deployment, phone calls decreased whereas child emailing frequency with dad increased. Houston et al. (2013) also noted that frequency of text messages with dad produced some negative childhood outcomes such as feeling upset or stressed and angry.

Renshaw, Rodrigues, and Jones (2009) used a different National Guard sample of 50 from Utah who returned from OIF to investigate psychological problems and marital satisfaction. Renshaw et al. (2009) used several instruments in their quantitative inquiry to measure combat exposure (CES), PTSD (PCL-M), depression (CES-D), marital satisfaction (RAS), and social support (MSPSS). Combat exposure was statistically significantly correlated with PTSD (r = .46, p $\le .001$) and depression (r = .52, p $\le .001$). PTSD was statistically significantly correlated with marital satisfaction (r = -.48, p $\le .001$). Additionally, depression was statistically significantly correlated with marital satisfaction (r = -.45, p $\le .001$). Combat exposure was not significantly correlated with marital satisfaction (r = -.21, ns). PTSD (r = -.43, p < .01) and depression (r = -.37, p < .05) were statistically significantly related to lower perceived social

support (r = -.37, p \leq .001). This study of OIF veterans showed that combat exposure was positively correlated with PTSD and/or depression that in turn was related to lower marital satisfaction and/or perceived social support.

Table 2.2 Renshaw et al. (2009) Intercorrelations

	Combat Exposure	PTSD	Depression	Marital Satisfaction
PTSD	.46**			
Depression	.52***	.89***		
Marital satisfaction	21	48***	45***	
Perceived social support (total)	22	43**	37*	.54***

Note: N = 50. PTSD, Post-traumatic stress disorder.

Similarly to Renshaw et al. (2009), Allen, Rhoades, Stanley, and Markman (2010) used correlation analyses but added tests of mediation. Allen et al. (2010) used Karney and Crown's (2007) theoretical framework of adaptive processes to explore the relationship between PTSD, a recent deployment, and marital functioning. Additional constructs that were related to PTSD and marital functioning were also included: confidence, dedication, parenting alliance, and positive bonding. All the veterans were male and female spouses were all civilians.

Husbands' self-reported PTSD was statistically significantly correlated with their own adaptive processes such as negative communication (r = .36, p < .001), parenting alliance (r = .30, p < .001), positive bonding (e.g., fun, friendship, and physical intimacy) (r = -.31, p < .001) and other indices of relationship quality such as marital satisfaction (r = -.39, p < .001), dedication (r = -.18, p < .01), satisfaction with sacrifice (r = -.12 p < .05), and confidence (r = -.33, p < .001) (Allen et al., 2010). Husbands self-report PTSD was also statistically significantly correlated with their wives adaptive processes such as negative communication (r = .28, p < .001), parenting alliance (r = -.16, p < .05), positive bonding (r = -.24, p < .001) and other indices of relationship quality such as marital satisfaction (r = -.27, p < .001), dedication (r = -.14, p < .05), satisfaction with sacrifice (r = -.08, ns), and confidence (r = -.30, p < .001). Please see Table 2.3.

^{*}*p*< .05, ***p*< .01, ****p*<u><</u>.001.

Table 2.3 Allen et al. (2010) Intercorrelations

Husband PTSD symptoms correlated with	Husbands	Wives
Measures of adaptive functioning		
Negative communication	.36***	.28***
Parenting alliance	30***	16*
Positive bonding	31***	24***
Other indices of relationship quality		
Marital satisfaction	39***	27***
Dedication	18**	14*
Satisfaction with sacrifice	12*	08
Confidence	33***	30***

^{*}p< .05. ** p< .01. *** p< .001 (all two tailed)

Allen et al. (2010) used advanced statistical mediation techniques (Barton & Kenny, 1986; Kenny 2009) to investigate the adaptive process between husbands' self-reported PTSD and marital satisfaction. The standardized estimate for the path from husbands' PTSD symptoms to their own marital satisfaction while controlling for mediators (negative communication [c' = -.21], positive bonding [c' = -.18], and parenting alliance [c' = -.30]) was statistically significant at the .05 level of significance. Additionally, the total effect of husbands' self-reported PTSD on their own marital satisfaction for each mediator (negative communication = 47%; positive bonding = 54%; parenting alliance = 24%) was statistically significant at the .05 level of significance. Additional analyses yielded the same trend for the veterans' wives' marital satisfaction. The standardized estimate for the path from husbands' PTSD symptoms to their wives' marital satisfaction while controlling for mediators (negative communication [c' = -.11], positive bonding [c' = -.07], and parenting alliance [c' = -.23]) was statistically significant at the .05 level of significance. Additionally, the total effect of husbands' self-reported PTSD on their wives' marital satisfaction for each mediator (negative communication = 60%; positive bonding = 73%; parenting alliance = 26%) was statistically significant at the .05 level of significance.

They also conducted simultaneous regressions of negative communication, positive bonding, and husbands' self-reported PTSD symptoms on marital satisfaction for the veteran and wife(Allen et al., 2010). The husbands' (F(4)=161.79, p < .01) and wives' regression

(F(4)=274.01, p < .01) were statistically significant. The husbands' regression $(R^2=.59)$ accounted for 59% and the wives' regression $(R^2=.71)$ accounted for 71% of the variance in their self-reported marital satisfaction. The standardized regression coefficients were all statistically significant for the husbands' marital satisfaction: negative communication $(\beta = -.22, p < .001)$, positive bonding $(\beta = .56,p < .001)$, and self-reported PTSD symptoms $(\beta = -.14, p < .001)$. Two of the standardized regression coefficients—negative communication $(\beta = -.12,p < .01)$ and positive bonding $(\beta = .74,p < .001)$ —were statistically significant whereas their husbands' self-reported PTSD symptoms $(\beta = -.06, ns)$ failed to reach significance for the wives' marital satisfaction.

Allen and colleagues (2010) arrived at some of the same conclusions as Renshaw et al. (2009) but did not include the variable of combat exposure. Renshaw et al. (2009) showed that it was not combat exposure that led to poor marital satisfaction; it was the constructs of depression and PTSD. In the simultaneous regression, negative communication (negative affect) decreased marital satisfaction whereas positive bonding (positive affect) increased marital satisfaction. From the research (Allen et al., 2010; Renshaw et al., 2009), it appears that how a person processes and displays affect can make or break the dyad.

Renshaw (2011) has continued to publish and used updated scales from the Deployment Risk and Resilience Inventory (DRRI) (King et al., 2006) to study OIF/OEF veterans. He was hoping to develop an integrated model of risk and protective factors to buffer against PTSD once stateside. His findings are extremely interesting; for example, he found two distinct and direct pathways to post-deployment PTSD. In the first path, combat experiences, preparation, and an interaction (combat experiences x preparation) led to perceived threat that in turn was statistically significantly related to post-deployment PTSD (β = .41, p < .001). In the second path, post-battle and combat experiences were correlated. The standardized path coefficient from post-battle to post-deployment PTSD was statistically significant PTSD (β = .20, p < .01). In line with these findings, Agren et al. (2012) were able to show that if the fear

memory trace is not consolidated (6 hours or longer), the presentation of the stimuli (trauma) will not be encoded in the amygdala as fearful. Given the results of Renshaw (2011) and Agren et al. (2012) the memories might be coded in different neural networks.

Lastly of the quantitative articles reviewed, Carter, Loew, Allen, Stanley, Rhoades, and Markman (2011) published a brief report about soldiers' PTSD symptoms and spousal communication during deployment. Before their manuscript, no study to date has quantitatively investigated new communication modalities (overall, interactive, and delayed), marital satisfaction, and PTSD. Carter et al. (2011) cited the major reason for investigating these variables is that they suspected immediate communication (e.g., phone calls, instant messaging, instant messaging with video) may have acted as more of a buffer against developing PTSD as opposed to delayed forms of communication (e.g., letters, care packages, and e-mails).

From a randomized clinical trial, Carter et al. (2011) selected a subsample of 193 soldiers. Of note they collected data in 2007 and excluded service members with a zero on the Combat Exposure Scale (CES) score. They conducted three hierarchical regressions. CES was a control variable, and also included marital satisfaction, communication frequency and the interaction of marital satisfaction/communication frequency. They probed the interaction using MODPROBE (Hayes & Matthes, 2009).

Carter et al. (2011) found statistically significant results for overall communication frequency (B = -0.17, SE B = 0.07, $t_{(187)}$ = -2.48, p = .014). After establishing the statistically significant relationship, only high marital satisfaction and greater frequency of communication predicted lower post-deployment PTSD symptoms (B = -0.75, SE B = 0.37, $t_{(187)}$ = -2.05, p = .042). Participants who had lower marital satisfaction did not yield any statistically significant relationships on overall communication. Delayed communication was statistically significant (B = -0.52, SE B = 0.15, $t_{(186)}$ = -3.42, p< .001). Those with high satisfaction communicated more frequently which resulted in lower post-deployment PTSD (B = -2.10, SE B = 0.80, $t_{(186)}$ = -2.64,

p = .009). Additionally, low marital satisfaction was related to higher post-deployment PTSD (B= 1.57, SEB = 0.77, t₍₁₈₇₎ = 2.05, p = .04). Interactive communication yielded no statistically significant results.

2.4 Treatments

Not to be overlooked, the GWOT has given birth to an explosion of research to treat PTSD. Different efficacious interventions are Cognitive Processing Therapy (CPT), Prolonged Exposure (PE), Eye Movement Desensitization and Reprocessing (EMDR), Imagery Rehearsal Therapy (IRT), hypnosis, relaxation techniques, group therapy, family therapy, Acceptance and Commitment Therapy (ACT), and Dialectical Behavioral Therapy (DBT) among others. Unfortunately most of the interventions are just that—interventions, they occur after the fact. This study tries to move from an intervention to prevention model attempting to get ahead of the curve before relationship dissolution. The Department of Veterans Affairs and Department of Defense (VA/DOD) clinical and practice guidelines (2010) noted that trauma focused psychotherapies (e.g., CPT, PE, EMDR) and stress inoculation training provided significant benefit. Also patient education, IRT, psychodynamic therapy, hypnosis, relaxation techniques, group therapy, and family therapy provide some benefit. However, web-based CBT, ACT, and DBT benefits are currently unknown.

Resick, Monson, and Chard (2008) created CPT, it can be administered in individual therapy or in a group format, typically in 12 sessions. CPT has been shown to be efficacious in treating combat trauma and Military Sexual Trauma (MST). The client receives psychoeducation, writes the meaning of the traumatic event, is introduced to thoughts and feelings, and re-writes their trauma. Additionally, the client covers five main domains in which trauma impacts a person: safety, trust, power/control, esteem, and intimacy (Resick et al., 2008).

EMDR is recognized as a treatment that provides significant benefit (VA/DOD, 2010).

EMDR has been studied among the veteran population for over two decades (Carlson,

Chemtob, Rusnak, Hedlund, & Muraoka, 1998; Shapiro, 1989; Silver, Brooks, & Obenchain,

1995; Silver, Rogers, & Russell, 2008). In fact, Shapiro (1989) included Vietnam War veterans in the first published article. EMDR has eight phases: history and treatment planning, preparation, assessment, desensitization, installation, body scan, closure, reevaluation (Shapiro, 2001). Conceptually, EMDR uses a three-pronged approach: past, present, and future, asserting that past memories lay the groundwork for present dysfunction and future actions.

PE is a treatment that has provided significant benefit to veterans (VA/DOD, 2010). It can be offered in a group or individual format, typically 90 minutes reoccurring on a weekly basis (Foa, Hembree, & Rothbaum, 2007). The client would be provided with general psychoeducation about PTSD, creating a self-ranked hierarchy ranking the least to most anxious situation; and then experiences in vivo and imaginal exposure to the traumatic event (Foa et al., 2007). In vivo exposure is the out of session homework the client does in which they would be gradually exposed to more fearful situations. Imaginal exposure is done in session and is the verbal account of the traumatic event.

Researchers have even developed trauma focused interventions at the dyadic and familial level from the cognitive behavioral (Monson, Fredman, & Adair, 2008) and attachment theoretical frameworks (Courtney, 2012). Cognitive-Behavioral Conjoint Therapy (CBCT) has three stages of treatment: rationale for treatment and psycho-education; satisfaction enhancement and undermining avoidance; and making meaning of the trauma and end of therapy (Monson et al., 2008). The PTSD Family Workshop Group Intervention Model was piloted at a Veterans Affairs Medical Center (VAMC) that involves three sessions for family members of veterans who have PTSD. The pilot results were significant and show promise.

Programs have emerged that attempt to help military personnel while on Active Duty. Families Over Coming Under Stress (FOCUS) was developed at Harvard Medical School and the University of California-Los Angeles (Lester et al., 2011) in an attempt to adaptively deal with military stressors. The program has eight lessons covered in parent/family and child

sessions. Parental and family sessions are 90 minutes whereas child sessions are 60 minutes (Lester et al., 2011). Couples and/or families that currently have substance abuse or domestic violence cannot participate. Though this is not per se therapy, it included psycho-education, emotional regulation skills, goal setting, problem solving skills, traumatic stress reminder management techniques and family communication skills. The Army has created the comprehensive soldier and family fitness (CSF2). This program was designed to promote physical and psychological health to assist in developing resiliency (DOA, 2013). This program is offered online which can be accessed anywhere at any time.

2.5 Gaps in the Literature

The qualitative findings have laid the groundwork for quantitative inquiry. Themes have been uncovered across the deployment cycle (Durham, 2010; Lapp et al., 2010; Sahlstein et al., 2009). Sahlstein et al. (2009) examined contradictions and praxis contextualized in a combat deployment. Faber et al. (2008) found common themes over the deployment cycle: pre (safety), during (roles), and post-deployment (reunion). Merolla (2010) found that sensory items were very commonly used. Lapp et al. (2010) concluded spouses felt they had to stay connected (by a phone, computer, etc), and Durham (2010) found service members tried to limit the contact with stateside family members.

The quantitative literature has produced correlation analyses (Houston et al., 2013; Ponder & Aguirre, 2012a; Renshaw, 2009), path analysis (Renshaw, 2011), advanced statistical techniques like MODPROBE (Carter et al., 2011, Hayes & Matthes, 2009) and mediation analyses (Allen et al., 2010). Renshaw et al. (2009) have shown that combat exposure can lead to PTSD or depression that is in turn directly related to marital satisfaction and social support. More to the point, Allen et al. (2010) showed that negative communication and positive bonding mediate PTSD and marital satisfaction.

There have been many different theoretical paradigms reviewed in this chapter: relationship dialectics (Sahlstein et al., 2009), biological (Agren et al., 2012), cognitive

behavioral (Renshaw, 2011), relational maintenance (Merolla, 2010), family communication (Houston et al., 2013), phenomenology (Lapp et al., 2010), and other qualitative orientations (Durham, 2010; Faber et al., 2008). Unfortunately, with all of the different researchers examining this topic, extraneous variables could be overlooked that cannot be explained from their theoretical orientation. Therefore, the largest gap in the current literature is a comprehensive theoretical framework to explain the complex and intricate emotional processes of individual and/or dyadic emotional expression. I believe that attachment theory is the broadest paradigm available to synthesize the current literature and explain most of the variables reviewed in this chapter. Additionally, little is known about female veterans and their partners, currently 15% of the military are female (Defense Manpower Data Center, 2008).

2.6 Conclusion

Communication in a combat zone has greatly evolved from WWII to the GWOT. Thus far, five qualitative and six quantitative studies of communication during GWOT have been reviewed that highlight the need for a more comprehensive theoretical framework. Additionally, a thorough review of current efficacious treatment modalities was provided that shows all interventions is conducted after the trauma. Shifting from intervention to prevention model with a sound theory is clearly needed; I propose that attachment theory can fill this gap.

Chapter 3

Attachment Theory

Unfortunately theory has been missing in published social work literature (Daley, Peters, Taylor, Hanson, & Hills, 2006). For example, Daley et al. (2006) reviewed 885 articles from 30 social work journals that were published in 2002. Astonishingly, approximately 71% made no mention of a theoretical framework (Daley et al., 2006). Later, Gentle-Genitty et al.(2007) attempted to replicate the previous study. They reviewed 1,168 articles from 37 social work journals and showed a similar trend, approximately 6% contributed to theoretical development. Thyer (2010, p. 470) asserts theories

can be roughly categorized into those focusing on description, explanation, prediction (e.g., creating hypotheses, and prescription (e.g., interventive theory), with grand theories encompassing all four of these aspects, and being applicable across a wide range of social work practice and psychosocial phenomena.

While no one theory can explain the entire variance or total effect of any construct, it is argued that attachment theory is the best fit. Attachment theory via internal working models can describe, explain, and can predict emotional expression (Mikulincer& Shaver, 2007).

Additionally, based on a person's given attachment style, it will be fairly easy to generate hypotheses and tailor an intervention for a dyadic relationship. If deficits in communication during a deployment can be found, then creating an intervention or template for success is a logical next step.

3.1 Beginnings

John Bowlby and Mary Ainsworth are commonly thought of as the early pioneers of attachment theory. Bowlby (1907-1990), the son of a practicing physician, was born in England. In his youth, Bowlby volunteered at a center for maladjusted youth and studied child psychiatry. Mikulincer and Shaver (2007) note that Bowlby studied psychoanalytic theory under Melanie Klein but eventually gravitated away from it because he felt they focused too much on fantasies and not on reality. In 1944,Bowlby published *Forty-Four Juvenile Thieves* suggesting that juvenile delinquents came from broken home backgrounds (Mikulincer & Shaver, 2007).Bowlby

found that the delinquents usually came from environments where bonding with a mother or mother like figure was interrupted due to loss, separation, or numerous foster placements.

After the carnage of World War II, Bowlby worked as a psychiatrist at the Tavistock Clinic in London and authored a paper about homeless children post-war for the World Health Organization (Mikulincer& Shaver, 2007). Bowlby was also heavily influenced from scholars (Harlow, 1959; Hinde, 1966; Loren, 1952) who studied emotional bonding, behavioral principals, and imprinting on animals (Mikulincer& Shaver, 2007). These scholars helped Bowlby form and mold his theoretical orientation. Bowlby published three papers (1958; 1960a, 1960b) that turned into his seminal book trilogy (1969/82, 1973, & 1980) that were printed and on occasion revised.

Mary Ainsworth (1913-1999) was a Canadian born developmental psychologist. She earned her PhD from the University of Toronto in 1939. Her dissertation first coined the term "secure base" (Mikulincer& Shaver, 2007). Early in her career Ainsworth lectured about personality assessment in academia. As a result she helped develop the Rorschach Inkblot Test that assesses personality structure. Her husband's work took them to London where she began to work with John Bowlby after responding to a job advertisement (Mikulincer& Shaver, 2007). The job entailed analyzing videos of human subjects. Ainsworth shifted her research to making behavioral observations which became one of the hallmarks in her research. Later she and her husband moved to Uganda where she furthered her studies on infant-mother interactions. She visited a group of mother-infants for two hours every two weeks for several months. After returning to the US, she published *Infancy in Uganda: Infant Care and the Growth of Love* in 1967. In 1978, she published a book with a procedure called the *Strange Situation* (Ainsworth, Blehar, Waters, & Wall, 1978). This book described a study where Ainsworth and colleagues created a controlled situation in which infants could be coded into various categories (i.e., secure attachment, anxious-resistant insecure attachment, anxious-

avoidant insecure attachment) (Mikulincer & Shaver, 2007). Both Bowlby and Ainsworth collaborated over the years contributing to attachment theory as it is known today.

3.1.1 Description of Attachment Theory

Bowlby consistently referred to attachment theory as the *attachment behavioral system* and it has two components: normative and individual differences. Mikulincer and Shaver (2007) assert the normative system is universal in everyone whereas the individual differences highlight a person's subjective interpretations. Mikulincer and Shaver (2007, p.11) highlight the six facets of the behavioral system:

(1) A specific biological function, which in the EEA [Environment of Evolutionary Adaptedness] increased the likelihood of survival or reproductive success; (2) a set of activating triggers; (3) a set of interchangeable, functionally equivalent behaviors that constitute the primary strategy of the system for attaining a particular goal; (4) a specific set-goal—the change in the person-environment relationship that terminates the system's activation; (5) the cognitive processes involved in activating and guiding the systems functions; and (6) specific excitatory or inhibitory neural links with other behavioral systems.

Studies have found support for attachment theory through biological evidence in orphans and other populations (Carter et al., 2005; O'Connor, 2005). Bowlby (1988) suggested that this system is potentially most impactful in the early years of development but is present through a person's life. Bowlby (1969/1982) posits that the attachment behavioral system is activated when a person perceives a threat in the environment. It is theorized that the threshold for the activation of the attachment system is greater in adulthood as opposed to infancy or childhood since adults have had many years to develop coping skills (Mikulincer & Shaver, 2007).

As an infant, once the attachment behavioral system is activated, s/he will seek proximity to their caregiver. This might take the form of a child outstretching their arms, wanting to be picked up and comforted. Later in adulthood, a person may seek physical proximity to an attachment figure, but will also pursue emotional closeness (Mikulincer & Shaver, 2007). For the attachment behavioral system to subside, a person must feel safe. This system eventually forms a blueprint or script of how interpersonal relationships are formed and maintained. When the attachment behavioral system is activated, it has a set-goal or goal-corrected aim: to

terminate the attachment behavioral system (Mikulincer & Shaver, 2007). Though the model has a behavioral title there are three cognitive elements:

(1) Processing information about the person-environment relationship, which involves monitoring and appraising threatening events and one's own internal state (e.g., distress, security); (2) monitoring and appraising the attachment figures responses to one's proximity-seeking attempts; and (3) monitoring and appraising the utility of the chosen behaviors in a given context, so that an effective adjustment of these behaviors can be made in accordance with contextual constraints. (Mikulincer& Shaver, 2007, p.15)

In Bowlby's work (1969/1982; 1973) and collaboration with others in the field (Craik 1943; Young 1964), this interplay was dubbed *working models* or attachment styles. Mikulincer and Shaver (2007) assert that working models mean two things: 1) An individual's behavior can be predicted based on the use of attachment behaviors and 2) a person's behavior is fluid and can be modeled or shaped over the course of someone's life.

3.1.1.1 Infant Attachment

Ainsworth (1967) was the first to notice individual differences in infant attachment and had an appendix in the manuscript giving sketches of different patterns of infant attachment (Mikulincer&Shaver, 2007). Later, Ainsworth et al. (1978) published a book chapter detailing the Strange Situation in which she observed an infant-caregiver for twenty minutes and then coded the child into one of three attachment classifications: secure attachment, anxious-resistant insecure attachment, anxious-avoidant insecure attachment. Later a fourth attachment style (disorganized/disoriented) was added (Main & Solomon, 1990).

Bowlby distinguishes between an attachment bond and attachment figure. Mikulincer and Shaver (2007, p.17) point out that Bowlby referred to the attachment bond as when the attachment relationship has been "psychological crystallized" (i.e., as a safe haven and secure base in times of need). An attachment figure is not just someone who you have a casual conversation or relationship with but rather can be "special individuals to whom a person turns when protection and support are needed" (Mikulincer & Shaver, 2007, p. 17). Mikulincer and Shaver (2007) note previous research (Ainsworth 1991; Hazan & Shaver 1994; Hazan &

Zeifman, 1994) shows that an attachment figure provides three roles: a person to turn to for proximity seeking, a safe haven, and a secure base. Separation distress (protest) is also an important tenet of attachment theory that occurs when the child cries when the attachment figure leaves sight. Proximity seeking is when the infant seeks physical proximity to the attachment figure. A safe haven occurs when an infant can return to the attachment figure for consolation. A secure base is when the attachment figure provides a firm foundation allowing the infant to explore the things in the environment.

Bowlby (1969/1982) and Ainsworth (1973) noticed four steps in the development of attachment bond among infants and their caregivers: pre-attachment (0-2 months), attachment in the making (2-6 months), clear-cut attachment (6-7 months), and goal corrected partnership (two years and older). Researchers (Hazan & Zeifman, 1999) were able to find a similar pattern of attachment development in adult romantic relationships: pre-attachment, attachment-in-themaking, and clear-cut attachment.

3.1.1.2 Adult Attachment

Conceptually, in adult attachment there are four attachment styles: secure, preoccupied, dismissing, and fearful (Mikulincer & Shaver, 2007). Each attachment style has its own unique template for viewing oneself and other individuals. Securely attached persons have a positive view of self and other. Preoccupied people have a negative view of self and positive view of other. A dismissing person has a positive view of self and negative view of other. A fearful person has a negative view of self and a negative view of other. Additionally, dismissing people use the secondary strategy of avoidance whereas preoccupied persons use the secondary strategy of anxiety.

Bowlby (1979) observed that attachment to others is present from the cradle to the grave. Research has shown that as human beings age, the attachment figure can shift.

Zeifman and Hazan (2008) acknowledge that as an infant matures into a child and then an adolescent, normative development takes place where the attachment figure shifts from parents

to peers. Hazan and Zeifman (1999) conducted an interview of over 100 people from ages 6 to 17 and assessed the four tenets of attachment theory: proximity seeking, safe haven, secure base, and separation distress. Of those individuals ages 8 to 14, most shifted to relying on their peers for a safe haven with most still reporting parents provide a secure base and separation distress. As they surveyed participants aged, those 15 to 17 years old demonstrated "full-blown attachments to peers" in all for areas proximity seeking, safe haven, secure base, and separation distress (Zeifman & Hazan, 2008, p. 339). Most of those 15 to 17 years old named a romantic partner as their primary attachment figure.

Hazan and Zeifman (1999) went on to conduct a follow up study to investigate adults and grouped them into three categories: "not in a relationship", "in a romantic relationship for less than 2 years" and "in a romantic relationship for 2 or more years." Possible attachment figures in their study were parents, adult sibling/friend, and romantic partner. Their results confirmed the findings of the earlier study. All adults identified peer-oriented behaviors in proximity seeking and safe haven constructs. However, for people in a relationship two years or more, those individuals primarily identified their partner as providing a secure base and the person who separation distress was directed towards. The majority of those in a relationship "two years or less" named their parents as providing a secure base and who separation distress behaviors were directed towards. Thus, they concluded an individual shifts the attachment figure from parents to peers and eventually to a pair-bond (romantic relationship) (Zeifman & Hazan, 2008).

3.1.2 Activation of the Attachment Behavioral System

Individuals whose primary attachment strategy (proximity seeking) does not work, resort to secondary strategies. These can be conceptualized as hyperactivation and deactivation (Mikulincer & Shaver, 2007); others have even suggested this resembles flight versus fight. In hyperactivation, the individual becomes very persistent and does things (which can resemble protest) to get the attention of the attachment figure whereas deactivation is avoidance and

isolation. The goal of the individual who deactivates is an attempt to turn off the attachment behavioral system (Mikulincer & Shaver, 2007). Over time, these strategies (primary attachment strategy, secondary strategies) eventually form a working model. Mikulincer and Shaver (2007, p.24) assert "the chronically accessible overall model coexists with less strong and less personally characteristic working models mood or internal state." Conceptually, there is a hierarchy of working models and the overall or most prevalent is the individual's attachment style (secure, preoccupied, dismissive, or fearful).

Since this dissertation focuses on adult romantic attachment, an emphasis will be placed on adult system activation/deactivation. Mikulincer and Shaver (2007) present a model (Please see Figure 3-1) synthesizing previous research (Fraley & Shaver, 2000; Shaver, Hazan, & Bradshaw, 1988;). The model addresses three issues (p. 30):

(1) proximity seeking following attachment-system activation (the attachment system's primary strategy), (2) beneficial consequences of using this strategy effectively to attain the support of a security-providing attachment figure, and (3) secondary strategies (called anxious hyperactivation and avoidant deactivation) pursued in response to attachment figure unavailability or unresponsive.

Specifically, the first part of the model deals with the person's assessment and appraisal of a threatening event. These threats can be both attachment related and unrelated. Attachment related could be a third party competing for the attachment figure's attention, and attachment unrelated might be a medical diagnosis with a negative prognosis such as cancer. A person's initial assessment of the threatening stimuli is a subjective judgment made by the individual (Mikulincer & Shaver, 2007).

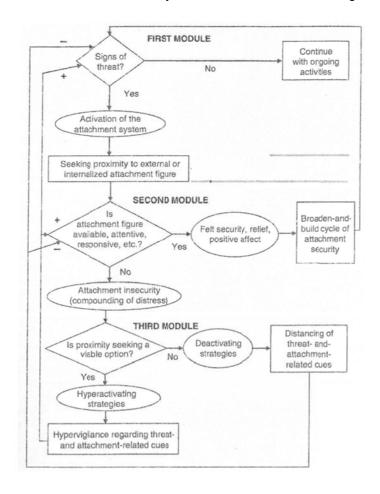


Figure 3.1. A model of attachment-system activation and functioning in adulthood

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The second stage of their model determines whether the attachment figure is available, attentive, or responsive. If the individual perceives interest from the attachment figure, then the individual experiences "felt security, relief, positive affect" which extinguishes the attachment behavioral system (Mikulincer & Shaver, 2007, p. 31). If the individual concludes that the attachment figure is not interested, then they move into the third stage of the model. At this time the individual falls back on previous mental representations to draw from with responses ranging from hyperactivation to deactivation. The goal of hyperactivation strategy would be to

gain the attention of the unavailable attachment figure whereas the goal of deactivation strategy is to extinguish the attachment behavioral system.

3.1.3 Critiques and Strengths of Attachment Theory

In the past, attachment theory has been criticized for having early roots in mother-infant patterns without including a paternal figure (Eyer, 1996). However, attachment theory has a plethora of positive aspects as well. Attachment theory takes into account normative and non-normative development (Mikulincer & Shaver, 2007). It has been the theoretical framework for a variety of different study samples: undergraduate students in the US (Roberts & Pistole, 2009), Prisoners of War (POWs) in Israel (Dieperink, Leskela, Thuras, & Engdahl, 2001), and even US veteran samples (Williams, 2010) which will allow for comparative analyses.

Attachment theory has been the paradigm used in development and revision of dozens assessment instruments. If this dissertation can identify maladaptive patterns of coping via attachment style, then, theoretically, adaptive adjustments can be implemented seamlessly.

3.1.4 Summarizing Key Assumptions of Attachment Theory

3.1.4 Summarizing Key Assumptions of Attachment Theory

Attachment theory began with Bowlby and Ainsworth but has become widely accepted in contemporary social sciences. Thus far it has been shown that the older a person gets, the attachment bond shifts from parent to peer to significant other (Zeifman & Hazan, 2008). The attachment system is only activated when a person views external stimuli (real or perceived) as a threat. If proximity-seeking behaviors to the attachment figure are not successful, secondary strategies (avoidance and anxiety) are employed. A thorough factor analysis by Brennan, Clark, and Shaver (1998) showed that two factors, avoidance and anxiety, held constant across almost all attachment style assessment instruments. By creating a y-axis (avoidance) and x-axis (anxiety), four quadrants emerged.

3.2 Creating A Profile from Undergraduate Students

Attachment theory as applied to undergraduate students provides an excellent starting point for beginning to study long-distance relationships within a military context. By using the

undergraduate literature as a road map, it is hoped that empirical findings can be replicated with service members and their partners. Virtually all attachment theory research studying long-distance relationships has been conducted on undergraduate students (Drouin & Landgraff, 2012; Gilbertson, Dindia, & Allen, 1998; Guerrero, Farinelli, & McEwan 2009; Jin & Peña, 2010; Pistole, Roberts, & Chapman, 2010; Roberts & Pistole, 2009; Timm & Keily, 2011; Weisskirch, 2012; Weisskirch & Delevi, 2011). One manuscript theoretically postulates how a deployment would affect the stateside family attachment system (Riggs & Riggs, 2011). I will first review the attachment literature within common themes: Long Distance Relationships (LDR) and Geographically Close Relationship (GCR), attachment and emotional regulation. Based upon the prototypes undergraduate students in long-distance relationships, I will postulate how attachment theory can be used to explain communication during a combat deployment and its impact on post-deployment mental health.

For decades in long-distance relationships, there have been attempts to measure a couple's behavior. The Routine and Strategic Relational Maintenance Scale (RSRMS) is one of the most common assessment instruments used when quantifying long-distance relationships (Pistole et al., 2010). Stafford et al. (2000, p. 306) broadly define maintenance as "actions individuals undertake with the conscious intent of maintaining their relationships. Research (Stafford, Dainton, & Haas, 2000) has provided a clear delineation between strategic and routine relationship maintenance behaviors. Stafford et al. (2000, p. 307) "view strategic maintenance behaviors as those which individuals enact with the conscious intent of preserving or improving the relationship" whereas routine behaviors "are those that people perform that foster relational maintenance more in the manner of a 'by-product.'" These concepts were first developed by Stafford and Canary (1991) and subsequently revised (Canary & Stafford, 1992). The original instrument Stafford and Canary developed (1991) contained five factors (positivity, openness, assurances, networks, and sharing tasks) and only probed strategic behavior.

However, in later factor analysis, two factors split and created four factors (Stafford et al., 2000) bringing the aggregate to seven. The factors that expanded were the original openness factor, which led to the addition of the advice giving factor; and the original positivity factor led to the development of the conflict management factor. There are two routine (advice giving and conflict management) and five strategic (positivity, openness, assurances, networks, and sharing tasks) factors. The original five factors represent a more deliberate approach to the maintenance of a relationship whereas the two new factors represent more day-to-day activities.

Several years later, Stafford (2010) attempted to address two issues with previous maintenance scales' (Canary & Stafford, 1992; Stafford, 2000; Stafford & Canary, 1991) item construction and conceptual flaws. Upon inquiry Stafford (2010) noticed poor question structure such as double or triple barreled questions and ambiguous language within the question. Some conceptual flaws were that questions within the same factor were correlated and that they tapped into different domains of life aside from maintenance behaviors (Stafford, 2010). As a result of this methodological review a seven-factor structure emerged (positivity, assurances, relationship talk, self-disclosure, understanding, networks, and tasks) (Stafford, 2010).

Around the same time the RSRMS was first developed, scholars were also investigating how couples who were not geographically close maintained their relationships. Sigman (1991) asked the research question "how is continuity of social relationships across interactional hiatuses organized and maintained?" (p. 109). He asserts that relationship continuity constructional units (RCCUs) are how the relationship is maintained and that it is continuous, though not co-present (geographically close). RCCUs are behaviors that a couple does before, during, and after reunion to maintain the continuity of their relationship. Sigman (1991) delineated three types of RCCUs: prospective units, introspective units, and retrospective units. Prospective units are done before the couple is geographically separated; introspective units are done during the separation; and retrospective units are what the couple does after reunification.

Sigman (1991) notes "these [prospective] units define the meaning and duration of the impending separation and of the likely return" (p. 112). Examples are "bye", "see you next time" or "don't forget to write." Sigman (1991) asserts introspective units can be but are not limited to wearing wedding rings or physical objects (clothes, necklace, etc.), photographs, and possibly re-reading old letters. Sigman (1991) asserts retrospective units can be discussing things in copresence that they wrote or talked about while geographically separated.

3.2.1 Long Distance Relationships (LDR) and Geographically Close Relationship (GCR)

Gilbertson, Dindia, and Allen (1998) used a sample of 56 couples (30 were married and 26 were cohabitating) to study co-presence, satisfaction, and RCCUs. Gilbertson et al. (1998) generated a list of RCCUs from Sigman's (1991) study and had the respondents rate how often they used those behaviors (ranging from 0% = never to 100% = every time). Gilbertson et al. (1998) tested three hypotheses relating to co-presence and marital satisfaction; the relationship between RCCUs and relational satisfaction; and RCCUs and relational satisfaction when co-presence is held constant.

Gilberston et al. (1998) used correlations and regressions in their statistical analyses. Hypothesis one investigated if co-presence was related to marital satisfaction. It was supported, showing that correlations for men and women were statistically significant for time spent together and marital satisfaction. Additionally, the more time apart (not co-present) the lower the satisfaction for both men and women. Hypothesis two investigated RCCUs and relationship satisfaction. Correlation analyses showed that the percentage of time spent using RCCUs before, during, and after reunion were statistically significantly related to marital satisfaction for both genders. Specifically, female use of prospective (r = .600), introspective (r = .293), and retrospective units (r = .531) were all statistically significantly related to female marital satisfaction. Whereas, only female use of prospective (r = .351) and retrospective units (r = .322) were significantly related to male marital satisfaction. Thus female use of RCCUs influenced male and female satisfaction whereas male use of RCCUs was not statistically

significant for any satisfaction. Hypothesis three investigated a positive relationship between satisfaction and RCCUs when co-presence is controlled. In the regression, female and male prospective RCCUs were statistically significant predictors of female satisfaction. The only statistically significant predictor of male satisfaction was female prospective RCCUs. Please see Table 3.1.

Table 3.1 Gilberston et al. (1998)

Gilberston et al. (1998)			
Sample Statistica	ll Findings		
56 heterosexual couples	Correlations		
-30 married -26 cohabitating	Satisfaction & co- presence Male (r = .30, p < .05)	Female satisfaction & RCCU Female prospective ($r = .600$, p < .05) Female introspective ($r = .293$, p <	Male satisfaction &RCCU Female prospective (<i>r</i> = .351, p < .05) Female introspective (<i>r</i> = .121, ns)
Measure(s) RCCU	Female ($r = 41$, p < .05)	.05) Female retrospective (<i>r</i> = .531, p < .05)	Female retrospective (<i>r</i> = .322, p < .05)
Limitations -operational definition of co-presence and RCCU	Regression	,	
	DV was female satisfaction Best fitting equation (R = .69, F = 15.52, p < .01) Female prospective (partial r = .60, F = 29.35, p < .01) Male prospective (partial r = .32, F = 5.89, p < .05) Co-presence (partial r = .29, F = 4.63, p < .05		
	DV was male satisfaction Best fitting equation (R = .3 Female prospective (no	,	

Note. Relationship Continuity Constructional Units (RCCU), Dependent variable (DV), not statistically significant (ns).

Pistole et al. (2010) also examined anxiety/avoidance attachment as measured by the ECR and maintenance behaviors on perceived global stress. They conducted three hierarchical regressions on LDRs and GCRs separately. In step one, sex and data group (there were two waves of data collection in a four year interval) were entered; in step two avoidance and anxiety were added; and in step three, conflict management (routine MB), shared tasks (strategic MB), positivity (strategic MB), advice (routine MB), social networks (strategic MB), prospective (RCCU), and introspective (RCCU) were added. The findings were strikingly similar. For LDRs,step one had an Adjusted R² of .40; step two .51; and the final model accounted for 56% of the variance in perceived global stress. For GCRs step one had an Adjusted R² of .43; step two .52; and the final model accounted for 55% of the variance in perceived global stress.

The final models for both LDRs and GCRs are similar but the statistically significant predictor variables differed. For LDRs and GCRs in step one, only data group was significant. In step two, avoidance and anxiety were statistically significant for both LDRs and GCRs. However, once maintenance behavior variables were added in step three, things shifted suggesting that LDRs communicate differently than GCRs. For GCRs, anxiety (β = .21) and data group (β = .65) were the only statistically significant predictor variables on perceived global stress. However, for LDRs, data group (β = -.57), anxiety (β = .27), positivity (strategic MB, β = -.15), advice (routine MB, β = .09), and introspective (RCCU, β = .14) were all statistically significant predictors of perceived global stress. Please see Table 3.2.

Table 3.2 Pistole et al. (2010)

	()	
Pistole et al. (2010)		
Sample	Statistical Findings	
N = 473 (male = 119;	Correlations	
female 352)		
LDR = 294	Avoidance (ECR)	Anxiety (ECR)
GCR = 179	Assurances ($r =57$, p < .01)	Assurances ($r =01$, ns)
Unmarried seriously dating	Openness ($r =70$, p < .01)	Openness ($r =12$, p < .01)
	Conflict mgt ($r =44$, p < .01)	Conflict mgt ($r =27$, p < .01)
Measure(s)	Shared tasks ($r =34$, p < .01)	Shared tasks ($r =14$, p < .01)
RQ	Positivity ($r =26$, p < .01)	Positivity ($r =20$, p < .01)
ECR	Advice $(r =31, p < .01)$	Advice $(r =06, ns)$
RCCU	Social networks ($r =31$, p <	Social networks (r =18, p <
RSRMS	.01)	.01)
PSS	Prospective ($r =39$, p < .01)	Prospective ($r =01$, ns)
	Introspective ($r =31$, p < .01)	Introspective ($r = .02$, ns)
<u>Limitations</u>	Retrospective ($r =32$, p < .01)	Retrospective ($r =09$, ns)
Operational definition of	Stress (r = .21, p < .01)	Stress ($r = .34$, p < .01)
LDR and GCR		
Higher scores on PSS in	Multiple Regressions	
data wave 1		
	LDR on DV (PSS)	2
	Final equation (step two): F(4, 28	(89) = 77.87, p < .001, R = .72, R2
	= .52, Adjusted R^2 = .51	
	Sex (β = .03, ns)	
	Data group ($\beta =61$, p < .001)	
	Avoidance ($\beta = .08, p < .05$)	
	Anxiety (β = .27, p < .001)	
	CCD on DV (DCC)	
	GCR on DV (PSS)	(4) = 40.06 × 4.004 D = 72 D ²
	Final equation (step two): F(4, 17	$4) = 48.96, p < .001, R = .73, R^{-1}$
	= .53, Adjusted R ² = .52	
	Data group ($\beta =65$, p < .001)	
	Avoidance (β = .13, ns)	

Note. Experiences in Close Relationships (ECR),Relationship Continuity Constructional Units (RCCU), Relationship Questionnaire (RQ), Routine and Strategic Relational Maintenance Scale (RSRMS), Perceived Stress Scale (PSS), Long Distance Romantic Relationship (LDR), Geographically Close Romantic Relationship (GCR), Dependent Variable (DV).

Anxiety (β = .20, p < .01)

In a different study, Roberts and Pistole (2009) investigated attachment and closeness on satisfaction in college student's long-distance romantic relationships (LDRRs) and geographically proximal romantic relationships (PRRs). There were no statistically significant differences between LDRRs and PRRs on satisfaction or attachment frequencies (secure, preoccupied, dismissive, and fearful). Roberts and Pistole (2009) conducted two separate

hierarchical regressions of attachment and closeness on satisfaction for LDRRs and PRRs. In the final hierarchical regression models, the Adjusted R² was .26 indicating the variables in each equation explained 26% of the variance in satisfaction for LDDRs and PRRs, separately. For PRRs, living together (β = -.39), anxiety (β = -.34), and avoidance (β = -.30) were all statistically significant. The standardized regression coefficients suggest that as the independent variables (living together [the authors dummy coded dating categories as live with partner, date steadily, and date regularly], anxiety, and avoidance) increase the relationship satisfaction decreases. However, in the LDRR regression equation, only avoidance (β = -.53) was a statistically significant predictor of satisfaction indicating the more avoidant a person is the lower the relationship satisfaction. Please see Table 3.3.

Table 3.3 Roberts & Pistole (2009)

Roberts & Pistole (2009)

Sample

N = 238 (male = 113; female 125)

102 LDRR

136 PRR

Currently dating

Measure

RQ

ECR

RCI

IOS

DAS satisfaction subscale

Limitations

need a better definition of LDRR & PRR

cross-sectional

demographics skewed towards Whites

(89.1%)

Statistical Findings

Hierarchical Regression

LDRR on DV (DAS satisfaction subscale)

Final model Adjusted $R^2 = .26$

Avoidance ($\beta = -.53$, p < .001)

Anxiety (β = -.00, ns)

PRR on DV (DAS satisfaction subscale)

Final model Adjusted $R^2 = .26$

Living together ($\beta = -.39$, p < .01)

Avoidance ($\beta = -.34$, p < .01)

Anxiety ($\beta = -.30$, p < .01)

Note. Relationship Questionnaire (RQ), Experiences in Close Relationships (ECR), Inclusion of Other in the Self (IOS), Relationship Closeness Inventory (RCI), Dyadic Adjustment Scale (DAS), Long-distance Romantic Relationship (LDRR), Proximal Romantic Relationship (PRR), Dependent Variable (DV)

3.2.2 Attachment and Emotional Regulation

Each attachment style regulates, tolerates, and modulates emotion differently. Possibly the most thorough consolidated place of attachment and emotional regulation comes from chapter seven in Mikulincer's and Shaver's (2007) *Attachment in Adulthood: Structure, Dynamics, and Change*. Mikulincer and Shaver (2007) highlight that in volume I of Bowlby's (1969/1982) trilogy, only one chapter addressed emotions. However, in volumes II and III there are emotional words—loss, sadness, depression, anxiety and anger—in the subtitles. Emotional regulation is core construct for attachment theory, as noted by secondary strategies (hyper-activation and deactivation). According to Bowlby (1980), secure attachment allows individuals to endure and overcome experiencing negative affect whereas insecure attachment loses emotional equilibrium (Mikulincer & Shaver, 2007).

Having secure attachment allows one to adapt and modulate situations. If a secure person experiences a situation in which negative emotions emerge, they can problem solve or reassess the situation cognitively to arrive at an adaptive resolution (Mikulincer & Shaver, 2007). Skills that secure people learn at a young age such as support seeking will extinguish the attachment system. Secure people also demonstrate self-confidence, express anger in an appropriate way, and can tolerate stress without losing their temper (Mikulincer & Shaver, 2007).

People with avoidant attachment attempt to suppress emotion. Mikulincer and Shaver (2007) assert that special attention is focused on fear, anxiety, anger, sadness, shame, guilt, and distress because these represent emotions that can activate the attachment system. Avoidant attachment attempts to keep emotional distance and not seek support from people because interpersonal activity could activate the attachment system. Anxious attachment does the opposite, amplifying negative emotional states. Both avoidant and anxious attachment lead to the same problem: inability to tolerate and modulate negative affect to an adaptive conclusion, albeit through different styles: deactivation and activation.

Mikulincer and Shaver (2007, p. 194) delineate differences among different adult styles of attachment in their model of attachment activation and functioning in adulthood:

(1) Use of the primary attachment strategy (support seeking); (2) appraisal, reappraisal, and other aspects of coping with stress (problem solving, emotion-focused strategies, distancing); (3) management of attachment-related threats; (4) experience and management of specific emotional states; and (5) mental access to emotional memories and experiences.

As delineated in the model, preconscious activation looks different for secure, anxious, and avoidant attachment styles. When a threat presents itself, secure attachment people respond with greater access to thoughts of relief. Anxious attachment usually has elevated rates of words related to rejection and/or separation. People with avoidant attachment deactivated when the word separation was used (Mikulincer, Gillath, & Shaver, 2002).

3.2.3 Attachment Style: Support Seeking and Coping in Stressful Events

Research on attachment styles has revealed clear trends in the literature. Mikulincer and Shaver (2007) reviewed thirty-five studies, and consistent patterns emerged for secure and avoidant attachment. Please see table 3.4 below (reprinted with permission) for a complete list of the studies reviewed. Those with secure attachment consistently reported support seeking tendencies and avoidant people tended to be less likely to seek support. Evidence regarding anxious attachment was not consistent—some showed an increase whereas others showed a decrease in support seeking. Mikulincer and Shaver (2007) reviewed a study (Vogel & Wei, 2005) that delineated two pathways from anxious attachment to support seeking. Anxious attachment was related to amplification of stress, which created greater support seeking and another was that a negative view of a potential source of support reduced support seeking.

Table 3.4 A Summary of Findings Concerning Attachment Orientation and Support-Seeking Tendencies

Studies	Attachment scale	Support Scale	Target	Main findings for the tendency to seek support
Studies assessing secure attach	•			
Greenberger & McLaughlin (1998)	HS ratings	COPE	Global	Security (+)
Torquatl & Vazsonyi (1999)	AAS	CAPSE	Global	Security (+)
Larose et al. (2001)	IPPA	ACBS	Counselor	Security (+)
Paley et al. (2002)	AAI	interview	Spouse	Security (+) (only for husbands)
Studies assessing attachment type	pes			
J. A. Fenney & Ryan (1994)	HS ratings	1 item	Professional	Secure > Avoidant
Florian et al. (1995)	HS types	SSS	Parents, peers	Secure > Anxious, Avoidant
Mikulincer et al. (1993)	HS types	WOCS	Global	Secure > Anxious, Avoidant
Mikulincer & Florian (1998)	HS types	WOCS	Global	Secure > Avoidant
Birnbaum et al. (1997)	HS types	WOCS	Global	No significant differences
Mikulincer & Florian (1995)*	HS types	WOCS	Global	Secure> Anxious, Avoidant
Ognibene & Collins (1998)	RSQ	WOCS	Global	Secure > Avoidant, Anxious
Priel et al. (1998)	RQ	1 item	Friends	Secure > Avoidant
Kemp & Neimeyer (1999)	RQ	WOCS	Global	No significant differences
Mikulincer & Florian (1999c)	HS types	WOCS	Global	Secure > Avoidant, Anxious
Berant et al. (2001a)	HS ratings	WOCS	Global	Secure > Avoidant, Anxious
R. DeFronzo et al. (2001)	RSQ	SSFQ	Global	Secure > Avoidant
Schmidt et al.(2002)	New scale	BCM	Global	Secure > Avoidant
Seiffge-Krenke & Beyers (2005)	AAI	CASQ	Global	Secure > Avoidant, Anxious
Studies based on attachment rat	ings or dimensions			
Radecki-Bush et al. (1993)	HS ratings	WOCS	Global	Avoidance (-)
Kotler et al. (1994)	HS ratings	WOCS	Global	Anxiety (ns), Avoidance (-)
Glachan & Ney (1995)	AAS	Narrative	Global	Anxiety (ns), Avoidance (ns)
J. A. Fenney (1998)	ASQ	Narrative	Global	Anxiety (-), Avoidance (-)
Lopez et al. (1998)	RQ model of	ATSPPH	Professional Counselor	Avoidance (ns)
	other	WSCS		Avoidance (-)
Pierce & Lydon (1998)	AAS	6 items	Global	Anxiety (ns), Avoidance (-)
Larose et al. (1999, Study 1)	ASQ	SHTS	Teacher	Anxiety (-), Avoidance (-)
Larose et al. (1999, Study 2)	ASQ	SHTS	Mentor	Anxiety (ns), Avoidance (-)
` '				

Berant et al. (2001b)

Larose et al. (2001)

Table 3.4—Continued

Harvey & Byrd (2000)

Alexander et al. (2001)

Larose & Bernier (2001)

Jerome & Liss (2005)

Vogel & Wei (2005)

Howard & Medway (2004)

Horppu & Ikonen-Varilla (2001)

AAS **FCOPES** Global ASQ WOCS Global **HS** ratings WOCS Global RQ 14 items Global **ASQ** ACBS Counselor AAI **TRAC** Teacher

COPE

COPE

ISCI

RSQ

ECR

ECR

Secure (+), Anxious (-), Avoidant (-) Anxiety (ns), Avoidance (-)

Anxiety (ns), Avoidance (-)
Anxiety (+), Avoidance (-)

Secure (ns), Anxious (ns), Avoidant (-)

Anxiety (-), Avoidance (-)

Anxiety (-), Avoidance (-) Anxiety (-), Avoidance (-)

Anxiety (-), Avoidance (-)
Anxiety (+), Avoidance (-)

Anxiety (+), Avoidance (-)

Note. *, longitudinal design; (-), significant inverse correlation; (+), significant positive correlation; (ns), nonsignificant effects; ACBS, Academic Counseling Behavior Scale; ATSPPH, Attitude toward Seeking Professional Psychological Help; BCM, Bernese Coping Modes; CAPSI, Child and Adolescent Problem-Solving Inventory; CASQ, Coping across Situations Questionnaire; FCOPES, Family Crises-Oriented personal Evaluation Scale; HS, Hazan and Shaver; ISCL, Intentions to Seek Counseling Inventory; SHTS, Seeking Help from Teacher Scale; SSFQ, Stress and Social Feedback Questionnaire; SSS, Support-Seeking Scale; TRAC, Test of Reactions and Adaptation to College; WSCS, Willingness to Seek Counseling Scale; WOCS, Ways of Coping Scale.

Global

Global

Counselor

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Mikulincer and Shaver (2007) reviewed forty-one studies and conclude there are different ways that each attachment style appraises and copes with distress. Please see table 3.5 below (reprinted with permission) for a complete list of the studies reviewed. They found consistent themes for secure and anxious attachment. Specifically, secure people believe they are able to cope effectively which deescalates the situation. On the other hand, people with anxious attachment conceptualize themselves as unable to cope with distress that only amplifies the situation. Avoidant people on the whole view themselves as capable to cope but can build up the situation so it becomes more stressful than it really is (Mikulincer & Shaver, 2007).

Table 3.5 Studies Linking Attachment Orientation with Patterns of Coping with Stressful Events

Study	Attachment Scale	Coping Scale	Type of Stressful Event
Mikulincer et al. (1993)	HS types	WOCS	Missile attack
Radecki-Bush et al. (1993)	HS ratings	WOCS	Partner infidelity
Kotler et al. (1994)	HS ratings	WOCS	College transition
Fenney (1995b)	ASQ	MBS	Recent major stressors
Glachan& Ney (1995)	AAS	Narrative	Infants distress
Mikulincer & Florian (1995)	HS types	WCOS	Combat training
Birnbaum et al. (1997)	HS types	WOCS	Divorce
Lopez (1996)	ASQ	GCTS	Recent major stressors
Lussier et al. (1997)	HS tyupes	CISS	Relation conflicts
Greenberger & McLaughlin (1998)	HS ypes	COPE	Recent major stressors
J. A. Fenney (1998)	ASQ	Narrative	Separation
Meyers (1998)	HS types	DMI	Recent major stressors
Mikulincer & Florian (1998)	HS types	WOCS	Chronic pain
Mikulincer & Florian (1998)	HS types	WOCS	Parenthood
Mikulincer & Florian (1998)	HS types	WOCS	Caring for a mentally ill
			adolescent
Ognibene & Collins (1998)	RSQ	WOCS	Recent major stressors
Raskin et al. (1998)	HS types	CSI	Work load
Z. Solomon et al. (1998)	HS types	Narrative	Captivity
Kemp & Neimeyer (1999)	RQ	WOCS	Recent major stressors
Mikulinver & Florian (1999c)	HS types	WOCS	Pregnancy
Shaprio & Levendosky (1999)	AAS	COPE	Relationship conflicts
Torquanti & Vazsonyi (1999)	AAS	CAPSI	Relationship conflicts
Harvey & Byrd (2000)	AAS	FCOPES	Family problems
Marhsall et al. (2000)	HS ratings	CISS	Recent major stressors
Alexander et al. (2001)	ASQ	WOCS	Parenthood
Berant et al. (2001a)	HS ratings	WOCS	Parenthood
Berant et al. (2001a)	HS ratings	WOCS	Caring for an infant with CHD
Berant et al. (2001b)	HS ratings	WOCS	Caring for an infant with CHD
J. A. Fenney & Hohaus (2001)	RQ	Narrative	Caregiving-related stress

Table 3.5—Continued

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Horppu & Ikonen-Varila (2001)	RQ ECR	14 items	College exam	
Lopez et al. (2001) Lopez et al. (2002)	ECR	PF-SOC PF-SOC	Recent major stressors Recent major stressors	
Lopez & Gormley (2002)	RQ	PF-SOC	College transition	
Schmidt et al. (2002)	APR	BCM	Health problems	
Williamson et al. (2002)	RQ	WOCS	Caring for a child with chronic	
77 marrison of all (2002)			pain	
Turan et al. (2003)	RSQ	DCM	Diabetes	
Wei et al. (2003)	AAS	PF-SOC	Recent major stressors	
Howard & Medway (2004)	RSQ	COPE	Recent major stressors	
Scharf et al. (2004)	AAI	WOCS	Combat training	
Jerome & Liss (2005)	ECR	COPE	Recent major stressors	
	AAI	CASQ	Recent major stressors	
Note. *, longitudinal design, AAPR, Adult Attachment Prototype Rating; BCM, Bernese Coping				
Models; CAPSI, Child and Adolescent Problem-Solving Inventory; CASQ, Coping across				
Situations Questionnaire, CISS, Coping Inventory for Stressful Situations, CSI, Coping Style				
Inventory; DCM, Diabetes's Coping Measure; DMI, Defense Mechanism Inventory; FCOPES,				
Family Crises-Oriented Personal Evaluation Scale; GCTS, Global Constructive Thinking Scale;				
HS, Hazan and Shaver; MBS, Monitory Blunting Scale; PF-SOC, Problem-focused Styles of				
Coping; WOCS, Ways of Coping Scale				
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As shown in the above referenced table there is an extensive list of stressful events which can include separations, relationship dissolution, or death of a person in the dyadic relationship (Mikulincer & Shaver, 2007). Avoidant people were less likely to seek support whereas people with anxious attachment showed elevated rates of anger and constant ruminating about the former partner. In regards to bereavement, studies consistently showed extended grief periods for anxious attachment and internalizing which could include somatic

symptoms for avoidant attachment (Mikulincer & Shaver, 2007).

Mikulincer & P. R. Shaver, 2007, New York: The Guilford Press. Copyright 2007 by The

Mikulincer and Shaver (2007) also reviewed how secure, anxious, and avoidant attachment styles deal with anger. On the whole secure attachment is related to successfully expressing anger to an adaptive resolution. Avoidant attachment attempts to suppress anger, however, it can still leak out in unintended ways within a dyadic relationship. Anxious attachment amplifies anger that can create severe episodes of angry outbursts with the partner.

Additionally, Mikulincer and Shaver (2007) put forth the ideas that each attachment style has different mental access to emotional memories and experiences. They reviewed a study by Mikulincer and Orbach (1995) that supported this notion in which participants were asked to retrieve childhood memories surrounding anger, happiness, sadness, and anxiety. Secure people used the greatest amount of time to recall but there memory retrieval was adaptive. Anxious people had the fastest recall whereas avoidant attachment had the poorest recall.

In sum, Mikulincer and Shaver (2007) reviewed approximately seventy-six articles for their book chapter on emotional regulation. Clear and consistent themes emerged for the attachment styles. People with secure attachment are more adaptive and successful in navigating emotional turmoil. People with avoidant attachment attempt to distance themselves via emotional suppression from unwanted affects that could activate the attachment system whereas anxious people tend to intensify emotion that only reinforces the maladaptive coping strategies.

3.2.3.1 Attachment and Emotional Communication

In this section, emotional regulation and attachment in a co-present dyadic relationship will be discussed. Two studies employed robust inferential statistics SEM (Guerrero, et al., 2009) and path analysis (Timm & Keiley, 2011). Guerrero et al. (2009) investigated relationship satisfaction and emotional communication and selected two forms of negative affect (anger and sadness) to include due to extensive reference in the literature (Bowlby, 1969, 1973, 1980; Mikulincer & Shaver, 2005). Guerrero et al. (2009) studied four types of anger expression: assertion, aggression, passive aggression, and avoidance. They operationalized sadness as how a person deals with it (solitude, immobilization, and dependent behavior). In their regression equations, they were able to show one partner's relationship satisfaction depended on the others attachment style (secure, β = .22, t = 5.39, p <.001; dismissive, β = -.18, t = -4.33,

p<.001; preoccupied, β = -.13, t = 2.47, p<.01; fearful, β = -.04, t = -.81, p>.05 [not statistically significant]).

Expanding on the findings from the regression equations, they used structural equation models (SEM) to investigate mediating variables between attachment style and relationship satisfaction. There were three categories for mediated forms of communication: pro-social, detached, and destructive. In the SEM for secure attachment, the standardized indirect effect on satisfaction was .27. The standardized direct effect from secure attachment to relationship satisfaction was .04, which was considerably less than the standardized regression coefficient (β = .22). In the SEM for dismissive attachment, the standardized indirect effect on satisfaction was -.12. The standardized direct effect from dismissive attachment to relationship satisfaction was -.07, which was less than the standardized regression coefficient (β = -.18). In the SEM for preoccupied attachment, the standardized indirect effect on satisfaction was -.12. The standardized direct effect from preoccupied attachment to relationship satisfaction was -.03, which was considerably less than the standardized regression coefficient (β = -.13). All SEMs were statistically significant and produced a good model fit (CFI, RMSEA). Please see Table 3.6.

Guerrero et al. (2009)

Sample

N = 581 couples

(13% married; 87% dating or engaged)

Measure(s)

Attachment instrument*

RQ

RAS

PA

AES

RSS-R

Limitations

Attachment instrument was general perceptions rather than specific relationships positive affect instrument was created for this study

Statistical Findings

Regression

DV wasRAS

Secure (β = .22, p < .001) Dismissive (β = -.18, p < .001)

Preoccupied (β = -.13, p < .01)

Fearful (β = -.04, ns)

Structural Equation Modeling (SEM)

DV was RAS

Secure (indirect effect = .27, direct

effect = .04)

Dismissive (indirect effect = -.12, direct

effect = -.07)

Preoccupied (indirect effect = -.12,

direct effect = -.03)

Note. Relationship Questionnaire (RQ), Relationship Assessment Scale (RAS), Positive Affect (PA; created for this study), Anger Expression Scale (AES), Responses to Sadness Scale-Revised (RSS-R), Dependent Variable (DV); *work from (Feeney et al., 1994; Guerrero 1996)

Timm and Keiley (2011) used a nonclinical convenience sample of 205 married participants (105 women and 100 men). They used the Revised Adult Attachment Scale (Collins & Read, 1990), Sexual Communication Satisfaction scale (Wheeless, Wheeless, & Baus, 1984), the Global Measure of Sexual Satisfaction along with a subscale of the Interpersonal Exchange Model of Sexual Satisfaction Questionnaire (Lawrance & Byers, 2010), Kansas Marital Satisfaction Scale, (Schumm, Nichols, Schectoman, & Grigsby, 1983) and the Differentiation of Self Inventory (Skowron & Friedlander, 1998). The purpose of their study was to investigate the impact of differentiation of self, adult attachment, and sexual communication on two dependent variables: sexual satisfaction and marital satisfaction.

All variables (attachment, differentiation, marital satisfaction, sexual satisfaction, and sexual communication) had statistically significant Pearson correlation coefficients at the p<.01 level of significance. After relationships between the variables were established from the

correlations, they created a statistically significant path analysis model (comparative fit index = 1; Tucker-Lewis index = 1; $\chi^2 = 0.72$, df = 3, p = 0.87). Differentiation of self and attachment were significantly related (r = .52, p < .001) whereas differentiation of self was not significantly related with sexual or marital satisfaction. Attachment was significantly related with marital satisfaction (r = .24, p < .01) but not with sexual satisfaction. Sexual communication was significantly related with sexual satisfaction (r = .70, p < .001) and marital satisfaction (r = .34, p < .001). The residual terms of sexual satisfaction and marital satisfaction were significantly correlated (r = .30, p < .001) indicating that they are not independent constructs. The variables of attachment and differentiation of self accounted for 23% of the variance in sexual communication. The independent variables of attachment, differentiation of self and sexual communication accounted for 23% of the variance in marital satisfaction and 50% of the variance in sexual satisfaction. In sum, they were able to empirically show that sexual communication mediated the paths to the dependent variables of sexual and marital satisfaction. Please see Table 3.7.

Table 3.7 Timm & Keiley (2011)

Timm&Keiley (2011)	
Sample	Statistical Findings
N = 205 (female = 105; male	Correlation
= 100)	
All were married	RAASand
	\overline{SCSS} ($r = .36$, p = .01)
Measure(s)	GMSEX ($r = .27$, p = .01)
RAAS	KMSS $(r = .32, p = .01)$
DSI	DSI $(r = .40, p = .01)$
SCSS	
GMSEX	Path Analysis
KMSS	(estimated correlations from the standardized solution for the
	fitted full model)
Limitations	
homogenous sample on race,	RAAS to
education, SES, and	KMSS ($r = .24$, p = .01)
geography	SCSS $(r = .31, p = .01)$
	GMSEX (r = .00, ns)

Note. Revised Adult Attachment Scale (RAAS), Differentiation of Self Inventory (DSI), Sexual Communication Satisfaction Scale (SCSS), Global Measure of Sexual Satisfaction (GMSS), Kansas Marital Satisfaction Scale (KMSS), not statistically significant (ns), Socioeconomic Status (SES)

3.2.3.2 Attachment and Mobile Communication

Moving from face-to-face communication, now special attention will be given to attachment and emotion through non-face-to-face mediums such as telephone use or texting. Two studies, Jin and Peña (2010) and Weisskirch (2012), examined phone use and attachment styles. Jin and Peña (2010) used the ECR to quantify attachment and the avoidance subscale was significantly negatively correlated with aggregate phone time (r = -.18) and frequency (r = -.29). There were no statistically significant findings for the anxiety subscale, phone call time or frequency and text messaging time or frequency. Please see Table 3.8.

Table 3.8 Jin & Pena (2010)

Jin & Pena (2010)		
Sample	Statistical Findings	
N= 197		
Male= 60	Correlations	
Female= 137	<u>Avoidance</u>	<u>Anxiety</u>
All in a dating relationship	Call time ($r =18$, P < .05)	Partner uncertainty (<i>r</i> = .33, p <
	Call frequency (<i>r</i> =29, p < .001)	.001)
Measure	Self uncertainty (r = .51, p < .001)	Relationship uncertainty (r =
ECR	Partner uncertainty (<i>r</i> =.45, p <	.29, p < .001)
Relational uncertainty*	.001)	
LS	Relationship uncertainty ($r = .56$,	
	p < .001)	
Limitations	Love $(r =51, p < .001)$	
self-report in general	Commitment ($r =56$, p < .001)	
self-report of phone use	Sex $(r =14, P < .05)$	
frequency	Relationship length ($r =31$, p <	
mobile communication	.001)	
could directly affect		
uncertainty, love,		
commitment		
cannot establish causality		

Note. Experiences in Close Relationships (ECR), Love Scale (LS). *work from Theiss & Solomon (2006); Knobloch & Solomon (1999)

Weisskirch (2012) used the ECR-R (see Fraley, Waller, & Brennan, 2000) and found that attachment anxiety was significantly positively correlated with number of text messages sent (estimated, r = .38; actual, r = .57) and received (estimated, r = .38; actual, r = .52).

Attachment avoidance was statistically significantly negatively correlated with the number of calls made (estimated, r = -.38; actual, r = -.34). Please see Table 3.9.

Weisskirch (2012)

Sample

N = 31

all female in a dating relationship

Measure

-ECR-R

estimated phone use vs. actual phone use (from monthly statement)

Limitations

small sample

sample was only female

Statistical Findings

Correlations

Avoidance (ECR-R) with

Number of calls

estimated overall (r = -.38), made (-.73), and received (-.03), p < .05 actual overall (r = -.34), made (-.70), and received (-.01), p < .10

Anxiety (ECR-R) with

sent texts

estimated overall (r = .39), made (.03), and received (.73), p < .05 actual overall (r = .57), made (.26), and received (.89), p < .01

texts received

estimated overall (r = .38), made (.02), and received (.73), p < .05 actual overall (r = .52), made (.19), and received (.84), p < .01

Note. Experiences in Close Relationships-Revised (ECR-R)

Another emerging field of study is "sexting", which "is a term commonly applied to sending or receiving sexually-laden text messages, sexually suggestive photos or videos, or partially nude or nude photos or videos via cell phone" (Weisskirch & Delevi, 2011, p. 1698). Weisskirch and Delevi (2011) studied sexting and adult romantic attachment and found that those individuals in a relationship were more likely to have sent a sexually suggestive text message and sent a text message propositioning sexual activity than those who were single. They conducted regressions on all of the sexting behaviors and found that only anxious attachment (β = .23) as measured by the ECR-R predicted sending a text message propositioning sexual activity. Lastly, two multiple regressions were performed when anxiety or avoidance were the independent variables and sexting attitude subscales was the outcome variables. The only statistically significant finding was that anxiety (β = .39) predicted Relational Expectations scores and they assert "anxiety may relate to expectations of sexting to please the partner" (Weisskirch & Delevi, 2011, p. 1699). Please see Table 3.10.

Table 3.10 Weisskirch & Delevi (2011)

Weisskirch & Delevi (2011)	
Sample	Statistical Findings
N = 128 (male = 22; female =	Hierarchical regressions
106)	DV = Sent text propositioning sexual activity
58% in a relationship	Anxiety (β =.23, p <.05)
42% single	Avoidance (β =.03, ns)
	In a relationship (β = .28, p<.01)
Measure(s)	
ECR-R	DV Sexting attitudes (Relational expectations subscale was
Sexting behavior (made by	only significant)
authors)	Anxiety (β =.39, p <.001)
Sexting attitude (made by these	Avoidance (β =04, ns)
authors)	
Limitationa	
Limitations	
sample was mostly female	
they created their own measure	
of sexting behavior and sexting	
attitudes	

Note. Experiences in Close Relationships-Revised (ECR-R), Dependent Variable (DV)

Building upon the work of Weisskirch and Delevi (2011), Drouin and Landgraff (2012) further examined sexting, texting and attachment style on a collegiate sample of committed romantic relationships. Men and women in the sample sent text messages, sex picture, and sex text messages equitably. Additional descriptive analyses revealed that 98% of the sample sent text messages to their partner, 67% sent sexually explicit text messages, and 54% sent sexually explicit pictures or videos. Correlations revealed that avoidant attachment was statistically significantly associated with sent sex picture (r = .13) and sent sex text (r = .11) but negatively associated with sent text (r = .10).

Subsequently, they conducted a hierarchical regression using attachment and several interaction variables (gender x anxious and gender x avoidance) on texting. In the final model the standardized regression coefficients of age (β = -.16) and avoidance (β = -.10) were the only statistically significant predictor variables accounting for 7% of the variance in texting. Lastly, they conducted two separate hierarchical regressions on sent sex texts and sent sex pictures. In the first hierarchical regression, anxious (β = .09), avoidant (β = .09) and the gender/avoidance interaction (β = .11) standardized regression coefficients were statistically significant predictors accounting for 3% of the variance on sent sex texts. In the second hierarchical regression, standardized regression coefficients of avoidant (β = .12) and the interaction of gender/avoidance (β = .13) were the only statistically significant predictors accounting for 4% of the variance of sent sex pictures. After these hierarchical regressions they performed simple slope analysis. It revealed that the slopes for sent sex texts and avoidance were more pronounced for men (β = .34, p<.001) than women (β = .10, p<.05). Additionally the slopes for sent sex picture messages and avoidance were stronger for men (β = .43, p<.001) than women (β = .13, p<.01). Please see Table 3.11.

Table 3.11 Drouin & Landgraff (2012)

Drouin & Landgraff (2012)

Statistical Findings

Sample

N = 774 (male = 233; female = 511) had to be in a committed relationship

Measure(s)

ECR

texting (made by authors) sexting (made by authors)

Limitations

small Adjusted R² potentially un-honest self-report on scales

Correlations

Avoidance Sent text (r = -.10, p < .01)

Sent sex picture (r = .13, p < .01) Sent sex text (r = .11, p < .01) <u>Anxiety</u>

Sent text (r = -.04, ns) Sent sex picture (r = .09, p < .01) Sent sex text (r = .11, p < .01)

Hierarchical regressions **DV Texting**

Adjusted $R^2 = .07$, p < .01

Gender x avoidant (β =.-03, ns) Gender x anxiety (β =.03, ns)

DV Sex texts

Adjusted $R^2 = .03$, p < .01

Gender x avoidant (β =.11, p < .01) Gender x anxiety (β =-.05, ns)

DV Sent sex picture

Adjusted $R^2 = .04$, p < .01

Gender x avoidant (β =.13, p < .01) Gender x anxiety (β =-.08, ns)

Note. Experiences in Close Relationships (ECR), Dependent Variable (DV), not statistically significant (ns)

3.3 Synthesis and Extrapolation to Veterans

Although nearly all long-distance relationship and attachment studies have been conducted on undergraduate students, there is applicability to a military setting. A supportive romantic relationship can reduce the probability of suicide and PTSD (Brenner, Homaifar, Adler, Wolfman, & Kemp, 2009; Goldsmith et al., 2002; Keane, Scott, Chavoya, Lamparski, & Fairbank, 1985; King, King, Fairbank, Keane, & Adams, 1998). In this section I will synthesize the literature review to propose that communication in a collegiate setting with veterans will be somewhat similar to non-veteran students. The potential sample for my dissertation will be university students along with purposive sampling to target the lesbian, gay, bisexual, and transgender (LGBT) community. By using attachment theory, SEMs can statistically and visually delineate communication patterns among attachment styles. Therefore potential intervention could be standardized at little cost to the Department of Defense.

Pistole (2010) presents a theoretical manuscript using attachment theory focusing on the separation-reunion cycle in long-distance romantic (LDR) couples. However, Pistole (2010, p. 115) defines LDRs as "married and nonmarried couples but excludes live-apart-in-the-same-location couples (Holmes, 2004) and deployed military couples whose separation is nonvoluntary, lengthy, and possibly risky." I disagree; attachment theory applies to military personnel for several reasons. Currently, everyone who joins the military is a volunteer and can almost certainly count on a combat deployment during their enlistment. Deployments range from 6 to 12 months in most cases. However, the military Brigade Combat Team (BCT) generally knows years in advance about their next deployment and training cycles at the National Training Center (NTC) in Fort Irwin, CA or the Joint Readiness Training Center (JRTC) at Fort Polk, LA. Research has shown that military couples are resilient if they are expecting a separation (deployment); they are able to cope with it better than if it was unexpected (Karney & Crown, 2007). In sum, Pistole's (2010) assertion that attachment theory's non-applicability to the military is incorrect because today's military is an all volunteer force, where separation-

reunion cycles are expected and the only difference is the continuous threat of injury which activates the attachment system.

Conceptually, when a service member draws closer to separation (deployment), the attachment system is activated (Riggs & Riggs, 2011). Once a service member deploys, their attachment system can constantly be activated due to the life-threatening environment. Additionally, the stateside partner's attachment system could be activated. Pistole (2010) asserts that LDRs, as she defined these, prefer frequent communication especially at the beginning of separation. Frequent and routine communication has been cited by service members and spouses as being very important (Lapp et al., 2010; Merolla, 2010). The set-goal, deactivation of the attachment system, changes for military personnel when physical proximity shifts to emotional proximity because of separation (deployment). Pistole (2010) also asserts that for civilian LDRs, the separation-reunion cycle can activate the attachment system and result in separation-protest. Since the attachment system is conceptually already activated due to potential loss of life, the use of frequent communication might reinforce the notion of attachment figure availability, thereby deactivating the attachment system rather than creating separation distress (activation). Pistole (2010) highlighted previous research (Bowlby, 1979; Mikulincer & Shaver, 2003) that has shown attachment figure availability can be physical, psychological (internal working models, memories), or symbolic pictures (phone calls or pictures).

3.3.1. Long Distance Relationships (LDR) and Geographically Close Relationship (GCR)

Moving from the theoretical to empirical literature, two studies investigated RCCUs: Gilbertson et al. (1998) and Pistole et al. (2010). Key findings from Gibertson et al. (1998) were: 1) the more time apart the lower the satisfaction;2) use of RCCUs predicted female and male satisfaction (the only non-significant was female use of introspective units); 3) and use of RCCUs by male was not statistically significantly related to any satisfaction. In sum, before separation, how the female constructs the continuity of the relationship has a larger impact on

male and female satisfaction than use of male RCCUs. In other words, pre-separation relationship satisfaction and RCCUs is extremely important. Conceptualizing this finding via attachment theory, the most recent interaction with the attachment figure (other partner) could be the foremost memory possibly interfering with otherwise normal proximity seeking behaviors (Mikulincer & Shaver, 2007). It could also be that geographically close relationships practice maladaptive strategies when together and it then becomes exacerbated during the separation. Please refer to Table 3.12.

Pistole et al. (2010) used the RCCU instrument along with RSMRS measuring maintenance behaviors. Two findings from their study will be expanded to a military sample. First, conceptualizing their results from the MANOVA using Bartholomew's two-dimensional model of self and others, an interesting pattern emerges. Bartholomew's self-report assessment instrument places a respondent into one of the four adult attachment styles based on their perception (positive or negative) of self and others. Pistole et al. (2010) showed that among those with a positive view of others (secure and preoccupied), MBs/RCCUs mean scores were always statistically significantly higher than those with a negative view of others (dismissing and fearful). For example, the assurances mean was higher for secure (51.49) and preoccupied (52.74) whereas dismissing (47.31) and fearful (48.36) means were lower. The conflict management mean was higher for secure (24.36) than fearful (22.77) and the positivity mean was higher for secure (11.96)/preoccupied (12.00) than for fearful (11.24). Social networks means were higher for secure (11.42) and lower for dismissing (10.31) and fearful (10.44). Introspective (RCCU) mean was higher for secure (67.75)/preoccupied (69.28) but lower for fearful (63.61). They also found prospective (RCCU) (LDR prospective = 51.49; GCR prospective = 50.22) and introspective (RCCU) (LDR introspective = 68.20; GCR introspective = 63.19) means were statistically significantly higher in LDRs as compared to GCRs. Also of note, the shared tasks mean was statistically significantly higher in GCRs (30.23) than LDRs (29.45), which makes sense because they are physically closer to one another.

Secondly, Pistole et al. (2010) used a multiple hierarchical regression for LDRs vs.

GCRs on stress. Since the anxious group (fearful/preoccupied) remained statistically significant in the final model and avoidance group (dismissing/secure) did not, it appears anxious people communicate differently which exacerbates their severity of perceived global stress. Also, anxious people's emotional expression or communication may be so intense, the message gets lost in translation (Mikulincer & Shaver, 2007; Pistole et al., 2010). Therefore, in an undergraduate sample, those people who were anxious had more perceived global stress. In a military setting, it could be that those who have an anxious attachment style could have higher post-deployment PTSD.

There were several important findings from the Roberts and Pistole (2009) study.

Closeness (strength of influence and interconnection) was not a statistically significant predictor of satisfaction on LDDRs or PRRs. In LDDRs, avoidance was the only statistically significant predictor of satisfaction and "anxiety did not, however, contribute uniquely to satisfaction suggesting that seeking proximity because of high or low concerns about the partner's accessibility does not influence LDDR satisfaction" (Roberts & Pistole, 2009, p. 12). These findings are divergent from other research (Mikulincer & Shaver, 2003), and the authors suggest that future studies should investigate attachment style, frequency of contact with their partner, partner's reaction (content), and relationship satisfaction (Roberts & Pistole, 2009). They recommend future research should investigate whether those with high attachment anxiety would prefer hearing a partner's voice (phone, *interactive*) or viewing their face (possibly webcam, *interactive*) while securely attached people would be content with e-mail communication.

Table 3.12 LDR and GCR Review

Gilberston et al. (1998) Pistole et al. (2010) Roberts & Pistole (2009)

<u>Correlations</u> <u>Correlations</u> <u>Correlations</u>

Satisfaction & co-

presence

Avoidance (ECR) & RSRMS Anxiety (ECR) & RCCU N/A

Female satisfaction &

RCCU

Male satisfaction &

RCCU

<u>Regression</u> <u>Multiple Regression</u> <u>Hierarchical Regression</u>

DV Female satisfaction LDR on PSS LDRR on satisfaction DV Male satisfaction GCR on PSS PRR on satisfaction

Note. Experiences in Close Relationships (ECR), Relationship Continuity Constructional Units (RCCU), Routine and Strategic Relational Maintenance Scale (RSRMS), Perceived Stress Scale (PSS), Long Distance Romantic Relationship (LDR), Geographically Close Romantic Relationship (GCR), Dependent Variable (DV).

3.3.2. Attachment and Emotional Regulation

3.3.2.1 Attachment and Emotional Communication

Guerrero et al. (2009) were able to show each attachment style expresses emotion differently. Specifically, having a secure attachment style increased the partner's relationship satisfaction whereas dismissive or preoccupied attachment styles decreased the other's relationship satisfaction. They assert future research should consider: context-specific, domain-specific, relationship-specific attachment models; attachment and relationship satisfaction of both partners; and relational maintenance behavior and types of disclosure (content). Please refer to Table 3.13.

Timm and Keiley (2011) assert one of most important contributions from their study was sexual communication significantly mediated the paths between independent variables of attachment and differentiation of self and dependent variables of sexual and marital satisfaction. However, their study had its limitations: a heterogeneous heterosexual married couple's sample that only collected data on one person instead of both partners in the dyad. The authors

suggest future research should include non-married, same-sex, and clinical samples. Also they created a one-path model for overall attachment instead of creating a separate path for each attachment style. This path analysis ignores the measurement error associated with each variable in the model.

Table 3.13 Attachment and Emotional Regulation Review

<u>Correlation</u> <u>Regression</u>

RAAS &SCSS DV is RAS

RAAS & GMSEX

RAAS & KMSS Secure
RAAS & DSI Dismissive
Preoccupied
Fearful

reariui

Path analysis SEM

RAAS to DV is RAS

KMSS Secure
SCSS Dismissive
GMSEX Preoccupied

Note. Revised Adult Attachment Scale (RAAS), Differentiation of Self Inventory (DSI), Sexual Communication Satisfaction Scale (SCSS), Global Measure of Sexual Satisfaction (GMSEX), Kansas Marital Satisfaction Scale (KMSS), Structural Equation Modeling (SEM), Relationship Assessment Scale (RAS), Dependent Variable (DV).

3.3.2.2 Attachment and Mobile Communication

Studies by Jin and Peña (2010) and Weisskirch (2012) were reviewed regarding attachment and cell phone/text message use. Both studies had a methodological flaw, they both used correlation analyses, which only describes the relationship between variables. Both studies found that avoidant attachment was negatively correlated with phone time, frequency, and number of calls with mixed results for anxious attachment. Also avoidant attachment was correlated with text messages sent and received, which fits with their tendency for emotional distance (Weisskirch, 2012). Please refer to Table 3.14.

Other researchers, Weisskirch and Delevi (2011) and Drouin and Landgraf f(2012) found similar trends in their studies. For example, anxious people in relationships sent more sexually suggestive text messages and text messages propositioning sexual activity (Weisskirch & Delevi, 2011). There were several methodological issues with the Weisskirch and Delevi (2011) article that limited generalizability: gender distribution (22 men, 106 women), sample size (N = 128), and proportion of the sample in a relationship (58%) as opposed to being single (42%). According to prior research (Hazan & Zeifman, 1999), length of relationship (i.e., 2 years or greater) is important because the proximity seeking, safe haven, secure base, and separation distress behaviors shift to the partner. Additionally the non-representative sample (22 men, 106 women) may not be generalizable to military setting where 85% of the personnel are male and 15% are female (Defense Manpower Data Center, 2008).

Drouin and Landgraff (2012) hierarchical regressions revealed that avoidant people text less than anxious people. Avoidant people attempt to distance themselves physically or emotionally from the attachment figure (pair-bond). The avoidant people exhibited the same distancing technique in the hierarchical regressions on sent sex texts and sent sex pictures. Having avoidant attachment increased the frequency of sent sex texts and sex pictures suggesting that using a distancing medium (texts) could reduce the frequency of in-person sexual activity. Drouin and Landgraff (2012) suggest that their study is only preliminary and future investigation is needed. For example, the highest variance explained was 7%, which suggests other predictor variables are missing. Additionally, they suggest future studies should look at how these behaviors are different among different technologies (Facebook, email, etc.). The studies did not differentiate long-distance or geographically close relationships.

Table 3.14 Attachment and Mobile Communication Review

Jin & Pena (2010)	Weisskirch (2012)	Weisskirch & Delevi (2011)	Drouin & Landgraff (2012)
Correlations	<u>Correlations</u>	Hierarchical Regressions	<u>Correlations</u>
Avoidance (ECR) & Call time	Avoidance (ECR) & Number of calls	DV = Sent text propositioning sexual activity	Avoidance (ECR) & Sent text Avoidance (ECR) & Sent sex picture
Avoidance (ECR) & Call frequency	Anxiety (ECR) & sent	Anxiety ECR Avoidance ECR	Avoidance (ECR) & Sent sex text
Avoidance (ECR) & Self uncertainty	texts	In a relationship	lext
Avoidance (ECR) & Partner	Americans (ECD) 9 tours	DV = Sexting attitudes	Anxiety (ECR) & Sent text
uncertainty	Anxiety (ECR) & texts received	Anxiety (ECR)	Anxiety (ECR) & Sent sex picture
Avoidance (ECR) & love		Avoidance (ECR)	Anxiety (ECR) & Sent sex text
Avoidance (ECR) & sex			Hierarchical regressions
Avoidance (ECR) & commitment			DV = Texting
Avoidance (ECR) & relationship length			Gender x avoidant Gender x anxiety
Avoidance (ECR) & Relationship uncertainty			DV = Sex texts
Anxiety (ECR) & Partner uncertainty			Gender x avoidant Gender x anxiety
• , ,			•
Anxiety (ECR) & Relationship uncertainty			DV = Sent sex picture
-			Gender x avoidant Gender x anxiety

Note. Experiences in Close Relationships (ECR), Dependent Variable (DV).

Chapter 4

Research Question

The purpose of this dissertation was to increase positive outcome variables including family functioning and relationship satisfaction while decreasing negative outcome variables such as PTSD, stress, and depression experienced during and after a deployment. All too often therapeutic interventions start after the veteran has returned stateside. Using attachment theory, this researcher hoped to be proactive in identifying positive and negative communication patterns during the deployment. By focusing on the dyadic communication during the deployment instead of waiting until after return stateside, the hope was for the family or couple to be starting the reunion using healthy emotional expression. The research question was how does attachment theory explain dyadic communication during a combat separation and its impact on post-deployment functioning?

4.1 Protection of Human Subjects

A full board review by the University of Texas at Arlington's Institutional Review Board (IRB) was required for this research project. Any modifications required or recommended by the dissertation committee were made as directed.

4.1.1 Research Design

If at all possible researchers seek to have an experimental design. The hallmark of an experimental design is randomizing the participants into the experiment or control groups. Examples of experimental designs are pretest-posttest control group design, posttest-only control group design, Solomon four-group design, alternative treatment design with pretest, dismantling designs (Rubin & Babbie, 2011). Establishing causality requires certain items to be present: temporal ordering, variables under investigation are related (correlated), controlling for extraneous variables so they do not influence the relationship between variables (Rubin & Babbie, 2011).

An experimental design was not possible because of time constraints, lack of financial resources, and that this is an emerging field of study. When the true experimental design with randomization is not practical, quasi-experimental designs are a suitable option. Some common quasi-experimental designs are simple time-series design, multiple time-series designs, cross-sectional designs, and case-control designs (Rubin &Babbie, 2011). This study used a quasi-experimental design, more specifically a cross-sectional retrospective online survey.

4.1.1.1 Sample

Random selection of participants is the trademark of probability sampling, which ensures that everyone has an equal chance of being selected. Common examples of probability sampling designs are simple random sampling, systematic sampling, stratified sampling or multistage cluster sampling among others (Rubin & Babbie, 2011). For example, simple and systemic random sampling requires the researcher to have an exhaustive list of all participants and has been shown to be laborious (Rubin & Babbie, 2011). Unfortunately in many cases social science research does not have the time or resources to use probability sampling.

Though probability sampling is the ideal option, non-probability sampling is an adequate substitute. Some examples of non-probability are reliance on available subjects, purposive or judgmental sampling, quota sampling, and snowball sampling (Rubin & Babbie, 2011). Examples of probability sampling designs are simple random sampling, systematic sampling, stratified sampling, implicit stratification in systematic sampling, and proportionate and disproportionate stratified samples (Rubin & Babbie, 2011). This study uses the non-probability sampling technique of purposive sampling. Purposive sampling was used because less than 1% of the US population (approximately 2.5 million people) has been to Iraq and/or Afghanistan. To access this small population, I needed to purposively identify potential places or locations where they congregate. This is most commonly in organizations such as the Veterans of

Foreign Wars (VFW) or American Legion. However, for the GWOT veterans, the internet has allowed the creation of digital communities.

The target population was combat veterans of the GWOT and their partners. This researcher sent emails to all 50 veterans state organizations and got one response from the state of Wyoming. Also, the Iraq and Afghanistan Veterans of America (IAVA) has agreed to post and disseminate the URL for this study to their members. Also, the Wounded Warrior Project (WWP) allowed me to post the link on their Facebook site. Additionally, Universities sent out an email with the link to the survey. Lastly, an up and coming veteran owned business called TroopSwap agreed to let me to post the URL on their website for its members to view. All organizations sought were selected due to their rigorous vetting of veterans; most, if not all, require a copy of the Department of Defense Form 214 (DD214) as verification of service. Please refer to Table 4.1 for a detailed account of each organizations membership and the potential sampling frame.

Table 4.1 Target Demographics

Organization	Era	Demographic	s	
		Active	Separated	Aggregate
TroopSwap	WWII to present	100,000	140,000	240,000
Iraq and Afghanistan Veterans of America (IAVA)	GWOT	Unknown		162,000
Wounded Warrior Project (WWP)	GWOT	Unknown		35,000 (1 million followers on facebook)
Wyoming Veterans Commission	WWII to present	Unknown		56,000
UT Arlington		Unknown		1,200
Northern Wyoming Community College District	All eras	Unknown		108
American Veterans for Equal Rights (AVER)	WWII to present	Unknown		1,000
Pride and Service				
Sum of all organiza	tions			533,308

Note. – indicated descriptive statistics were not available.

4.1.2 Instrumentation

This study used a created demographic questionnaire that collected information on age, orientation of the relationship, sex, ethnicity, deployment history, relationship history among others. Please refer to the appendix for a copy of the veteran and partner questionnaire. Also there were 12 standardized assessment instruments that were used in this dissertation:

Experiences in Close Relationships (ECR), Dyadic Adjustment Scale (DAS), Positive and Negative Affect Schedule (PANAS), Relational Maintenance Behavior Measure (RMBM), Dyadic Sexual Communication (DSC), Relationship Continuity Constructional Units (RCCU), Combat Experiences (CE), PTSD Checklist-5 (PCL-5), Patient Healthcare Questionnaire-9 (PHQ-9), Impact of Event Scale – Revised (IES-R), Self-Report Family Inventory: Version II (SFI), and the Global Measure of Sexual Satisfaction (GMSEX). Please refer to the appendix

for a copy of all assessment instruments included in this dissertation and Table 4.2 for the role of each variable.

Table 4.2 Variable Role

Independent variables	Moderator	Dependent variables.
PANAS	ECR	PCL-5
DSC		IES-R
RMBM		PHQ-9
RCCU		DAS
CE		SFI
		GMSEX

Note: (ECR) Experiences in Close Relationships; (DAS) Dyadic Adjustment Scale; (PANAS) Positive and Negative Affect Schedule; (RMBM) Relational Maintenance Behavior Measure; (DSC) Dyadic Sexual Communication; (RCCU) Relationship Continuity Constructional Units; (CE) Combat Experiences; (PCL-5) PTSD Checklist-5; (PHQ-9)Patient Healthcare Questionnaire-9; (IES-R) Impact of Event Scale – Revised; (SFI) Self-Report Family Inventory: Version II; and (GMSEX) Global Measure of Sexual Satisfaction (GMSEX).

4.2 Standardized Assessment Instruments

4.2.1 Experiences in Close Relationships (ECR)

Ainsworth et al. (1978) were the first to measure and code attachment in the Strange Situation where infants were placed in one of three categories: secure attachment, anxious-resistant insecure attachment, and anxious-avoidant insecure attachment (Mikulincer & Shaver, 2007). Hazan and Shaver (1987) were the first to conceptualize attachment in a romantic dyad. What emerged from the Hazan and Shaver (1987) manuscript was a plethora of scale development and revision in the 1990s. Some of the scales were the Adult Attachment Questionnaire (Simpson, 1990), Adult Attachment Scale (Collins & Read, 1990; Collins 1996), the Attachment Style Questionnaire (Feeney, Noller, & Hanrahan, 1994), and the Relationship Questionnaire (Barthomew & Horowitz, 1991). In 1998, the Experiences in Close Relationships (ECR) was published (Brennan et al., 1998).

The ECR is a 36-question instrument that assesses adult attachment on two factors: anxiety and avoidance (Brennan et al., 1998). The ECR is a 7-point Likert instrument with responses ranging from 1 (disagree strongly) to 7 (agree strongly) with each statement. There are two ways to score the ECR: categorically, which places the respondent into one of the four

attachment styles or by creating means for the avoidance and anxiety factors. Greater mean scores on the anxiety and avoidance factors indicate greater presence of each construct. The coefficients from the initial study were strong for the avoidance factor (α = .94) and anxiety factor (α = .91). Additionally, the test-retest reliability statistics usually range from .50 to .75 (Mikulincer & Shaver, 2007). The ECR Cronbach alpha in this sample was .940.

4.2.2 Dyadic Adjustment Scale (DAS)

Spanier (1976) developed the Dyadic Adjustment Scale (DAS) which measures the quality of a dyadic relationship. The DAS is a 32-question instrument that can assess general satisfaction with the relationship or four different subscales of elements of satisfaction: dyadic satisfaction, dyadic cohesion, dyadic consensus, and/or affectional expression. Aggregated scores range from 0 to 151 and each subscale produces its own score. Higher scores indicate better relationship satisfaction.

The DAS, originally developed in 1976, has stood the test of time, being continuously used by researchers. Although some reviews find a three factor structure, most reviews substantiate the same four factor structure in the original article; which indicates good factorial validity (Graham, Liu, & Jeziorski, 2006). Rubin and Babbie (2011) assert factorial validity is how many constructs a scale measures and does it measure what it is intended. Also, the DAS has high internal consistency with an alpha of .96 along with each subscale: dyadic satisfaction (.94), dyadic cohesion (.81), dyadic consensus (.90), and affectional expression (.73) (Spanier, 1976). The DAS Cronbach alpha in this sample was .920.

4.2.3 Positive and Negative Affect Schedule (PANAS)

Watson, Clark, and Tellegen (1988) first developed the Positive and Negative Affect Schedule (PANAS) that has two factors: positive and negative affect. Each factor has ten feelings or emotions that are rated 1 (very slightly or not at all) to 5 (extremely). The PANAS was later updated into the Positive and Negative Affect Schedule-Expanded Form (PANAS-X) (Watson & Clark, 1994). The PANAS-X has 60 phrases or words that a respondent can answer

1 (very slightly or not at all) to 5 (extremely). The PANAS-X still retains the two higher order constructs of negative and positive affect. Additionally, it adds eleven specific affects: fear, sadness, guilt, hostility, shyness, fatigue, joviality, self-assurance, attentiveness, serenity, surprise. Due to this dissertation having a fairly lengthy survey, it was argued that the PANAS-X would not be inappropriate because it is too time consuming and too specific for an exploratory project. Instead, the original PANAS was used to assess for general positive or negative affects. If trends were identified via the PANAS, the PANAS-X was used in follow up empirical investigation.

The PANAS has excellent construct validity that was established when correlated with the Hopkins Symptom Checklist (HSCL), Beck Depression Inventory (BDI), and STAI State Anxiety Scale (A –State) (Watson et al., 1988). Internal consistency coefficients for the PANAS were between .86 to .90 for positive affect and .84 to .87 for negative affect that were tested across different time frames (moment, today, past few weeks, past week, past few weeks, past month, past year, and general) (Watson et al., 1988). The PANAS's negative affect descriptors are: afraid, scared, nervous, jittery, guilty, ashamed, irritable, hostile, upset, and distressed. The PANAS positive affect descriptors are: active, alert, attentive, enthusiastic, excited, inspired, interested, proud, strong, and determined. The PANAS Cronbach alpha in this sample was .903.

4.2.4 Relational Maintenance Behavior Measure (RMBM)

The Relational Maintenance Behavior Measure (RMBM) is a synthesis of previous research in assessment of relationship maintenance behaviors. The two instruments it built upon were the five-factor Routine and Strategic Relational Maintenance Scale (RMSM) structure (Stafford & Canary, 1991; Canary & Stafford, 1992) and seven factor model (Stafford, Dainton, & Haas, 2000). The original RMSM five factors were positivity, openness, assurances, networks, and sharing tasks that only addressed strategic behavior (Stafford & Canary, 1991). Stafford et al. (2000) added two factors bringing the total to seven factors: advice giving, conflict

management, positivity, openness, assurances, networks, and sharing tasks. However, several years later, Stafford (2010) created the RMBM to address two problem areas: item construction and conceptual flaws.

The RMBM has good reliability and factorial validity. For men, the reliability coefficients ranged from .83 to .95 and for women, from .86 to .95 (Stafford, 2010). The RMBM showed good factorial validity over three samples and accounted for more of the variance than the RMSM did on variables such as satisfaction (Stafford, 2010). A seven-factor structure emerged: positivity, assurances, relationship talk, self-disclosure, understanding, networks, and tasks. The RMBM Cronbach alpha in this sample was .979.

4.2.5 Dyadic Sexual Communication Scale (DCS)

The Dyadic Sexual Communication Scale (DSC) is a 13-question Likert-scale instrument that assesses perceptions of communication about sexual relationships (Catania, 1998). In the pilot study, the DSC had good test-retest reliability (α = .89), internal consistency (α = .81), and factorial validity because a single factor emerged (Catania, Pollack, McDermott, Qualls, & Cole, 1990). The Likert scale ranges from 1 (disagree strongly) to 6 (agree strongly) and aggregated scores range from 13 to 78. Higher scores indicate more communication about sexual topics with one's partner.

4.2.6 Relationship Continuity Constructional Units (RCCU)

Sigman (1991) developed Relationship Continuity Constructional Units (RCCUs) to explain how a dyadic relationship is maintained when the individuals are not co-present (geographically close). RCCUs are behaviors that a couple does before (prospective), during (introspective), and after reunion (retrospective) to maintain the continuity of their relationship. Gilbertson et al. (1998) used confirmatory factor analysis (CFA) and established the factorial validity for the three factors: prospective, introspective, retrospective. Additionally internal consistency reliability was within the standard: prospective $\alpha = .86$, introspective $\alpha = .80$, and retrospective $\alpha = .91$. To this author's knowledge, the RCCU has been used in two studies (i.e.

Gilbertson et al., 1998; Merolla, 2007) (S. J. Sigman, personal communication, June 10, 2013). There are 22 RCCUs and the participant was asked to rate frequency of each RCCU ranging from 0% to 100%, pre (prospective), during, (introspective) and post deployment (retrospective). Though not in a military setting, this analytic plan has been used previously (e.g., Gilbertson et al., 1998).

4.2.7 Combat Experience (CE)

Until recently, Keane et al.'s (1989) Combat Exposure Scale (CES) has been the norm for measuring combat exposure. The CES is a self-report measure that was originally designed to measure combat exposure in Vietnam veterans. It has been almost 25 years since the CES was developed and over four decades since the Vietnam War. Vogt, Smith, King, and King (2012) created the Combat Experiences (CE) which was specifically designed for OIF/OEF veterans. The CE was used for this study and it is a 17 question Likert scale (1 = never to 6 = daily or almost daily) instrument that measures combat exposure. The 17 questions are summed to obtain an aggregated score that ranges from 17 to 102; higher scores represent greater combat exposure.

Within the validation sample of the CE, the mean was 25.66 (SD= 11.60) and the internal consistency reliability statistic was .91, indicating it is a reliable measure (Vogt et al., 2012). Internal consistency statistics above .9 are excellent (Rubin & Babbie, 2011). The CE was statistically significantly positively correlated at the .001 level of significance with PTSD (r = .45), depression (r = .20), and anxiety (r = .23) (Vogt et al., 2012). This is interpreted as severity of combat exposure increases to do PTSD, depression and/or anxiety. Mean differences between men (M= 29.71, SD= 14.03) and women (M= 22.22, SD= 7.43) were statistically significant at the .05 level of significance. Additionally, means between Active Duty (M= 26.39, SD= 12.89) and National Guard/Reserves (M= 24.61, SD= .9.46) were statistically significant at the .05 level of significance. The CE Cronbach alpha in this sample was .950.

4.2.8 PTSD Checklist-5 (PCL-5)

PTSD was not an official diagnosis until 1980. Weathers, Litz, Herman, Huska, and Keane (1993) created the PTSD Checklist-Military (PCL-M) that corresponded to the DSM-IV organization of symptoms. The PCL-M has become a widely used assessment instrument when studying PTSD among veterans of GWOT. The PCL-M had 17 questions that are answered on a Likert scale 1 (not at all) to 5 (extremely). The cutoff score of 50 has been accepted as the line of demarcation for a possible PTSD diagnosis in a military population (Weathers et al., 1993).

To be diagnosed, there must be a stressor; symptoms must be present one month or longer, functional impairment, and no other attribution cause (medication, substance abuse or other illness. In the DSM-5, there are four symptoms clusters: cluster B (intrusions), cluster C (avoidance), cluster D (negative alterations in cognitions and mood), and cluster E (alterations in arousal and reactivity). Like the PCL-M, the PCL-5 questions are related to the DSM-5 diagnostic criteria: cluster B (1-5), cluster C (6-7), cluster D (8-14), and cluster E (15-20).

To this researcher's knowledge, there was no published psychometrics on the PCL-5. I contacted Dr. Keane at the National Center for PTSD in Boston who confirmed that is the case, and provided a copy of an article under review (Keane et al., 2013, under review). Keane et al. (2013, under review) report that in two studies (OIF/OEF veterans and another with combat veterans from all wars) the PCL-5 and PCL-M were correlated (r = .95 and r = .87) and showed high internal consistency (α = .97 and α = .94). Additionally, Keane et al. (2013, under review) cite personal communication showing the PCL-5 has good convergent validity (r = .81) with the Clinician Administered PTSD Scale (CAPS). The PCL-5 Cronbach alpha in this sample was .978.

4.2.9 Patient Healthcare Questionnaire-9 (PHQ-9)

The Patient Healthcare Questionnaire (PHQ) was originally created to use in a primary care setting to screen for depression and other mental health constructs (Kroenke, Spitzer, &

Williams, 2001). The PHQ screened for eight disorders as related to the DSM-IV: major depressive disorder, panic disorder, other anxiety disorder, bulimia nervosa, other depressive disorders, alcohol abuse or dependence, somatoform, and binge eating disorder (Kroenke et al., 2001). The PHQ-9 is a nine question subscale of the original PHQ. PHQ-9 responses range from 0 (not at all) to 3 (nearly every day) and scores are summed ranging from 0 to 29. There are five levels of depressive severity: 1-4 (minimal), 5-9 (mild), 10-14 (moderate), 15-19 (moderately severe) and 20-27 (severe) (Kroenke et al., 2001).

The PHQ-9 has internal consistency reliability of .89 (Primary Care Study) and .86 (PHQ OBGYN Study) (Kroenke et al., 2001). Criterion validity is when a researcher chooses an external metric (major depression) to compare the instrument to (Rubin & Babbie, 2011). The aggregate score of 15 or greater had 95% specificity with major depression in a structured psychiatric interview. Construct validity was established against the Short Form Health Survey (SF-20) (Kroenke et al., 2001). Wells et al. (2013) compared the PHQ-9 within a military sample. The PHQ-9 was found to have good reliability (K = .97) with high sensitivity (94-95%) within a military sample (Wells et al., 2013). The PHQ-9 Cronbach alpha in this sample was .917.

4.2.10 Impact of Event Scale Revised (IES-R)

The Impact of Event Scale - Revised (IES-R) is an update from the original Impact of Events Scale (IES). Horowitz, Wilner, and Alvarez (1979) published the original IES that had two subscales: intrusions and avoidance. Interestingly, the IES was published in 1979 and the DSM did not include PTSD as an official diagnosis until 1980 (Creamer, Bell, & Failla, 2003). Weiss and Marmar (1997) updated the IES to reflect the inclusion of hyper-arousal symptoms.

The IES-R measures three symptom clusters that mimic PTSD: intrusions, avoidance, and hyper-arousal (Weiss & Marmar, 1997). Aggregated scores range from 0 to 80, with higher scores representing greater presence of the construct; there is no cutoff score or recommended cutoff score. The three subscales can also produce means or aggregated scores. The ranges

of scores for each symptom cluster are: intrusions (0-32), avoidance (0-32), and hyper-arousal (0-24).

The IES-R has good psychometric properties. Concurrent validity is a subtype of criterion-related validity (Rubin & Babbie, 2011). Specifically, concurrent validity is comparing a newer measure against an established instrument. Creamer et al. (2003) compared the IES-R and PCL on aggregate and subscale measurement. The total scores on the IES-R and PCL were highly correlated (r = .84, p<.001) (Creamer et al., 2003). Additionally the IES-R and PCL subscale correlations were statistically significant at the .001 level of significance (intrusion r = .86; avoidance r = .66; hyper-arousal r = .79). Also, the internal consistency of the three IES-R subscales is high: intrusion (.87 to .92), avoidance (.84 to .86), and hyper-arousal (.79 to .90) (Weiss & Marmar, 1997). The IES-R Cronbach alpha in this sample was .978.

4.2.11 Self-Report Family Inventory: Version II (SFI)

The Self-Report Family Inventory Version II (SFI) (Beavers, Hampson, & Hulgus, 1990) was an adaptation of the Beavers Model of Family Functioning (Beavers, Hampson, & Hulgus, 1985). The SFI is a 36-question instrument that assesses a person's perception about their current family functioning (Beavers et al., 1990). The first 34 questions are in a 5-point Likert scale (1 = fits our family very well to 5 = does not fit our family). The last two questions also use a 5-point Likert scale (1 = my family functions very well together to 5 = My family does not function well together at all. We really need help) and (1 = No one is independent. There are no open arguments. Family members rely on each other for satisfaction rather than on outsiders to 5 = Family members usually go their own way. Disagreements are open. Family members look outside of the family for satisfaction). There are five subscales: health/competence, conflict, cohesion, expressiveness, and leadership (Beavers et al., 1990). In the Beavers et al. (1985) article, all subscales' internal consistencies ranged from .84 to .88. For the five subscales, test re-test reliability alphas were: family health/competence (.84 to .87), conflict (.50 to .59), cohesion (.50 to .70), expressiveness (.79 to .89), and directive leadership (.41 to .49) from 30

to 90 days (Beavers et al., 1990). Additionally, concurrent and convergent validity have been established with other instruments such as the McMaster Family Assessment Device (Epstein, Baldwin, & Bishop, 1983) and the Beavers Interactional Scales (Beavers et al., 1985). Since there is no aggregated SFI score, the family health/competence subscale was used. Therefore for this dissertation from here on out, SFI is referring to the family health/competence subscale. Cronbach alpha in this sample was .931.

4.2.12 Global Measure of Sexual Satisfaction (GMSEX)

The Interpersonal Exchange Model of Sexual Satisfaction Questionnaire (IEMSS) was published by Lawrance, Byers, and Cohen (2011) and contains three subscales: Global Measure of Sexual Satisfaction (GMSEX), Global Measure of Relationship Satisfaction (GMREL), and the Rewards/Costs Checklist (RCC). The GMSEX is a five question 7-point Likert-scale instrument that assesses overall sexual satisfaction (Lawrance, et al., 2011). Scores can range from 5 to 35 with higher scores indicating greater overall sexual satisfaction. The five areas of sexual satisfaction are: good-bad, pleasant-unpleasant, positive-negative, satisfying-unsatisfying, and valuable-worthless. Construct validly of the GMSEX was established (r = -.65, p < .001) with the Index of Sexual Satisfaction (Lawrance, et al., 2011). Additionally the GMSEX was chosen because of its brevity and it allowed for comparative analyses with other studies reviewed for this dissertation (Timm & Keiley, 2011).

4.3 Data Collection

Eight letters of support were obtained for the sampling frame and the organizations' letters of support are in the appendices. The organizations were Pride and Service, American Veterans for Equal Rights (AVER), Wyoming State Veterans Service Officer Director, Veteran Services Northern Wyoming Community College District, Coordinator, Veterans Benefits University of Texas at Arlington, Wounded Warrior Project, Troop Swap, and Iraq and Afghanistan Veterans of America (IAVA). Please refer to the appendix for a copy of the informed consent. The respondents were provided with the following information: introduction

to the topic, purpose, duration, procedures, possible benefits, compensation, risks/discomforts, alternative procedures, and withdrawal from the study. At any time respondents were allowed to exit the survey and they were provided the national crisis line and/or option to query for a provider in their local area if they became distressed.

At this point, this author emailed all 50 state veteran service organizations and obtained one response from Wyoming. Consistent with prior research (Ponder, 2009), this researcher made contact with several organizations that emphasize advocacy for the GWOT. Specifically, the IAVA and WWP agreed to disseminate to their members.

Data collection looked different in two specific ways. For organizations that had a forum, chat room, or Facebook site, the URL was cut and pasted allowing direct access for a veteran or partner to complete. For those organizations that did not have an interactive site, the URL was provided to the gatekeeper and then dissimilated internally for their members. Upon the first person (veteran or partner) completing the survey, they were provided the URL for their partner to fill out. The respondent could have directly provided the URL to their partner or they could have provided their contact information and this author could have forward it. Data collection lasted approximately two months.

For three scales (PANAS, RMBM, and DSC), participants were asked to select a Likert scale 1 (strongly disagree) to 7 (strongly agree) on interactive and delayed communication modalities. There was also a not applicable (NA) option for each question. Interactive modes of communication were telephone, text, social networking sites, Skype, instant messenger, and instant messenger with video. Delayed modes of communication were letters, care packages, and email. Higher scores on each question and corresponding factor indicate greater presence of the behavior.

In this dissertation, the stressful life event on the IES-R was conceptualized as the dyadic separation during the most recent combat deployment. The veteran completed the IES-R that assessed their perception of their partner's symptoms (intrusion, avoidance, and hyper-

arousal). The significant other of the veteran completed a modified CE and PCL-5 that would assess their perception of their partner's symptoms. Renshaw et al. (2008) have highlighted the importance of perception symptom agreement between the couple in the dyadic relationship. Specifically, Renshaw et al. (2008) used a modified PCL-M and CES to assess their perception of their partner's experiences.

4.3.1 Threats to Research Credibility

When conducting empirical inquiry special attention needs to be given to internal and external validity. According to Rubin and Babbie (2011, p.247) "internal validity refers to the confidence we have that the results of a study accurately depict whether one variable is or is not a cause of another." Some threats to internal validity are history, maturation (passage of time), testing, instrumentation changes, statistical regression, selection biases, and/or ambiguity (Rubin & Babbie, 2011). External validity refers to the ability to generalize the conclusions of the study to the larger population (Rubin & Babbie, 2011).

The threats to internal validity were history, maturation (passage of time), statistical regression, and ambiguity. History could be a news event or some unforeseen extraneous event. For veterans, an example could be starting a trauma-focused intervention to treat their PTSD symptoms. Maturation asserts that people are not stagnant; they are always growing or changing (Rubin & Babbie, 2011). One example of this threat could be conceptualized as the amount of time a service member has been stateside. Statistical regression could be a problem because of the sampling frame (WWP, IAVA, etc). Generally speaking, a service member using WWP services could have been more severely injured in combat than most people, which could result in extreme PTSD, depression, and/or relationship satisfaction scores. There was also an ambiguity issue, this dissertation as a cross-sectional retrospective design, so true causality cannot be established. If associations between variables via correlation or regressions were found, future researchers could perform a longitudinal study to truly assess causality.

Researchers also need to be mindful of external validity which asks how generalizable is the

findings from the study sample to the target population. Shadish, Cook, and Campbell (2002) present threats to external validity in terms of interactions of causal relationship with units, over treatment variations, outcomes, settings, and context–dependent mediation. Another threat to external validity was the Hawthorne Effect, that is when participants know they are in a study and they might respond differently (Christensen, 2000). Lastly, due to this exploratory investigation and convenience sampling, external validity could have be an issue. However, future research could include a larger and more representative sample.

4.4 Data Analyses

All data analyses were conducted using the Statistical Package for Social Sciences (SPSS) Version 22. Descriptive statistics were generated for the total sample and then for each subgroup (veteran and spouse). To evaluate the basic assumptions of many statistical tests, histograms were generated to assess if study variables were normally distributed. Next, bivariate relationships were established using correlation analysis.

This dissertation used Multilevel Analysis to examine the Actor/Partner

Interdependence Model (APIM) with distinguishable dyad members (Kenny, Kashy, & Cook, 2006). The APIM was appropriate for this study because the attributes and behaviors of both the veteran and their spouse affect each other's outcomes. I used the Interaction Multilevel Model described by Kenny et al. (2006) to estimate the APIM with distinguishable dyads.

The actor effect was the influence that the individual has on his/her own outcome; the partner effect was the influence that the other member of the dyad has on the individual. Each individual was both an actor and a partner. For this study, the members of the dyad were distinguishable: the veteran and the veteran's spouse.

Chapter 5

Results

Chapter five will start with a presentation of the dyadic, veteran, and communication (mode and frequency) descriptive data. Next the ten assessments will be reviewed.

Unfortunately, some were not included because they were not normally distributed or had extreme missing values. After that, findings from the undergraduate literature, APIM main effects, and 2-way interactions are presented.

5.1 Dyadic Descriptive Statistics

Until this point the significant other of the veteran has been referred to as their partner.

Due to this dissertation using the APIM, the word partner can become confusing when interpreting the statistical analyses. Therefore from here partners of veterans will be referred to as spouses. For several assessment instruments the common logarithm to the base 10 was calculated and will be denoted as LOG to transform the data.

5.1.1 Orientation, Age, Length of Relationship, Children, Ethnicity

Marriage was not a requirement for inclusion in this dissertation. Rather, the participant had to currently be in the same committed relationship that they were in during their most recent combat deployment. There were 44 participants (22 male; 22 female) that produced twenty-two heterosexual dyads. There were 1 female and 21 male veterans. There were 1 male and 21 female spouses. The mean age was 33.48 years old (SD=6.92) with a range from 24 to 50 years old. The average length of relationship was 11.36 years (SD=5.88) ranging from 4 to 23 years. The average number of children was 1.41 (SD=1.05) with ranges of 0 to 3 children. The most common ethnicity was White, representing 84.1% of the sample. Please see Table 5.1.

Table 5.1 Ethnicity of the Sample

Ethnicity	Frequency	Percent
White	37	84.1%
Hispanic	6	13.6%
Other	1	2.3%
Total	44	100%

5.1.2 Marital Status of Parents

Self-report of GWOT veterans and their spouses parental marital status was similar for never married (N=1) and married (N=13). However, spouses' self-report revealed fewer parental divorces but more individuals that were widowed or currently separated. See Table 5.2.

Table 5.2 Parental Marital Status of Sample

	Veteran (N, %)	Spouse (N, %)
Never married	1 (4.5%)	1 (4.5%)
Married	13 (59.1%)	13 (59.1%)
Separated		1 (4.5%
Divorced	8 (36.4%)	4 (18.2%)
Widowed		3 (13.6%)
Total	22 (100%)	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.1.3 Spouse Hours Worked per Week

Veterans' perceptions and spouses' self-report of hours worked per week were similar, with a slight difference for 1 to 10 hours and more than 40 hours worked per week. Please refer to Table 5.3.

Table 5.3 Hours Worked Per Week by Spouse

	Veteran (N, %)	Spouse (N, %)
Does not work	4 (18.2%)	4 (18.2%)
1 to 10 hours	2 (9.1%)	1 (4.5%)
11 to 20 hours	1 (4.5%)	1 (4.5%)
21 to 30 hours	1 (4.5%)	1 (4.5%)
31 to 40 hours	5 (22.7%)	5 (22.7%)
More than 40 hours	9 (40.9%)	10 (45.5%)
Total	22 (100%)	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.1.4 Geographic Proximity to Family Post-Deployment

Post-deployment spouses (N=9) as opposed to veterans (N=4) lived within 50 miles of their family members (immediate or distant). Refer to Table 5.4.

Table 5.4 Geographic Proximity to Family

	Veteran (N, %)	Spouse (N, %)
Within 50 miles	4 (18.2%)	9 (40.9%)
101 to 200 miles	2 (9.1%)	3 (13.6%)
201 or more miles	16 (72.7%)	10 (45.5%)
Total	22 (100%)	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.1.5 Familial Income

Of the 44 individual responses, the mean self-report family income was \$86,545.45 (SD = 49,217.34) ranging from 20,000 to 240,000 dollars. Upon dyadic descriptive analyses (N = 12 couples) in which both participants self-reported the same level of income, the mean was 93,333.33 (SD = 60,116.31) ranging from \$20,000 to \$240,000. Of the ten couples that reported different family incomes, the mean income was \$78,400 (SD= 31,293.85) ranging from \$40,000 to \$158,000. Also, for the ten couples that reported different family incomes, the mean difference was \$14,600 (SD = 11,032.97) ranging from \$4,000 to \$38,000. Veterans (N = 6) more frequently self-reported higher family income as opposed to spouses (N = 3).

5.1.6 Wounded or Injured During Deployment

Two of the twenty-two veterans self-reported being wounded or injured by the enemy during their most recent deployment. Three of the twenty-two spouses reported their veteran was injured during the deployment. There was dyadic agreement (both self-report) from two dyads. However, on the third spouse self-report, the veteran did not acknowledge being wounded or injured by the enemy.

5.2 Veteran Descriptive Data

5.2.1 Rank

There were three categories for military rank (e1 to e4; e5 to e9; and warrant or commissioned officer) during the most recent combat deployment. The most cited rank was e5 through e9, representing 54.5% of the GWOT respondents. Please refer to Table 5.5.

Table 5.5 Military Rank During the Most Recent Deployment

	N. %
e1 to e4	5 (22.7%)
e5 to e9	12 (54.5%)
Warrant or commissioned officer	5 (22.7%)
Total	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.2.2 Number of Deployments

GWOT respondents most frequently reported serving only one combat tour (N= 8, 36.4%). Please refer to Table 5.6.

Table 5.6 Number of Deployments

	N, %
Once	8 (36.4%)
Twice	6 (27.3%)
Three times	3 (13.6%)
Four times	2 (9.1%)
Five or more	3 (13.6%)
Total	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.2.3 Length of Deployment

The average length of deployment from the first deployment was 11.23 (SD=4.66) months. The average length of deployment has continued to decrease for all subsequent deployments. Please see Table 5.7.

Table 5.7 Length of Deployments

	N	Mean, SD	Range
First Deployment	22	11.23 (4.66)	2-18
Second Deployment	14	7.57 (4.91)	2-16
Third Deployment	8	6.50 (3.96)	2-12
Fourth Deployment	5	6.20 (3.77)	2-12
Fifth Deployment	3	5 (2.65)	2-12

Note: N (number of participants), % (percentage of participants)

5.2.4 Location of Most Recent Deployment

Iraq (59.1%) and Afghanistan (22.7%) were the most cited locations of most recent deployments. Together Iraq and Afghanistan comprised 81.8% of most recent deployments. Please see Table 5.8.

Table 5.8 Location of Most Recent Deployment

	N, %
Iraq	13 (59.1%)
Afghanistan	5 (22.7%)
Other	4 (18.2%)
Total	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.2.5 Length of Months Stateside

Respondents have been stateside on average 52.73 months (SD=32.19) ranging from 6 to 121 months.

5.2.6 Branch and Component of Military

The majority of GWOT veterans were in the Army (68.2%) during their most recent combat deployment. In this sample of GWOT veterans, Active Duty was the most frequently cited component in all branches: Army (N=12), Navy (N=2), Air Force (N=3), and Marine Corps (N=2). Please see Table 5.9.

Table 5.9 Branches in the Military

	N, %
Navy	2 (9.1%)
Army	15 (68.2%)
Air Force	3 (13.6%)
Marine Corps	2 (9.1%)
Total	22 (100%)

Note: N (number of participants), % (percentage of participants)

5.3 Communication Descriptive Data

5.3.1 Mode of Communication

There were nine modes of communication available: letters, care packages, emails, telephone, text messaging via telephone, social networking, Skype, instant messenger, and instant messenger with video. Three modes of communication (letters, care packages, and emails) were categorized as delayed forms of communication. Six modes of communication (telephone, text messaging via telephone, social networking, Skype, instant messenger, and instant messenger with video) were categorized as interactive communication.

On overall mode of communication, email and telephone were the most used at N= 42 (95.5%) whereas text messaging via telephone was the least frequent at N=6 (13.6%). Please refer to Table 5.10 for overall modes of communication. Of the veterans' mode of communication, email was the most popular at N=21 (95.5%) whereas text messaging via telephone was the least frequent at N=2 (9.1%). Of the spouses' mode of communication, telephone was the most popular at N=22 (100%) whereas text messaging via telephone was the least frequent at N=4 (18.2%). Please refer to Table 5.11 for veteran and spouse modes of communication.

Table 5.10 Overall Modes of Communication

	Used (N, %)	Did not use (N, %)	Total Frequency, %	
Letters	33 (75%)	11 (25%)	44 (100%)	
Care packages	35 (79.5%)	9 (20.5%)	44 (100%)	
Emails	42 (95.5%)	2 (4.5%)	44 (100%)	
Telephone	42 (95.5%)	2 (4.5%)	44 (100%)	
Text messaging via	6 (13.6%)	38 (86.4%)	44 (100%)	
telephone				
Social networking	19 (43.2%)	25 (56.8%)	44 (100%)	
(Facebook, MySpace, etc)				
Skype	17 (38.6%)	27 (61.4%)	44 (100%)	
Instant messenger	11 (25%)	33 (75%)	44 (100%)	
Instant Messenger w video	9 (20.5%)	35 (79.5%)	44 (100%)	

Table 5.11 Veteran and Spouse Modes of Communication

	Veteran (N, %)		Spouse (N, %)	
Letters	16 (72.7%)	6 (27.3%)	17 (77.3%)	5 (22.7%)
Care packages	16 (72.7%)	6 (27.3%)	19 (86.4%)	3 (13.6%)
Emails	21 (95.5%)	1 (4.5%)	21 (95.5%)	1 (4.5%)
Telephone	20 (90.9%)	2 (9.1%)	22 (100%)	0 (0%)
Text messaging via telephone	2 (9.1%)	20 (90.9%)	4 (18.2%)	18 (81.8%)
Social networking (Facebook, MySpace, etc)	9 (40.9%)	13 (59.1%)	10 (45.5%)	12 (54.5%)
Skype	9 (40.9%)	13 (59.1%)	8 (36.4%)	14 (63.6%)
Instant messenger	4 (18.2%)	18 (81.8%)	7 (31.8%)	15 (68.2%)
Instant Messenger w video	13 (59.1%)	18 (81.8%)	5 (22.7%)	17 (77.3%)

5.3.2 Frequency of Communication

Email (N=5, 11.4%) was the most frequently (7 days a week) overall cited whereas instant messenger with video was the least (none) frequently (N=32, 72.7%) referenced.

Please refer to Table 5.12 for overall frequencies for all modes of communication. For veterans, emails (N=1, 4.5%) and social networking (N=1, 4.5%) were the most frequently (7 days a week) cited whereas instant messenger with video was the least (none) frequently (N=17, 77.3%) referenced. Please refer to Table 5.13 for veteran frequencies for all modes of communication. For spouses, email (N=4, 18.2%) was the most frequently (7 days a week) cited whereas instant messenger with video was the least (none) frequently (N=15, 68.2%) referenced. Please refer to Table 5.14 for spouse frequencies for all modes of communication.

Table 5.12 Overall Frequencies

	None	1 day a	2 days	3 days	4 days	5 days	6 days	7 days
		week	a week	a week	a week	a week	a week	a week
	10	24	6	2	1			1
Letters	(22.7%)	(54.5%)	(13.6%)	(4.5%)	(2.3%)			(2.3%)
Care	16	27				1		
packages	(36.4%)	(61.4%)				(2.3%)		
	3	4	8	9	9	4	2	5
Emails	(6.8%)	(9.1%)	(18.2%)	(20.6%)	(20.6%)	(9.1%)	(4.5%)	(11.4%)

Table 5.12- Continued

	4	40	4.4	T 4	1	-	4	
	1	12	11	4	3	7	4	2
Telephone	(2.3%)	(27.3%)	(26%)	(9.1%)	(6.8%)	(15.9%)	(9.1%)	(4.5%)
Text	36	2			2	1	1	2
messaging	(81.8%)	(4.5%)			(4.5%)	(2.3%)	(2.3%)	(4.5%)
via	,	, ,			` ′	` ′	` ′	
telephone								
Social	18	6	5	2	4	6		3
networking	(40.9%)	(13.6%)	(11.4%)	(4.5%)	(9.1%)	(13.6%)		(6.8%)
(Facebook,			,		`	,		
MySpace,								
etc)								
,	26	7	2	3		1	4	1
Skype	(59.1%)	(15.9%)	(4.5%)	(6.8%)		(2.3%)	(9.1%)	(2.3%)
Instant	30	2			6	3	2	4
messenger	(68.2%)	(4.5%)			(13.6%)	(6.8%)	(4.5%)	(9.1%)
Instant	32	2	1	2	2	2	1	2
Messenger	(72.7%)	(4.5%)	(2.3%)	(4.5%)	(4.5%)	(4.5%)	(2.3%)	(4.5%)
w video	, ,	, ,	, ,	, ,	, ,	, ,	` ,	, ,

Table 5.13 Veteran Frequency

	None	1 day a	2 days	3 days	4 days	5 days	6 days	7 days
		week	a week	a week	a week	a week	a week	a week
	5	12	3	1	1			
Letters	(22.7%)	(54.5%)	(13.6%)	(4.5%)	(4.5%)			
Care	13	9						
packages	(59.1%)	(40.9%)						
	2	4	6	3	3	3		1
Emails	(9.1%)	(18.2%)	(27.3%)	(13.6%)	(13.6%)	(13.6%)		(4.5%)
	1	6	5	1	2	5	2	
Telephone	(4.5%)	(27.3%)	(22.7%)	(4.5%)	(9.1%)	(22.7%)	(9.1%)	
Text	20				1		1	
messaging	(90.9%)				(4.5%)		(4.5%)	
via								
telephone								
Social	10	3	2		3	3		1
networking	(45.5%)	(13.6%)	(9.1%)		(13.6%)	(13.6%)		(4.5%)
(Facebook,								
MySpace,								
etc)								
	13	3	2	1		1	2	
Skype	(59.1%)	(13.6%)	(9.1%)	(4.5%)		(4.5%)	(9.1%)	
Instant	16	1			2	2	1	
messenger	(72.7%)	(4.5%)			(9.1%)	(9.1%)	(4.5%)	
Instant	17	1	1	1		1	1	
Messenger	(77.3%)	(4.5%)	(4.5%)	(4.5%)		(4.5%)	(4.5%)	
w video							-	

Table 5.14 Spouse Frequency

	None	1 day a	2 days	3 days	4 days	5 days	6 days	7 days
		week	a week	a week	a week	a week	a week	a week
	5	12	3	1				1
Letters	(22.7%)	(54.5%)	(13.6%)	(4.5%)				(4.5%)
Care	3	18				1		
packages	(13.6%)	(81.8%)				(4.5%)		
	1		2	6	6	1	2	4
Emails	(4.5%)		(9.1%)	(27.3%)	(27.3%)	(4.5%)	(9.1%)	(18.2%)
		6	6	3	1	2	2	2
Telephone		(27.3%)	(27.3%)	(13.6%)	(4.5%)	(9.1%)	(9.1%)	(9.1%)
Text	16	2			1	1		2
messaging	(72.7%)	(9.1%)			(4.5%)	(4.5%)		(9.1%)
via								
telephone								
Social	8	3	3	2	1	3		2
networking	(36.4%)	(13.6%)	(13.6%)	(9.1%)	(4.5%)	(13.6%)		(9.1%)
(Facebook,								
MySpace,								
etc)								
	13	4		2			2	1
Skype	(59.1%)	(18.2%)		(9.1%)			(9.1%)	(4.5%)
Instant	14	1			4	1		2
messenger	(63.6%)	(4.5%)			(18.2%)	(4.5%)		(9.1%)
Instant	15	1		1	2	1		2
Messenger	(68.2%)	(4.5%)		(4.5%)	(9.1%)	(4.5%)		(9.1%)
w video	<u> </u>			-				

5.4 Standardized Assessment Instruments

5.4.1 Assessment Instruments That Have Been Excluded

The GMSEX and DSC were discarded because of low response rate. No respondents fully completed the GMSEX. Also, only 8 people completed the delayed DSC and only 5 completed the interactive DSC. During survey construction, this researcher did not assign a value to each bubble. For example in surveymonkey, the GMSEX was weighted 1 to 5 on a Likert scale. If the respondent selected 2, 3, or 4 then their response was not recorded. Lastly, the RCCU was discarded because it was not normally distributed.

5.4.2 Experiences in Close Relationships (ECR)

All respondents completed the ECR. The mean score for all respondents for anxiety was 3.27 (SD=1.32) ranging from 1 to 6.33. The mean score for all respondents for avoidance was 2.58 (SD=.99) ranging from 1 to 4.78). The veterans' mean score on the ECR anxiety scale was 3.26 (SD=1.26) ranging from 1.28 to 6.33. The veterans' mean score on the ECR avoidance scale was 2.91 (SD=.97) ranging from 1.11 to 4.78. The spouses' mean score on the ECR anxiety scale was 3.29 (SD=1.41) ranging from 1 to 5.78. The spouses' mean score on the ECR avoidance scale was 2.25 (SD=.90) ranging from 1 to 4.

The veteran ECR anxiety distribution was positively skewed (ECR [anxiety] = .479, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (ECR [anxiety] = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the ECR anxiety kurtosis (.059) falls within the range of -1.906 to 1.906. The spouse ECR anxiety distribution was positively skewed (ECR [anxiety] = .108, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (ECR [anxiety] = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the ECR anxiety kurtosis (-.902) falls within the range of -1.906 to 1.906.

The veteran ECR avoidance distribution was positively skewed (ECR [avoidance] = .084, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (ECR [avoidance] = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the ECR avoidance kurtosis (-.476) falls within the range of -1.906 to 1.906. The spouse ECR avoidance distribution was positively skewed (ECR [avoidance] = .874, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (ECR [avoidance] = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906),

the distribution approaches normality because the value for the ECR avoidance kurtosis (-.143) falls within the range of -1.906 to 1.906.

5.4.3 Dyadic Adjustment Scale (DAS)

All respondents completed the DAS. The mean score for all respondents on the DAS was 107.52 (SD= 17.18) ranging from 65 to 141. The veterans mean score on the DAS was 102.95 (SD=16.55) ranging from 65 to 129. The spouses mean score on the DAS was 112.1 (SD=16.94) ranging from 74 to 141. The veteran DAS distribution was negatively skewed (DAS = -.898, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (DAS = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the DAS kurtosis (.411) falls within the range of -1.906 to 1.906. The spouse DAS distribution was negatively skewed (DAS = -.580, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (DAS = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the DAS kurtosis (.163) falls within the range of -1.906 to 1.906.

5.4.4 Positive Affect and Negative Affect Schedule (PANAS)

This researcher first examined overall means for delayed and interactive forms of communication. Both delayed and interactive forms of communication for negative affect were not normally distributed. For overall descriptive statistics please refer to Table 5.15.

Table 5.15 Overall PANAS Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	30	10-45	14.40 (7.37)	7.37 (3.03)	10.40 (.83)
Negative (I)	34	10-44	15.85 (7.40)	7.40 (2.29)	5.81 (.79)
Positive (D)	34	14-50	31.76 (9.32)	9.32 (.09)	53 (.79)
Positive (I)	39	21-50	37.79 (8.42)	8.42 (31)	92 (.74)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

After overall descriptive statistics were computed, separate analyses were conducted for veteran and spouse. For veterans and spouses, negative affect (delayed and interactive) were not normally distributed. Please see Table 5.16 for descriptive data on veterans and Table 5.17 for spouses.

Table 5.16 Veteran PANAS Pre-Mean Imputation Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	17	10-30	13.94 (5.72)	1.98 (.55)	3.47 (1.06)
Negative (I)	18	10-31	14.94 (5.61)	1.85 (.54)	3.16 (1.04)
Positive (D)	19	14-45	29.32 (8.87)	.23 (.53)	19 (1.01)
Positive (I)	20	21-50	34.90 (7.76)	02 (.51)	56 (.99)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

Table 5.17 Spouse PANAS Pre-Mean Imputation Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	13	10-45	15.00 (9.32)	3.21 (.62)	10.94 (1.19)
Negative (I)	16	10-44	16.88 (9.10)	2.18 (.56)	4.90 (1.09)
Positive (D)	15	18-50	34.87 (9.21)	14 (.58)	39 (1.12)
Positive (I)	19	24-50	40.84 (8.19)	87 (.52)	20 (1.01)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

Due to the small sample of couples (N=22) for this dissertation, overall means for each role (veteran or spouse) and communication (delayed vs. interactive) were calculated and imputed for the respondents who did not complete the entire scale. There was no pattern of missing data so mean imputation was used. If there would have been patterns of missing data, those participants would have been excluded. Overall negative affect (delayed and interactive) fell outside the range of a normal distribution. The overall positive affect for delayed communication was 32.09 (SD= 8.28) ranging from 14 to 50 and interactive communication was 37.87 (SD= 7.98) ranging from 21 to 50. Please see Table 5.18 for overall mean imputation descriptive statistics.

Table 5.18 Overall PANAS Mean Imputation Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	44	10-45	14.47 (6.06)	7.37 (.36)	15.54 (.70)
Negative (I)	44	10-44	15.91 (6.50)	7.40 (.36)	7.94 (.70)
Positive (D)	44	14-50	32.09 (8.28)	9.32 (.36)	.04 (.70)
Positive (I)	44	21-50	37.87 (7.98)	8.42 (.36)	70 (.70)

Veteran negative affect (delayed and interactive) fell outside the range of a normal distribution. The veterans' positive affect for delayed communication was 29.32 (SD= 8.21) ranging from 14 to 45 and interactive communication was 34.90 (SD= 7.38) ranging from 21 to 50 were normally distributed. Please see Table 5.19 for veteran mean imputation descriptive statistics.

Table 5.19 Veteran PANAS Mean Imputation Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	22	10-30	13.94 (4.99)	2.20 (.49)	5.07 (.95)
Negative (I)	22	10-31	14.94 (5.05)	2.01 (.49)	4.33 (.95)
Positive (D)	22	14-45	29.32 (8.21)	.24 (.49)	.29 (.95)
Positive (I)	22	21-50	34.90 (7.38)	02 (.49)	29 (.95)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

Spouses' negative affect (delayed and interactive) fell outside the range of a normal distribution. The spouses' positive affect for delayed communication was 34.87 (SD= 7.53) ranging from 18 to 50 and interactive communication was 40.84 (SD= 7.59) ranging from 24 to 50. Please see Table 5.20 for spouse mean imputation descriptive statistics. This researcher attempted to LOG(PANAS) but it only produced more extreme scores that were not randomly distributed. The PANAS negative affect scores for role (veteran and spouse) and communication (delayed and interactive) were not included in inferential statistical analyses.

Table 5.20 Spouse PANAS Mean Imputation Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Negative (D)	22	10-45	15.00 (7.04)	3.95 (.49)	17.46 (.95)
Negative (I)	22	10-44	16.88 (7.69)	2.48 (.49)	7.25 (.95)
Positive (D)	22	18-50	34.87 (7.53)	16 (.49)	.91 (.95)
Positive (I)	22	24-50	40.84 (7.59)	93 (.49)	.27 (.95)

5.4.5 Relationship Maintenance Behavior Measure (RMBM)

The RMBM is comprised of 7 subscales: positivity, understanding, self-disclosure, relationship talks, assurances, tasks, and networks. For this dissertation, each subscale was separated into delayed and interactive forms of communication. Overall the RMBM was normally distributed, except for assurances (delayed and interactive). Please see Table 5.21. For further analyses, the data was split into veteran and spouse responses. All veteran responses were normally distributed. However, for spouses, relationship talks and assurances both were not randomly distributed. Please see Table 5.22.

Table 5.21 Overall RMBM Raw Descriptive Data

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Positivity (D)	40	10 - 28	22.82 (4.55)	90 (.37)	.55 (.73)
Positivity (I)	42	10 – 28	22.69 (4.64)	84 (.37)	.34 (.72)
Understanding (D)	30	16 -28	22.67 (4.08)	18 (.43)	-1.28 (.83)
Understanding (I)	33	13 – 28	22.52 (4.70)	37 (.41)	-1.06 (.80)
Self disclosure (D)	36	11 – 28	21.94 (4.63)	91 (.39)	.21 (.77)
Self disclosure (I)	40	10-28	21.85 (5.10)	89 (.37)	.07 (.73)
Relationship talks (D)	39	6 – 21	16.87 (4.27)	-1.11 (.38)	.70 (.74)
Relationship talks	42	6 -21	16.79 (4.31)	-1.15 (.37)	.83 (.72)
Assurances (D)	36	10 – 28	24.78 (4.19)	-1.85 (.39)	3.66 (.77)
Assurances (I)	40	10 – 28	24.75 (4.35)	-1.54 (.37)	2.16 (.73)
Tasks (D)	32	14 – 28	22.53 (4.47)	40 (.41)	92 (.81)
Tasks (I)	35	14 – 28	23.29 (4.29)	61 (.40)	44 (.78)
Networks (D)	25	14 -35	24.52 (5.57)	07 (.46)	78 (.90)
Networks (I)	27	14 - 35	24.26 (5.32)	.19.(45)	.12 (.87)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

Table 5.22 Raw RMBM Spouse Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Relationship talks (D)	19	6 – 21	17.95 (3.69)	-1.96 (.52)	5.33 (1.01)
Relationship talks (I)	20	6 -21	17.05 (3.86)	-1.21 (.51)	2.12 (.99)
Assurances (D)	17	10 – 28	24.94 (4.60)	-2.47 (.55)	6.85 (1.07)
Assurances (I)	20	10 – 28	24.50 (4.70)	-1.80 (.51)	3.64 (.99)

From this point, four couples were excluded because over 90% of their data were missing. Means were imputed for the remaining missing data. With four couples excluded and mean imputation, there were three subscales that were not normally distributed, assurances (delayed and interactive) and interactive networks. Please see Table 5.23.

Table 5.23 Overall RMBM Imputed Means

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Assurances (D)	36	10 – 28	24.79 (4.07)	-2.00 (.39)	4.46 (.77)
Assurances (I)	36	10 – 28	24.91 (4.18)	-1.85 (.39)	3.73 (.77)
Networks (I)	36	14-35	23.48 (4.03)	.21 (.39)	2.14 (.77)

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication), SD (standard deviation), SE (standard error).

The only distribution for veterans out of the range of normality was interactive networks. Please see Table 5.24. For the spouses, relationship talks (delayed and interactive), assurances (delayed and interactive) and interactive networks were not distributed normally. Please see Table 5.25. This researcher attempted to RMBM the non-normally distributed subscales but it only produced more extreme scores that were not randomly distributed. So, in conclusion, for the RMBM the positivity, understanding, self disclosure, and tasks subscale, both delayed and interactive forms of communication were normally distributed. Also interactive network was retained because it is normally distributed.

Table 5.24 Veteran RMBM Imputed Outside the Range of Normality.

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Networks (I)	18	15 – 35	22.80 (4.56)	1.02 (.54)	2.79 (1.04)

Note: N (number of participants), I (interactive forms of communication), SD (standard deviation), SE (standard error).

Table 5.25 Spouse RMBM Imputed Outside the Range of Normality

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Relationship talks (D)	36	6 – 21	17.59 (3.63)	-1.93 (.54)	5.50 (1.04)
Relationship talks (I)	36	6 – 21	17.06 (3.84)	-1.39 (.54)	2.89 (1.04)
Assurances (D)	36	10 – 28	24.87 (4.46)	-2.47 (.54)	7.19 (1.04)
Assurances (I)	36	10 – 28	24.76 (4.61)	-2.19 (.54)	5.61 (1.04)
Networks (I)	36	14 – 31	24.17 (3.41)	-1.14 (.54)	4.63 (1.04)

5.4.6 Relationship Continuity Constructional Units (RCCU)

The overall RCCU (Table 5.26) and veteran subgroup (Table 5.27) analyses showed that the RCCU was normally distributed. However upon spouse subgroup analyses the prospective and retrospective were not normally distributed. Please see Table 5.28 for spouse subgroup analyses. To correct this issue the overall, veteran and spouses were LOG(RCCU).

Table 5.26 Overall RCCU Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	43	4.4-100	8.26 (1.60)	99 (.36)	.23 (.71)
Introspective	21	.91-9.09	1.61 (2.36)	.36 (.50)	72 (.97)
Retrospective	44	4-10	8.60 (1.73)	-1.30 (.36)	.55 (.70)

Note: N (number of participants), SD (standard deviation), SE (standard error).

Table 5.27 Veteran RCCU Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	22	4.86-10	7.97(1.57)	42 (.49)	61 (.95)
Introspective	16	.91-8.64	4.23 (2.26)	.55 (.56)	36 (1.09)
Retrospective	22	4.75-10	8.16 (1.83)	74 (.49)	82 (.95)

Note: N (number of participants), SD (standard deviation), SE (standard error).

Table 5.28 Spouse RCCU Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	21	4.43-10	8.57(1.60)	-1.79 (.50)	2.78 (.97)
Introspective	5	2.27-9.09	5.82 (2.50)	24 (.91)	.80 (2.00)
Retrospective	22	4-10	9.05 (1.54)	2.32 (.49)	5.36 (.95)

Note: N (number of participants), SD (standard deviation), SE (standard error).

After the LOG(RCCU) transformation over all participants; the prospective and retrospective descriptive statistics were still not normally distributed. Please see Table 5.29.

The transformed veteran statistics were normally distributed (Table 5.30) whereas spouse (Table 5.31) prospective and retrospective scores were outside the range of normal distribution. Due to the spouses (original and transformed), overall (transformed) scores being outside the range of normal distribution the RCCU was not used for inferential testing.

Table 5.29 Overall LOG(RCCU) Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	43	.65-1	.91 (.10)	-1.41 (.36)	1.47 (.71)
Introspective	21	0496	.60 (.26)	73 (.50)	.16 (.97)
Retrospective	44	.6-1	.92 (.10)	-1.6 (.36)	1.73 (.70)

Note: N (number of participants), SD (standard deviation), SE (standard error).

Table 5.30 Veteran LOG(RCCU) Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	22	.69-1	.89 (.09)	83 (.49)	.28 (.95)
Introspective	16	0494	.56 (.27)	65 (.56)	.16 (1.09)
Retrospective	22	.68-1	.90 (.11)	99 (.49)	33 (.95)

Note: N (number of participants), SD (standard deviation), SE (standard error).

Table 5.31 Spouse LOG(RCCU) Descriptive Statistics

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Prospective	21	.65-1	.92 (.10)	-2.17 (.50)	4.24 (.97)
Introspective	5	.3696	.72 (.23)	-1.27 (.91)	2.19 (2.00)
Retrospective	22	.6-1	.95 (.10)	-2.80 (.49)	8.22 (.70)

Note: N (number of participants), SD (standard deviation), SE (standard error).

5.4.7 Combat Experience (CE)

All respondents completed the CE. The mean score for all respondents on the CE was 40.59 (SD=19.28) ranging from 0 to 79. The veterans' mean score on the CE was 41.32 (SD=18.77) ranging from 17 to 79. The spouses' mean score on the CE was 39.86 (SD=20.19) ranging from 0 to 74. The veteran CE distribution was positively skewed (CE = .755, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (CE = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the CE kurtosis (-.299) falls within the range of - 1.906 to 1.906. The spouse CE distribution was negatively skewed (CE = -.050, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (CE =

.953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the CE kurtosis (-.931) falls within the range of - 1.906 to 1.906.

5.4.8 PTSD Checklist-5 (PCL-5)

All respondents completed the PCL-5. The mean score for all respondents on the PCL-5 was 26.82 (SD=23.35) ranging from 0 to 70. The veterans' mean score on the PCL-5 was 29.32 (SD=21.94) ranging from 0 to 70. The spouses' mean score on the PCL-5 was 24.32 (SD=24.94) ranging from 0 to 68. The veteran PCL-5 distribution was positively skewed (PCL-5 = .192, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (PCL-5 = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the PCL-5 kurtosis (-1.191) falls within the range of -1.906 to 1.906. The spouse PCL-5 distribution was positively skewed (PCL-5 = .637, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (PCL-5 = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the PCL-5 kurtosis (-1.217) falls within the range of -1.906 to 1.906.

5.4.9 Patient Healthcare Questionnaire-9 (PHQ-9)

All respondents completed the PHQ-9. The mean score for all respondents on the PHQ-9 was 7.95 (SD=6.93) ranging from 0 to 24. The veterans' mean score on the PHQ-9 was 9.09 (SD=6.84) ranging from 0 to 24. The spouses' mean score on the PHQ-9 was 6.81 (SD=6.99) ranging from 0 to 21. Ten participates or 22.7% percent of the sample self-reported 15 or greater score which indicates moderately severe depression. The spouse PHQ-9 distribution was positively skewed (PHQ-9 = .865, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (PHQ-9 = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the PHQ-9 kurtosis (-.707) falls within the range of -1.906 to 1.906. The

veteran PHQ-9 distribution was positively skewed (PHQ-9 = .422, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (PHQ-9 = .953) and multiplying by 2 to construct the range of normality (-.1.906 to 1.906), the distribution approaches normality because the value for the PHQ-9 kurtosis (-.483) falls within the range of -1.906 to 1.906.

5.4.10 Impact of Events Scale-Revised (IES-R)

All respondents completed the IES-R. The mean score for all respondents on the IES-R was 16.14 (SD=21.79) ranging from 0 to 77. The veteran IES-R distribution was positively skewed (IES-R = 1.59, SE = .36) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (IES-R = .70) and multiplying by 2 to construct the range of normality (-1.40 to 1.40), the distribution is not normally because the value for the IES-R kurtosis (1.50) does not fall within the range of -1.40 to 1.40.

Due to the overall respondents not obtaining a normal distribution the aggregated IES-R scores with put into a LOG(IES-R). The mean score for all respondents on the LOG(IES-R) was .84 (SD=.64) ranging from 0 to 1.89. The overall LOG(IES-R) distribution was positively skewed (IES-R = .02, SE = .36) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (IES-R = .70) and multiplying by 2 to construct the range of normality (-1.40 to 1.40), the distribution approached normality because the value for the IES-R kurtosis (-1.25) falls within the range of -1.40 to 1.40.

The mean score for veterans LOG(IES-R) was 1.06 (SD=.62) ranging from 0 to 1.88. Taking the standard error of the kurtosis statistic (IES-R = .95) and multiplying by 2 to construct the range of normality (-1.90 to 1.90), the distribution approached normality because the value for the LOG(IES-R) kurtosis (-.97) falls within the range of -1.90 to 1.90. The mean score for spouses LOG(IES-R) was .63 (SD=.59) ranging from 0 to 1.89. Taking the standard error of the kurtosis statistic (IES-R = .95) and multiplying by 2 to construct the range of normality (-1.90 to

1.90), the distribution approached normality because the value for the IES-R kurtosis (--.86) falls within the range of -1.90 to 1.90.

5.4.11 Self-Report Family Inventory: Version II (SFI)

The overall mean score on the health/competence was 38.11 (SD=13.11) ranging from 20 to 74. The overall health/competence distribution was positively skewed (SFI = .765, SE = .357) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (SFI = .702) and multiplying by 2 to construct the range of normality (-.1.404 to 1.404), the distribution approaches normality because the value for the health/competence kurtosis (.041) falls within the range of -1.404 to 1.404.

The veteran mean score on the health/competence was 39.59 (SD = 12.83) ranging from 20 to 64. The veteran health/competence distribution was positively skewed (SFI = .287, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (SFI = .953) and multiplying by 2 to construct the range of normality (-1.906 to 1.906), the distribution approaches normality because the value for the health/competence kurtosis (-.794) falls within the range of -1.906 to 1.906.

The partner mean score on the health/competence was 36.64 (SD = 13.52) ranging from 21 to 74. The partner health/competence distribution was positively skewed (SFI = 1.290, SE = .491) and the distribution appears platykurtic. Taking the standard error of the kurtosis statistic (SFI = .953) and multiplying by 2 to construct the range of normality (-1.906 to 1.906), the distribution approaches normality because the value for the health/competence kurtosis (1.549) falls within the range of -1.906 to 1.906.

Table 5.32 SFI Health/Competence

	N	Range	Mean (SD)	Skewness (SE)	Kurtosis (SE)
Overall	44	20-74	38.11	.765 (.357)	.041 (.702)
			(13.11)		
Veteran	22	20-64	39.59	.287 (.491)	794 (.953)
			(12.83)		, ,
Spouse	22	21-74	36.64	1.290 (.491)	1.549 (.953)
			(13.52)		, ,

Note: N (number of participants), SD (standard deviation), SE (standard error).

5.5 Undergraduate Replication

5.5.1 LDR and GDR Review

The LDR and GCR review contains three studies (Gilbertston et al., 1998; Pistole et al., 2010; Roberts & Pistole, 2009) that were replicated as far as the data allows. In this study the RCCU was not normally distributed therefore Gilberston and colleagues (1998) results cannot be replicated.

Roberts and Pistole (2009) conducted two hierarchical regressions (LDRR and PRR) with steady dating, avoidance (ECR), anxiety (ECR), strength of influence, and interconnection. This dissertation did not collect strength of influence and interconnection. A Multiple Regression was conducted with anxiety and avoidance as the predictor variables and relationship satisfaction as the dependent variable. Two separate regressions were run, one for the veteran and one for the spouse.

The veteran regression equation was significant F(2, 19) = 3.41, p<.05 and had an Adjusted $R^2 = .19$ meaning 19% of the variance in DAS satisfaction subscale was explained with these two variables. Anxious attachment ($\beta = .19$, p = .39) was not significant whereas avoidant attachment was statistically significant ($\beta = -.56$, p < .05). The spouse regression equation was significant F(2, 19) = 4.60, p<.05 and had an Adjusted $R^2 = .26$ meaning 26% of the variance in DAS satisfaction subscale was explained with these two variables. Anxious attachment ($\beta = -.55$, p < .05) was statistically significant whereas avoidant attachment was not significant ($\beta = -.05$, p = .81).

Another study from Pistole and colleagues (2010) examined perceived stress and attachment. Variable differences are that Pistole et al. (2010) included the RCCU and Perceived Stress Scale (PSS), whereas this study used the IES-R. Both scales (PSS and IES-R) quantify self-reported subjective distress. Two separate correlation matrices (one for veteran and one for spouse) showed different trends. There were no statistically significant correlations

for veterans. However, for spouses, anxiety and positivity (I), understanding (D & I), self-disclosure (I), and IES-R were all significant. Please see Table 5.33.

5.33 Veteran and Spouse Correlation with Stress

	Veteran		Spouse	
	Avoidance	Anxiety	Avoidance	Anxiety
Positivity (D)	37	33	08	44
Positivity (I)	24	27	19	59*
Understanding (D)	.10	.43	.17	52*
Understanding (I)	.08	03	23	69**
Self disclosure (D)	36	06	.19	45
Self-disclosure (I)	32	.02	12	67**
Task (D)	07	02	.15	40
Task (I)	16	04	.08	46
Network (D)	31	.11	.47*	19
LOG(IES-R)	.13	.30	.25	.42*

Note: N (number of participants), D (Delayed forms of communication), I (interactive forms of communication, RMBM scales (N=18), LOG(IES-R) (N=18)*p <.05, **p<.01 Pearson Correlation

In addition to correlations, Pistole et al. (2010) conducted two hierarchical regressions (GCRs & LDRs). However, this study exclusively replicated the LDR equation for both veteran and spouse. The veterans' first equation was not statistically significant F(1, 20) = 1.02, p = .32, R = .22, $R^2 = .05$ (Adjusted $R^2 = .001$) and the second equation was not statistically significant F(1, 20) = .77, p = .53, R = .34, $R^2 = .11$ (Adjusted $R^2 = .03$). The spouses' first equation was not statistically significant F(1, 20) = .07, p = .80, R = .06, $R^2 = .003$ (Adjusted $R^2 = .48$) and the second equation was not statistically significant F(1, 20) = 1.37, p = .28, R = .43, $R^2 = .19$ (Adjusted $R^2 = .05$). Both the veteran and spouses regressions were not statistically significant.

Table 5.34 Veteran and Spouse Multiple Regression Replication

	Veteran		Spouse	
	B (SE B)	β (sr)	B (SE B)	β (sr)
gender	.47 (.68)	.16 (.16)	.47 (.68)	.16 (.16)
Data Group				
Avoidance	01 (.16)	02 (02)	01 (.16)	02 (02)
Anxiety	.13 (.12)	.27 (.25)	.13 (.12)	.27 (.25)

Note: *B* unstandardized coefficient, *SE B* (standard error of unstandardized coefficient), β (standardized cofficient, sr (semipartial correlation),*p<.05; **p<.01; ***p<.001

5.5.2 Attachment and Emotional Communication Review

Two studies have been reviewed that use SEM (Guerrero, et al., 2009) and path analysis (Timm & Keiley, 2011) to explain attachment communication. Guerrero et al. (2009) cannot be replicated because the structure of this survey and resulting data are not compatible with their statistical analyses. Timm and Keiley (2011) relied on measures that assessed sexual satisfaction and sexual communication. Due to formatting issues in surveymonkey the DCS (sexual communication) and GMSEX (sexual satisfaction) cannot be used due to missing data so the path analysis cannot be replicated.

5.5.3 Attachment and Mobile Communication Review

Of the four articles that were reviewed earlier in the attachment chapter only three were replicated (Drouin & Landgraff, 2012; Jin & Pena, 2010; Weisskirch, 2012). The Weisskirch and Delevi (2011) article was omitted because formatting issues with the DCS (sexual communication) and GMSEX (sexual satisfaction) in surveymonkey produced missing data.

The Drouin and Landgraff (2012) hierarchical regression was replicated with the same variables except marital status because in this sample is it unknown. There were three steps in their regression, however when replicated in this dissertation the step three interactions (anxiety x gender and avoidant x gender) produced collinearity so only step one and two are presented. Separate regressions were replicated for veteran and spouse.

The first veterans first model was significant F(3, 18) = 5.12, p = .01 and had an Adjusted R^2 = .37 accounting for 37% of the variance in frequency of text message. The second veterans model was also significant F(5, 16) = 3.83, p < .05 and had an Adjusted R^2 = .40 accounting for 40% of the variance in frequency of text message. Please see veteran Table 5.35

Table 5.35 Veteran Hierarchical Regression Analyses on Frequency of Text Message

Variable	В	(SEB)	β	R	R2	ΔR2
Step 1				.68	.46	.37**
Age	.28	.08	1.24**			

Table 5.35- Continued

Gender	-2.44	1.33	35			
Length of relationship	35	.09	-1.38**			
Step 2				.74	.55	.40*
Avoidant	07	.24	06			
Anxious	42	.30	28			

Note: *B* unstandardized coefficient, SE *B* (standard error of unstandardized coefficient), β (standardized cofficient, R (R), R² (R squared, Δ R² (Adjusted R squared), *p<05 **p<.01

The first spouses model was significant F(3, 18) = 6.28, p < .01 and had an Adjusted $R^2 = .43$ accounting for 43% of the variance in frequency of text message. The second spouses model was also significant F(5, 16) = 4.39, p = .01 and had an Adjusted $R^2 = .45$ accounting for 45% of the variance in frequency of text message. Please see spouse Table 5.36

Table 5.36 Spouse Hierarchical Regression Analyses on Frequency of Text Message

Variable	В	(SEB)	β	R	\mathbb{R}^2	ΔR^2
Step 1				.72	.51	.43**
Age	.27	.08	.85**			
Gender	3.56	1.89	.33			
Length of relationship	43	.10	.10***			
Step 2				.76	.52	.45*
Avoidant	.23	.47	.09			
Anxious	.39	.31	.24			

Note: B unstandardized coefficient, SE B (standard error of unstandardized coefficient), β (standardized cofficient, R (R), R² (R squared, Δ R² (Adjusted R squared), *p<05 **p<.01

Jin and Pena (2010) added additional variables to the correlations of Weisskirch (2012) which were call and text frequency correlated with attachment (avoidance vs. anxiety).

Therefore Jin and Pena's (2010) study was replicated as the data allowed. Of Jin and Pena's (2010) correlation matrix of 13 variables, six were replicated for this study (avoidance and anxiety with call frequency, text frequency, sex, and relationship length). They found that avoidance was negatively related to call frequency, sex, and relationship length whereas anxiety was statistically significant. Please see Table 5.37 for their findings.

Table 5.37 Inter-correlations from Jin and Pena (2010)

	Call frequency	Text frequency	Sex	Relationship length
Avoidance	33***	.04	14*	31***
Anxiety	06	.01	.01	.03

^{*}p<.05, **p<.01, ***p<.001, one tailed test

Veteran and spouse correlations included four variables (call frequency, text frequency, sex, and relationship length) from Jin and Pena (2010) plus three additional variables (email frequency, Skype frequency and social networking frequency) from this dissertation. For veterans only, avoidant attachment was significantly correlated with telephone, email, and Skype frequency. The antithesis was found for spouses whose anxiety was significantly correlated with text and social networking frequency. Please see Table 5.38

Table 5.38 Replicated Mobile Communication Correlations

	ECR	telephone	Text	Sex	Relationship	Email	Skype	Social
					length			networking
Veteran	Avoidance	51*	17	.29	09	44*	46*	25
	Anxiety	.15	.44	.24	36	21	26	02
Spouse	Avoidance	.11	.37	.29	27	.38	31	.22
	Anxiety	.20	.46*	.24	17	03	05	.46*

^{*}p<.05, two tailed test, N=22, Pearson Correlation, Telephone, Text, Email, and Skype are frequencies

5.6 Actor Partner Interdependence Model (APIM)

Using the SPSS Version 22 mixed model procedure, the APIM for distinguishable dyads was used to explain behavior in terms of attachment theory (anxiety and avoidance). For this dissertation, actor/partner is with the variable ROLE as the distinguishing variable of the dyad. ROLE is coded with veterans as 1 and spouses as -1. For the initial attachment model, all two-way interactions with ROLE are included as recommended by Kenney et al. (2006).

5.6.1 Initial Model Main Effects on Dependent Variables

As a first step, the statistical significance of this initial model was established with the five dependent variables (DAS, PCL-5, LOG[IES-R], SFI, and PHQ-9). See Table 5.39. Next, the remaining variables from the survey were examined to see if they should be included. These additional variables included: participant demographic information, interactive/delayed communication measures (i.e., RMBM), and method/frequency of communication during the combat deployment. These additional variables were examined via residual plots and simple correlations with residuals. The significance of any additional variable was evaluated with the standard t-test for its inclusion in the model.

Table 5.39 Initial Model Main Effects on Dependent Variables

DV	ROLE	ANX (ACTOR)	AVOID (ACTOR)	ANX (PARTNER)	AVOID (PARTNER)	ANX (ACTOR) x ROLE	AVOID (ACTOR) x ROLE	ANX (PARTNER) x ROLE	AVOID (PARTNER) x ROLE
LOG(IES -R)	0.61	0.16*	0.09	0.04	-0.16	0.01	0.06	0.04	-0.31**
PHQ-9	4.52	3.01***	1.11	0.51	-1.26	0.21	0.48	0.5	-2.77*
PCL5	9.52	9.11***	-1.95	1.92	3.47	-0.42	10.08*	1.03	-12.51**
SFI	8.26***	1.96	0.90	0.94	3.83*	-5.29****	1.49	2.60*	-0.57
DAS	-7.24*	-2.22	-5.10**	-0.48	-2.76	5.98***	-0.28	-5.07***	0.85

Note: DV = dependent variable, ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse. Dyadic Adjustment Scale (DAS), PTSD Checklist-5 (PCL-5), Patient Healthcare Questionnaire-9 (PHQ-9), Impact of Event Scale – Revised (IES-R), Self-Report Family Inventory: Version II (SFI), Estimate with associated

level of significance *p < .10; ** p < .05, *** p < .01; **** p < .001

The initial model for each dependent variable showed clear trends. The main effect of anxiety or avoidance, as exhibited by the actor or the partner, was statistically significant at the .05 level of significance. More specifically, there are four anxiety/avoidance variables (or main effects) for each individual: 1) the actor's anxiety; 2) the actor's avoidance; 3) the partner's anxiety; 4) and the partner's avoidance. Only one of these four main effects was statistically

significant in each model. Actor anxiety had a positive relationship with the LOG(IES-R), PHQ-9, and PCL-5, whereas actor avoidance was related to decreased relationship satisfaction. Partner avoidance was related to family functioning. Role (veteran/spouse) was related with decreased relationship satisfaction and inhibited family functioning.

The four anxiety/avoidance variables had four interactions with ROLE. These interactions were complementary to the main effects. If an anxiety main effect was significant, then only an avoidance interaction with ROLE was significant. Correspondingly, if an avoidance main effect was significant, then only an anxiety interaction with ROLE was significant. The interaction of anxiety and ROLE was related to family functioning and relationship satisfaction. The interaction of actor avoidance and role was related to higher PTSD scores. Partner anxiety x ROLE was related with decreased family and relationship functioning. Partner avoidance x ROLE was related to decreased LOG(IES-R), PHQ-9, and PCL-5 scores.

In the initial model, the only main effect on IES-R that was statistically significant was actor anxiety (estimate = 0.16, t =-1.86, p < .10). Also, the interaction of partner avoidance x ROLE was a significant (estimate = - 0.31, t =-2.11, p < .05) predictor on LOG(IES-R). None of the additional variables in the survey were statistically significant for inclusion in the model.

Please see Table 5.40.

Table 5.40 Final LOG(IES-R) Model

Effect	Estimate	SE	t
ROLE	0.61	0.35	1.73
ANX_ACTOR	0.16	0.08	1.86*
AVOID_ACTOR	0.09	0.13	0.71
ANX_PARTNER	0.04	0.08	0.53
AVOID_PARTNER	-0.16	0.13	-1.20
ANX_ACTOR*ROLE	0.01	0.08	0.09
AVOID_ACTOR*ROLE	0.06	0.14	0.40
ANX_PARTNER*ROLE	0.04	0.08	0.48
AVOID_PARTNER*ROLE	-0.31	0.15	-2.11**

Note: ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner

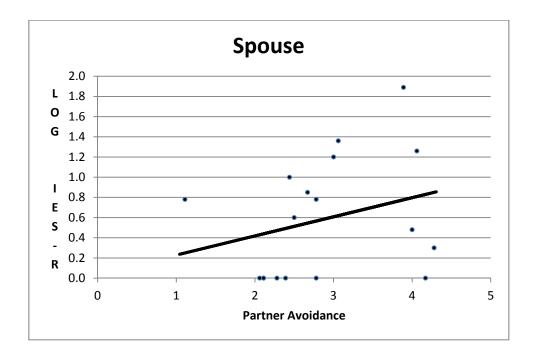
Table 5.40-Continued

avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse, Estimate with associated level of significance *p < .10; *** p < .05, *** p < .01; **** p < .001

Veteran 2.0 L 1.8 **o** 1.6 $G_{1.4}$ 1.2 1.0 8.0 0.6 0.4 0.2 0.0 2 3 0 1 4 5 **Partner Avoidance**

Figure 5.1 Interaction Plots of Partner Avoidance x ROLE (Veteran) for LOG(IES-R)

Figure 5.2 Interaction Plots of Partner Avoidance x ROLE (Spouse) for LOG(IES-R)



5.6.3 APIM Model on PHQ-9

In the initial model, the only main effect on PHQ-9 that was statistically significant was actor anxiety (estimate = 3.70, t = 4.92, p < .001). Also, the interaction of partner avoidance x ROLE was significant (estimate = -3.61, t = -2.97, p < .01) predictor on PHQ-9. Lastly, independent variable RMBM delayed task was a significant (estimate = .88, t = 3.46, p < .001) predictor on PHQ-9. Please see Table 5.41.

Table 5.41 Final PHQ-9 Model

Effect	Estimate	SE	t
ROLE	6.82	4.17	1.64
ANX_ACTOR	3.70	0.75	4.92****
AVOID_ACTOR	0.14	1.29	0.11
ANX_PARTNER	0.38	0.74	0.52
AVOID_PARTNER	-0.21	1.29	-0.17
ANX_ACTOR*ROLE	-0.52	0.77	-0.68
AVOID_ACTOR*ROLE	1.66	1.25	1.33

Table 5.41- Continued

ANX_PARTNER*ROLE	0.47	0.74	0.63
AVOID_PARTNER*ROLE	-3.61	1.22	-2.97***
RMBM_DELAY_TASK	0.88	0.25	3.46****

Note: ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse, RMBM_DELAY_TASK = Relationship Maintenance Behavior Measure delayed communication task factor. Estimate with associated level of significance *p < .10; *** p < .05, *** p < .01; **** p < .001

Figure 5.3 Interaction Plots of Partner Avoidance x ROLE (Veteran) for PHQ-9

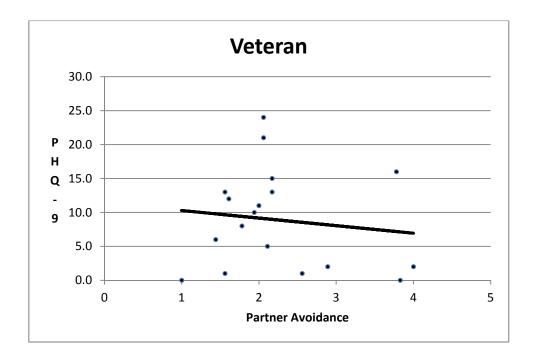
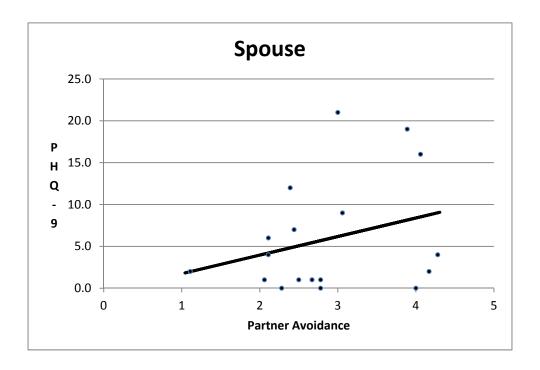


Figure 5.4 Interaction Plots of Partner Avoidance x ROLE (Spouse) for PHQ-9



5.6.4 APIM Model on PCL-5

In the initial model, two main effects on PCL-5 were statistically significant: actor anxiety (estimate = 12.32, t = 4.73, p<.001) and partner anxiety (estimate = 4.98, t = 1.99, p < .10). There were two statistically significant interactions: actor avoidance x ROLE (estimate = 8.84, t = 2.07, p < .10) and partner avoidance x ROLE (estimate =-9.97, t = -2.27, p < .05). Lastly, the independent variable CE was a significant (estimate = .62, t = 3.70, p < .001) predictor on PCL-5. Please see Table 5.42.

Table 5.42 Final PCL-5 Model

Effect	Estimate	SE		t
ROLE	3.0)4	7.60	0.40
ANX_ACTOR	12.3	32	2.61	4.73****
AVOID ACTOR	-2.0	19	3.45	-0.61

Table 5.42 - Continued

ANX_PARTNER	4.98	2.51	1.99*
AVOID_PARTNER	0.20	3.66	0.05
ANX_ACTOR*ROLE	0.81	2.36	0.34
AVOID_ACTOR*ROLE	8.84	4.28	2.07*
ANX_PARTNER*ROLE	0.41	2.24	0.18
AVOID_PARTNER*ROLE	-9.97	4.39	-2.27**
CE	0.62	0.17	3.70****

Note: ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse, CE = Combat Exposure. Estimate with associated level of significance *p < .10; *** p < .05, *** p < .01; **** p < .001

Figure 5.5. Interaction Plots of Actor Avoidance x ROLE (Veteran) for PCL-5

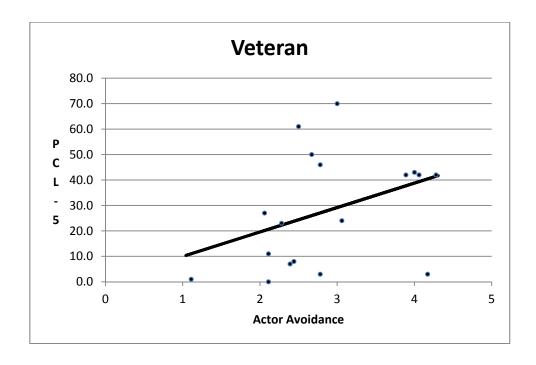


Figure 5.6 . Interaction Plots of Actor Avoidance x ROLE (Spouse) for PCL-5

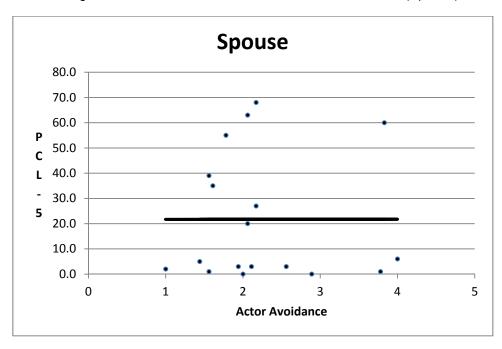


Figure 5.7 Interaction plots of partner avoidance x ROLE (Veteran) for PCL-5

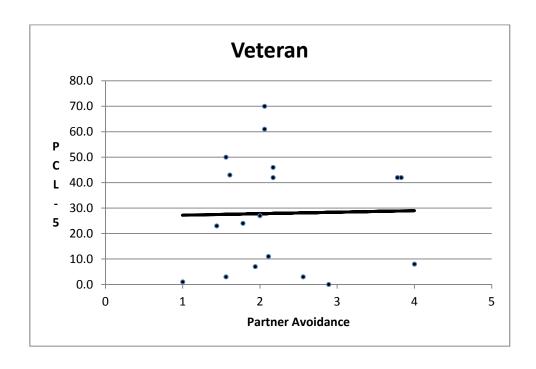
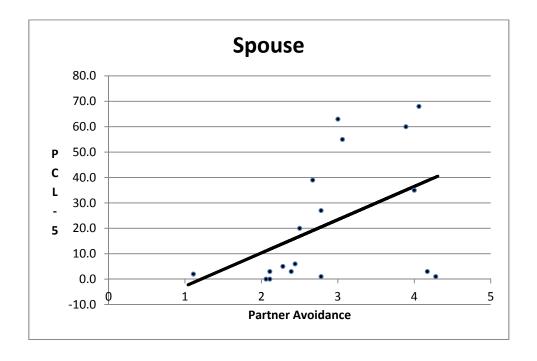


Figure 5.8 Interaction Plots of Partner Avoidance x ROLE (Spouse) for PCL-5



5.6.5 APIM Model on SFI

In the initial model, there were two main effects on SFI that were statistically significant was ROLE (estimate = 7.66, t = 3.18, p < .01) and partner avoidance (estimate = 3.35, t = 1.81, p < .10). There were three statistically significant interactions: actor anxiety x ROLE (estimate = -4.65, t = -3.65, p < .001) and partner anxiety x ROLE (estimate = 2.45, t = 1.96, p < .10). Lastly, the independent variable RMBM interactive task factor was a significant (estimate = -.74, t = -2.98, p < .01) predictor on SFI. Please see Table 5.43.

Table 5.43 Final SFI Model

Effect	Estimate	SE		Т
ROLE	7	7.66	2.41	3.18***
ANX_ACTOR	1	.39	1.36	1.02
AVOID_ACTOR	1	.27	1.84	0.69
ANX PARTNER	C).91	1.34	0.68

Table 5.43- Continued

AVOID_PARTNER	3.35	1.85	1.81*
ANX_ACTOR*ROLE	-4.65	1.27	-3.65****
AVOID_ACTOR*ROLE	0.71	2.46	0.29
ANX_PARTNER*ROLE	2.45	1.25	1.96*
AVOID_PARTNER*ROLE	-0.31	2.46	-0.12
RMBM_INTER_TASK	-0.74	0.25	-2.98***

Note: ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse, RMBM_INTER_TASK = Relationship Maintenance Behavior Measure interactive communication task factor. Estimate with associated level of significance *p < .10; ** p < .05, *** p < .01; **** p < .001

Figure 5.9 Interaction Plots of Actor Anxiety x ROLE (Veteran) for SFI

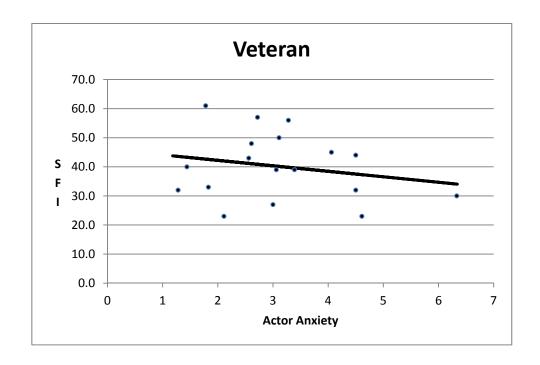


Figure 5.10 Interaction Plots of Actor Anxiety x ROLE (Spouse) for SFI

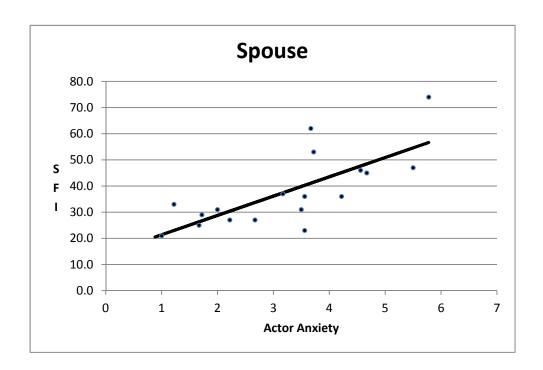


Figure 5.11 Interaction Plots of Partner Anxiety x ROLE (Veteran) for SFI

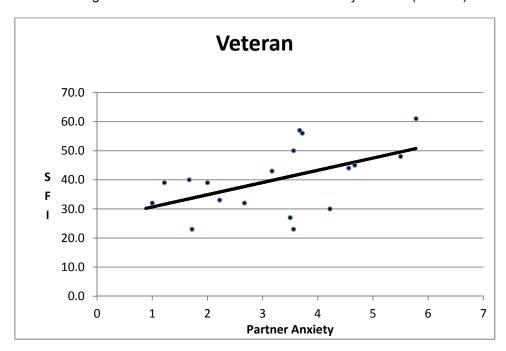
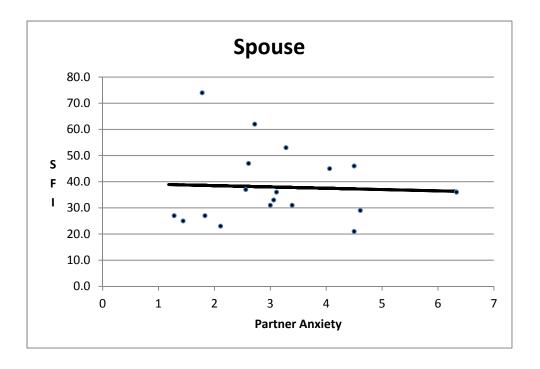


Figure 5.12 Interaction Plots of Partner Anxiety x ROLE (Spouse) for SFI



5.6.6 APIM Model on DAS

In the initial model, there were three main effects on DAS that were statistically significant: ROLE (estimate = -9.48, t = -2.36, p < .01), actor avoidance, (estimate = -4.47, t = -2.40, p < .05), and partner avoidance (estimate = -4.02, t = -2.12, p < .05). There were two statistically significant interactions: actor anxiety x ROLE (estimate = .5.95, t = 1.27, p < .001) and partner anxiety x ROLE (estimate = -4.46, t = -3.56, p < .001). Lastly, two independent variables were significant: interactive partner communication (estimate = -4.99, t = -4.00, p < .001) and RMBM interactive task (estimate = .90, t = .29, p < .01). Please see Table 5.44.

Table 5.44 Final DAS Model

Effect	Estimate	SE	t
ROLE	-9.48	2.91	-3.26***
ANX_ACTOR	-2.09	1.35	-1.55
AVOID_ACTOR	-4.47	1.87	-2.40**
ANX_PARTNER	-0.08	1.34	-0.06
AVOID_PARTNER	-4.02	1.89	-2.12**
ANX_ACTOR*ROLE	5.95	1.27	4.69****
AVOID_ACTOR*ROLE	-3.34	2.61	-1.28
ANX_PARTNER*ROLE	-4.46	1.25	-3.56****
AVOID_PARTNER*ROLE	3.97	2.55	1.56
I_COMM_PARTNER	-4.99	1.25	-4.00****
RMBM_INTER_TASK	0.90	0.29	3.07***

Note: ROLE = veteran or spouse, ANX (ACTOR) = anxiety of actor, AVOID (ACTOR) = avoidance of actor, ANX(PARTNER) = partner anxiety, AVOID (PARTNER) = partner avoidance), ANX (ACTOR) x ROLE = anxiety of actor x veteran/spouse, AVOID (ACTOR) x ROLE = avoidance of actor x veteran/spouse, ANX (PARTNER) x ROLE = partner anxiety x veteran/spouse, AVOID (PARTNER) x ROLE = partner avoidance x veteran/spouse, I_COMM_PARTNER = interactive communication by the PARTNER, RMBM_INTER_TASK = Relationship Maintenance Behavior Measure interactive communication task factor. Estimate with associated level of significance *p < .10; ** p < .05, *** p < .01; **** p < .001

Figure 5.13 Interaction Plots of Actor Anxiety x ROLE (Veteran) for DAS

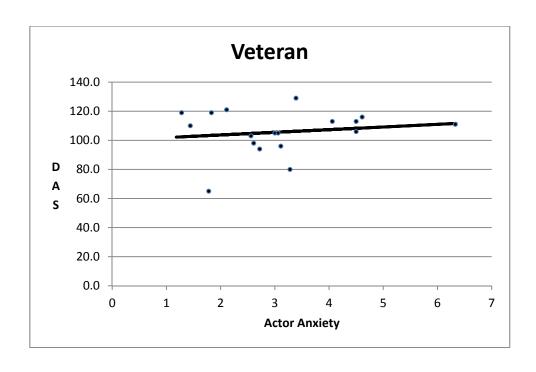


Figure 5.14 Interaction Plots of Actor Anxiety x ROLE (Spouse) for DAS

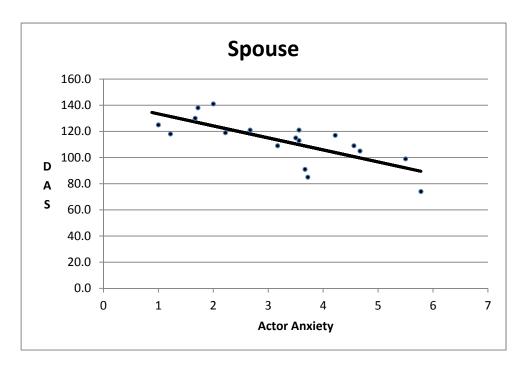


Figure 5.15 Interaction Plots of Partner Anxiety x ROLE (Veteran) for DAS

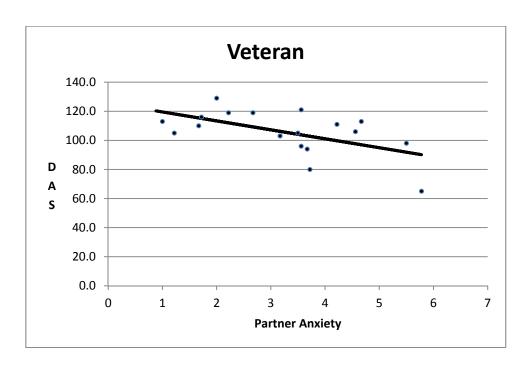
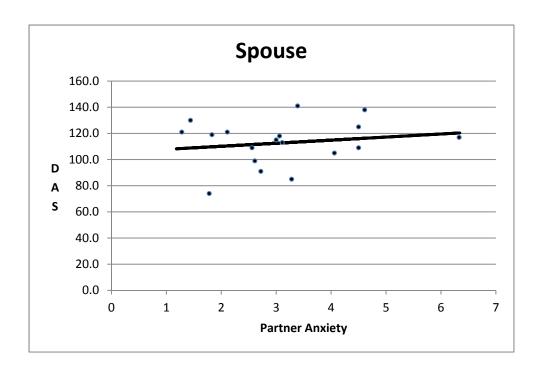


Figure 5.16 Interaction Plots of Partner Anxiety x ROLE (Spouse) for DAS



Chapter 6

Discussion

Chapter six presents a summary of the purpose statement, hypotheses, and methods of this study. From there, findings from the undergraduate literature, APIM main effects and 2-way interactions are reviewed. After that, the findings are discussed within the context of the different phases of the deployment cycle. Implications for social work policy, practice, theory, and research are covered. Lastly, limitations of this dissertation and concluding remarks are presented.

6.1 Purpose Statement

The purpose of this dissertation was to increase positive outcome variables including family functioning and relationship satisfaction while decreasing negative outcome variables such as PTSD, stress, and depression experienced during and after a deployment. The research question was how does attachment theory explain dyadic communication during a combat separation and its impact on post-deployment functioning?

6.2 Hypotheses

To this author's knowledge, this is the first attempt to examine long distance relationships using attachment theory within the context of a war-time separation. Since this was exploratory and during a war-time separation—which has the constant threat of death, it was unclear how both members of the dyad would be affected. Therefore, no specific hypotheses were posited. Rather the aim was to identify deficits and strengths within the dyad and to maximize positive and minimize negative outcomes.

6.3 Methods

This study used a quasi-experimental design, more specifically a cross-sectional retrospective online survey. There were 44 participants (22 male; 22 female) that produced twenty-two heterosexual dyads. Twenty-one of the veterans were male and one was female; twenty-one of the spouses were female and one was male. The GMSEX and DSC were

excluded due to low response rates. The entire RCCU was excluded because it was not normally distributed. Both spouse and veteran PANAS affect scores (negative and positive) required mean imputation. Negative affect (delayed and interactive) for both veteran and spouse were not normally distributed so they were excluded. For the RMBM, the positivity, understanding, self disclosure, and tasks factors both delayed and interactive forms of communication were normally distributed. Also interactive network was retained because it is normally distributed. The IES-R required a logarithm to the base of 10 to have a normal distribution. All other scales were retained.

Data analyses occurred in several phases: descriptive data, replication of undergraduate investigations, and lastly APIM statistical analyses. First, descriptive data were presented, which included demographics of the sample, communication (mode and frequency), and finally assessment instruments. Next inferential testing started with a replication of undergraduate studies. Lastly, APIM statistical analyses were conducted for main effects and 2-way interactions.

6.4 Undergraduate Replication

6.4.1 LDR vs. GDR

The first study this dissertation was able to replicate was the Roberts and Pistole (2009) multiple regression on LDRs. They had one dependent variable (DAS satisfaction subscale) and five independent variables: steady dating, avoidance, anxiety, strength of influence, and interconnection. Their equation was significant, (F(5, 74) = 6.52, p<.001) which had an Adjusted R² of .31 indicating that their equation explained 31% of the variance in satisfaction. Their only significant independent variable was avoidance (β = -.53, p < .01).

This dissertation did not have three of the independent variables (steady dating, strength of influence, and interconnection) they used. The only two independent variables that were used in the regression were avoidance and anxiety. The veteran (F[2, 19] = 3.41, p<.05, Adjusted R^2 = .19) and spouse (F[2, 19] = 4.60, p<.05, Adjusted R^2 = .26) regressions were

significant. Veterans' avoidant attachment (β = -.56, p < .05) and spouses' anxious attachment (β = -.55, p < .05) were statistically significant.

Roberts and Pistole (2009) assert that the reason for their empirical inquiry was that at the time of their study, there had been no literature on attachment and LDDRs. However, they drew their guidance from Mikulincer and Shaver (2003) suggesting that in PRRs high attachment avoidance was related to low relationship satisfaction. The findings of this study were consistent with Roberts and Pistole (2009) in that high avoidance was a statistically significant predictor of relationship satisfaction (for the veteran). Additionally, stateside spouses' attachment anxiety was a significant predictor of relationship satisfaction (for the spouse)

Another study by Pistole et al. (2010) used correlation and multiple regression analyses. Pistole and colleagues found a significant relationship between Perceived Stress Scale (PSS) and anxiety (r = .34, p < .01). This study found the relationship between the LOG(IES-R) and spousal anxiety (r = .42, p < .05). Also, spouse anxious attachment was significantly correlated with interactive self disclosure (interactive (r = -.67, p < .01). Interestingly spouse anxious attachment and interactive positivity was statistically significant (r = -.59, p < .05) whereas delayed was not (r = -.44, ns). Stafford (2010) posits that positivity has two roles, understanding and global positivity. Furthermore, "Feeling understood by a partner likely serves a different maintenance function in a loving relationship than does a perception that one's spouse is generally cheerful" (Stafford, 2010, p. 297). Spouse anxious attachment and understanding was significant for delayed (r = -.52, p < .05) and interactive (r = -.69, p < .01) forms of communication. This suggests that understanding has the same relationship for both delayed and interactive forms of communication. Please see Table 6.1.

Table 6.1 Pistole et al. (2010) vs. Ponder Spouse Anxious Attachment Correlations with RMBM

Spouse Anxiety					
Pistole et al. (2010)		Ponder dissertation			
			delayed	interactive	
Shared tasks	14**	Task	40	46	
Positivity	20**	Positivity	44	59*	
Social networks	18**	network	19		
Assurances	01	Understanding	52*	69**	
Openness	12**	Self-disclosure	45	67**	
Conflict management	27**				
Advice	06				
PSS	.34**	LOG(ES-R)		.42*	

Note: *p <.05, ** p < .01, Pearson correlations, PSS (Perceived Stress Scale), IES-R (Impact of Events Scale-Revised)

There are several differences between both studies. Pistole et al. (2010) used the PSS whereas I used the IES-R to quantify subjective self-reported stress. Additionally, they used the RSRMS whereas I used the RMBM to quantify maintenance. In the process of scale construction of the RMBM (Stafford, 2010), some of the new factor loadings were added and/or dropped from the previous version. Furthermore, this study asked respondents to answer the RMBM for delayed and interactive forms of communication whereas Pistole et al. (2010) did not.

Pistole et al. (2010) also conducted a multiple regression using four independent variables on stress (PSS). This study replicated the multiple regression using LOG(IES-R). Pistole et al. (2010) step two equation included a variable named "Data group" that this study did not have. Data group was a variable that indicated which wave of data collection respondents were (Pistole, et al., 2010). For long distance relationships in Pistole et al's study, avoidance (β = .08, p < .05) and anxiety (β = .31, p < .001) increased PSS scores. In this study, the regressions for both veteran and spouse were on the dependent variable LOG(IES-R).

Veteran avoidance (β = -.02, ns) and anxiety (β = .27, ns) along with spouse avoidance (β = .01, ns) and anxiety (β = .13, ns) were all not statistically significant. In other words, in this sample avoidant and anxious attachment did not have a significant impact on the dependent variable LOG(IES-R).

6.4.2 Mobile Communication

Jin and Pena (2010) were two of the first researchers to investigate texting and call frequency using attachment theory (anxious and avoidance). They uncovered a relationship between anxious attachment partner uncertainty (r = .33, p < .001) and relationship uncertainty (r = .29, p < .001). Unfortunately, those variables were not collected in this dissertation. Jin and Pena (2010) found a significant relationship between avoidant attachment, call frequency (r = .33, p < .001), sex (r = .14, p < .01), and relationship length (r = .31, p < .001). Other research has also found a significant relationship between avoidant attachment by estimated number of calls (r = .38, p < .05) and actual calls made (r = .34, p < .10) (Weisskirch, 2012).

This study evaluated, via correlations, the relationship between attachment and several other variables: telephone frequency, text frequency, sex, relationship length, email, Skype, and social networking. Veterans' avoidant attachment significantly decreased call, email, and Skype frequency whereas stateside spouses' anxious attachment significantly increased text and social networking frequency. See Table 6.2.

Table 6.2. Jin and Pena (2010) vs. Ponder Dissertation Communication Frequency Correlations

	Jin and Pena (2010)		Ponder (Veteran)		Ponder (Spouse)	
	Avoidant	Anxious	Avoidant	Anxious	Avoidant	Anxious
Call frequency	33**	06	51*	.15	.11	.20
Text frequency	.04	.01	17	.44	.37	.46*
Sex (gender)	14*	.01	.29	.24	.29	.24
Relationship length	31**	.03	09	36	27	17

Table 6.2- Continued

Email frequency	 	44*	21	.38	03
Skype frequency	 	46*	26	31	05
Social networking frequency	 	.25	02	.22	.46*

Note: * p < .05; **p < .001, Pearson correlations

Drouin and Landgraff (2011) used attachment theory to probe texting and sexting behaviors. This dissertation was only able to replicate their hierarchical regression on text frequency separately for veteran and spouse. Both the spouse and veteran hierarchical regressions were significant in step one. However, in step two (veteran and spouse), anxious and avoidant attachment standardized regression coefficients were not statistically significant. The first veteran model was significant F(3, 18) = 5.12, p = .01 and had an Adjusted $R^2 = .37$ accounting for 37% of the variance in frequency of text message. The first spouse model was significant F(3, 18) = 6.28, p < .01 and had an Adjusted $R^2 = .43$ accounting for 43% of the variance in frequency of text message. This dissertation did not delineate sent vs. received text messages like the original article does. Text messaging with a phone in a combat zone would not be available if there were a KIA or WIA in theatre because the DoD would need to contact the family in-person first. Additionally, text messaging may be a normative behavior and not the first option if the attachment behavioral system is activated.

6.5 APIM Main Effects and 2-Way Interactions

For reasons of clarity the assessment instruments will now be referred to as below: LOG(IES-R) – Stress. If stress is reported by the veteran, it is their perception of their spouse's level of stress.

PHQ-9 -- Depression

PCL-5 – PTSD, if PTSD is endorsed by the spouse, it is their perception of their veteran's level of PTSD.

SFI - Family functioning

DAS - Relationship satisfaction

RMBM_Delay_Task - Delayed Relationship Maintenance Tasks

RMBM_INTER_TASK - Interactive Relationship Maintenance Tasks

I_COMM_PARTNER - Interactive Spouse Communication

6.5.1 LOG(IES-R)

As actor anxiety increased, the stress increased for both the spouse and veteran. The relationship between partner avoidance and stress differed by ROLE (vet/spouse). As partner avoidance increased, the veteran's stress decreased, but the spouse's stress increased.

6.5.2 PHQ-9

As actor anxiety increased, depression increased for both the spouse and veteran. The relationship between partner avoidance and depression differed by ROLE (vet/spouse). As partner avoidance increased, the veteran's' depression decreased, but the spouse's increased. In the final model, the main effect delayed relationship maintenance tasks was significant. It indicates that as the delayed relationship maintenance tasks increased, depression increased. 6.5.3 PCL-5

As actor avoidance increased, spouse PTSD remained constant whereas the veteran's PTSD increased. The relationship between partner avoidance and PTSD differed by ROLE (veteran/spouse). As partner avoidance increased, the spouse PTSD increased and the veteran's PTSD slightly increased. In the final model, the main effect combat exposure was significant and it indicated that as combat exposure increased, PTSD increased.

6.5.4 SFI

As actor anxiety increased, spouse family functioning increased, whereas veteran's family functioning decreased. In addition, the relationship between partner anxiety and family functioning differed by ROLE (veteran/spouse). As partner anxiety increases the veteran's family functioning increased whereas the spouse's family functioning slightly decreased. In the final model, the main effect interactive relationship maintenance tasks were significant. It

indicates that as interactive relationship maintenance tasks increased, family functioning decreased.

6.5.5 DAS

As actor anxiety increased, spouse's relationship satisfaction decreased whereas veteran's relationship satisfaction increased. Also, the relationship between partner anxiety and relationship satisfaction differed by ROLE (veteran/spouse). As partner anxiety increased, the veteran's relationship satisfaction decreased, whereas the spouse's relationship satisfaction increased. In the final model, the main effect interactive relationship maintenance tasks and interactive spouse communication were significant. It indicated that as interactive relationship maintenance tasks increased, relationship satisfaction increased. The final model also indicates that as interactive spouse communication increased, relationship satisfaction scores decreased.

6.6 Attachment and the Deployment Phases

In this section, all deployment phases (pre, during and post) will be revisited from chapter two. From the qualitative studies reviewed, stressors during each phase will be identified. The main effect results from the APIM will be used to explain, via attachment theory, how communication during the deployment affects post-deployment constructs. Lastly, the interaction results from the APIM will be used to show how attachment and dependent variables affect dyadic post-deployment constructs.

6.6.1 Pre-Deployment

This dissertation did not collect pre-deployment data because the length of the survey and the in-depth focus on communication during the deployment. Two qualitative studies exist on spouses' experiences during the pre-deployment stage (Lapp et al., 2010; Sahlstein et al., 2009). They both were explaining the same phenomenon in different words. Lapp et al. (2010) shared that stateside spouses during the pre-deployment phase report "their lives are on hold" (p. 51) and "described literally being 'on' alert in the sense that they could not make plans" (p.

- 51). Sahlstein et al. (2009) asserts spouses feel uncertainty, no control, no power, and in the dark because of lack of communication by the veteran and military at large.
 - No control/power
 - Lack of communication from veteran and DOD about logistics of deployment.

6.6.2 Deployment

Sahlstein et al. (2009) dubbed the deployment phase autonomy vs. connection. Studies consistently cite that the stateside spouse worries about the safety of their partner (Faber, et al., 2008; Lapp et al., 2010; Sahlstein et al., 2009). The stateside spouse consistently reported that shifting into new roles and having to complete all daily tasks (that use to be shared) individually was very overwhelming. Additionally, the stateside spouse had to balance being available for the veteran if s/he initiated communication over any mode. Lastly, spouses shared that towards the end of the deployment, their anxiety shifted from the veteran's safety to what post-deployment reunification will be like. Below are the four main themes from the deployment phase:

- Safety
- Roles/daily tasks
- The need to be constantly available in case the veteran initiates communication.
- Anxiety surrounding reunification

In APIM analyses, there was an initial base model that included the main effects of anxiety/avoidance on each participant (veteran and spouse) and interactions of anxiety/avoidance (veteran and spouse) x ROLE. Also other main effects of participant demographic information, interactive/delayed communication measures (i.e., RMBM), and method/frequency of communication during the combat deployment were included until the last independent variable was significant. Stress was the only dependent variable that did not have a significant relationship with any independent variables outside of the initial model.

In the final model, the main effect of delayed relationship maintenance tasks was significant (estimate = .88, t = 3.46, p < .001) on the dependent variable PHQ-9. This indicates that when delayed relationship maintenance tasks increased, post-deployment depression increased. In the final model, the main effect of CE was significant (estimate = .62, t = 3.70, p < .001) on the dependent variables PCL-5. This indicates that when combat exposure increased post-deployment PTSD increased. The main effect of interactive relationship maintenance tasks was significant (estimate = -.74, t = 2.98, p < .01) on the dependent variable SFI. This indicates that when interactive relationship maintenance tasks increased, post-deployment family functioning scores decreased (lower SFI scores indicate healthier family functioning). In the final model, the main effects of interactive spouse communication (estimate = -4.99, t = 4.00, p < .001) and interactive relationship maintenance tasks (estimate = .90, t = 3.07, p < .01) was significant on the dependent variable relationship satisfaction. This indicates that during the deployment phase, when interactive stateside spousal communication increased, post-deployment relationship satisfaction decreased. However, when interactive relationship maintenance tasks were used during the deployment, post-deployment relationship satisfaction increased.

Table 6.3. Main Effects During Deployment

Independent variable (increase) → Dependent variable (main effect)
Delayed Relationship Maintenance Tasks (↑) → Depression (↑)
Combat Exposure $(\uparrow) \rightarrow PTSD (\uparrow)$
Interactive Relationship Maintenance Tasks $(\uparrow) \rightarrow$ Family Functioning (\downarrow)
Interactive Spousal Communication $(\uparrow) \rightarrow$ Relationship Satisfaction (\downarrow)
Interactive Relationship Maintenance Tasks (↑) → Relationship Satisfaction (↑)

Note: Interactive Spousal Communication (interactive communication by the spouse); Interactive Relationship Maintenance Tasks (Relationship Maintenance Behavior Measure interactive communication task factor); Delayed Relationship Maintenance Tasks (Relationship Maintenance Behavior Measure delayed communication task factor), Relationship Satisfaction (DAS), PTSD (PCL-5), Depression (PHQ-9), Family Functioning (SFI), ↑ increase, ↓ decrease, → impact of independent variable on dependent variable

6.6.3 Post-Deployment

Sahlstein et al. (2009) found that during post-deployment, the openness vs. closedness contradiction emerged. During a combat deployment, both veteran and spouse practiced topic avoidance, which meant they deliberately avoided discussions surrounding combat experiences. Rather, the dyad attempted to discuss the day to day activities of the stateside spouse. Shifting from the closed communication practiced during deployment to open communication post-deployment was a common problem for most dyads (Faber, et al., 2008; Lapp et al., 2010; Sahlstein et al., 2009). Additionally, assimilating back into their family system was difficult. In sum, the following were stressors post-deployment:

- New roles
- Moving from closed to open dyadic communication

In this dissertation, there were five dependent variables under investigation: stress LOG(IES-R), depression (PHQ-9), PTSD (PCL-5), family functioning (SFI), and relationship satisfaction (DAS). This dissertation was a cross-sectional, retrospective design. The participants were asked how they communicated during their last deployment. But, as far as the five dependent variables, it was current functioning being assessed (no matter how many months or years ago the deployment was). Therefore, the only conclusions or inferences from those scales that can be drawn are about current attachment and current symptoms as measured by the instrument.

The IES-R was given for the spouses self-report of their stressful life events (deployment separation). The veteran completed a modified IES-R to assess their perception of how distressing the deployment separation was for their spouse. As partner avoidance increased, the veterans stress decreased (Figure 5.1) and the spouse's stress increased (Figure 5.2). The PHQ-9 was given for the veteran and spouse to assess their own level of depression. As partner avoidance increased, the veteran's depression decreased (Figure 5.3) and the spouse's depression increased (Figure 5.4).

The PCL-5 was given for the veteran's self-report of their PTSD symptoms. The spouse completed a modified PCL-5 to assess their perception of the veterans PTSD symptoms. The effect of avoidance on PTSD was somewhat complicated since both the actor and partner avoidance interactions with ROLE (veteran, spouse) were significant. As partner avoidance increased, the veteran's PTSD slightly increased (Figure 5.7) and the spouse's PTSD increased (Figure 5.8).

Table 6.4 Avoidance Interactions Post-Deployment

	Spouse Avoidance (increase) →	Veteran Avoidance (increase) →	
	Veteran (effect)	Spouse (effect)	
Stress	Spouse (↑) →Veteran (↓)	Veteran (↑) → Spouse (↑)	
Depression	Spouse $(\uparrow) \rightarrow Veteran (\downarrow)$	$Veteran (\uparrow) \rightarrow Spouse (\uparrow)$	
PTSD	Spouse (↑) → Veteran (slight ↑)	$Veteran (\uparrow) \rightarrow Spouse (\uparrow)$	

Note: Stress (IES-R), Depression (PHQ-9), PTSD (PCL-5), \uparrow increase, \checkmark decrease, \rightarrow impact of independent variable on dependent variable

Both the veteran and spouse completed the SFI to assess their family functioning. As partner anxiety increased, the veteran's family functioning increased (Figure 5.11) and the spouse's family functioning slightly decreased (Figure 5.12). The veteran and spouse completed the DAS to assess their relationship satisfaction. As partner anxiety increased, the veterans relationship satisfaction decreased (Figure 5.15) and the spouse's relationship satisfaction increased (Figure 5.16).

Table 6.5 Anxious Interactions Post-Deployment

	Spouse Anxiety (increase) >	Veteran Anxiety (increase) > Spouse		
	Veteran (effect)	(effect)		
Family Functioning	Spouse $(\uparrow) \rightarrow \text{Veteran}(\uparrow)$	Veteran (↑) → Spouse (slight ↑)		
Relationship	Spouse $(\uparrow) \rightarrow \text{Veteran}(\downarrow)$	Veteran (↑) → Spouse (↑)		
Satisfaction				

Table 6.5- Continued

Note: Family Functioning (SFI), Relationship Satisfaction (DAS), \uparrow increase, \checkmark decrease, \rightarrow impact of independent variable on dependent variable

6.7 Implications

Social workers have had the privilege and honor of working with veterans and their families since 1918 (CSWE, 2010). Social workers from different licensure and specialty areas can be change agents. On a macro level, social workers can advocate for policies and on the micro level provide clinical services. Unfortunately, theory and theoretical consultation have been missing in published social work literature (Daley, et al, 2006; Gentle-Genitty, 2007). Implications for theory are presented; followed by a lay person's interpretation of the results; then a program is proposed that encompasses policy implications at the macro and micro levels for the military; finally, implications for social work practice are presented.

6.7.1 Theory

There have been many different theoretical paradigms reviewed in this dissertation: relationship dialectics (Sahlstein et al., 2009), biological (Agren et al., 2012), cognitive behavioral (Renshaw, 2011), relational maintenance (Merolla, 2010), family communication (Houston et al., 2013), phenomenology (Lapp et al., 2010), and other qualitative orientations (Durham, 2010; Faber et al., 2008). Unfortunately, with all of the different researchers examining this topic, extraneous variables could be overlooked that cannot be explained from their theoretical orientations. Therefore, the largest gap in the current literature is a comprehensive theoretical framework to explain the complex and intricate emotional processes of individual and/or dyadic emotional expression. I believe that attachment theory is the broadest paradigm available to synthesize the current literature and explain most of the variables reviewed in this chapter. Additionally, little is known about female veterans and their partners, currently 15% of the military are female (Defense Manpower Data Center, 2008).

Attachment theory has proven to be a more than adequate optic to understand dyadic communication in a combat environment. Using undergraduate literature as a genesis for

conceptualizing a combat deployment was effective because the tests that were replicated for this dissertation revealed similar results. Attachment theory was also able to show how communication throughout the deployment phases affects outcome variables through APIM main effects and 2-way interactions. Most importantly, attachment theory was broad enough of a paradigm to synthesize a wide variety of theoretical orientations such as relationship dialectics biological, cognitive behavioral, relational maintenance, family communication, and phenomenology among others. If researchers from different theoretical orientations can start conceptualizing variables using the same jargon (attachment theory) then outcomes can be achieved faster.

6.7.2 Lay Person's Interpretation of Findings

Using the existing undergraduate long-distance relationships as a blueprint for studying a combat separation was fairly effective. The replication of the correlation matrix of attachment and maintenance behaviors (RSRMS) by Pistole and colleagues (2010) provided evidence of maladaptive coping skills. This dissertation used correlation analyses of attachment by maintenance behaviors (RMBM) and stress (LOG[IES-R]). Interestingly there were no significant relationships between veteran attachment and any of the independent variables. Surprisingly, spousal avoidant attachment was significantly correlated with delayed networks (r = .47, p < .05). However, spousal anxious attachment showed that maintenance behaviors were significantly correlated with interactive positivity (r = .59, p < .05), delayed understanding (r = .52, p < .05), interactive understanding (r = .69, p < .01), interactive self-disclosure (r = .67, p < .01), and LOG(IES-R) (r = .42, p < .05). Ideally, an individual wants to increase interactive positivity, delayed understanding, interactive understanding, and interactive self-disclosure because this would be healthy for the dyad. Also, it would be healthy for the dyad if LOG(IES-R) scores decreased. These results illustrate that the spouse's secondary strategy of hyper-activation is not effective.

Jin and Pena (2010) used correlations to investigate undergraduate attachment by call frequency, text frequency, sex, and relationship length. This researcher introduced three additional independent variables in the correlation matrix. Veteran avoidant attachment was negatively correlated with three variables: telephone frequency(r = -.51, p < .05), email frequency (r = -.44, p < .05), and Skype frequency (r = -.46, p < .05). Spouse anxious attachment was positively correlated with two variables: text frequency (r = .46, p < .05) and social networking (r = .46, p < .05). The veteran and spouse replication of Roberts and Pistole's (2009) regression of attachment on DAS highlighted the veterans' preference of avoidance and the spouses tendency to become anxious. For example in the veterans regression the only statistically significant variable was avoidant attachment ($\beta = -.56$, p < .05) whereas in the spouse regression the only statistically significant predictor was anxious attachment ($\beta = -.55$, p < .05).

Thus far it has been established that deployed veterans use avoidance whereas stateside spouses exhibit anxiety. This is most clear in the Jin and Pena (2010) replication in that veteran avoidance is related to a decrease in frequency of call, email, and Skype frequency whereas spousal anxiety increases the frequency in text and social media. By using attachment theory, we can conceptualize issues and treat this population.

When the veteran returns to America and s/he uses avoidance, it increases spouse stress and depression. But when the spouse avoids, it decreases the veteran's depression and perception of spouse stress. Avoidance also impacts PTSD. When the veteran returns stateside and uses avoidance, it increases their own PTSD, but when the spouse uses avoidance, it has no effect on their perception of the veteran's PTSD. When the veteran avoids, the spouse's appraisal of the veteran's PTSD increases dramatically. When the spouse avoids, the veteran's self-report of PTSD severity only slightly increases.

From the data in this study, it has been established that for the spouse's avoidance interactions, the preferred method of coping by the veteran (avoidance) increases the spouse's self-reported depression, level of stress, and perception of PTSD severity in their veteran. Additionally, post-deployment, when the veteran continues to use their coping strategy of avoidance, it decreases their self-reported depression and decreases their perception of their spouse's level of stress. Additionally, partner avoidance buffers (slightly increases) the spouse's perception of the veteran's PTSD. Also, as the veteran's avoidance increases, so too does their self-reported level of PTSD.

6.7.3 Proposed Intervention: Moving from CLOSED to OPEN Communication

In this sample, it has been shown that stateside spouses exhibit anxiety and not avoidance. As spouses use their default method of anxiety, it has negative outcomes; specifically, as anxiety increases, spouse family maladaptive functioning increases and relationship satisfaction scores decrease. However, when the veteran uses anxiety, it has positive outcomes; specifically, as veteran anxiety increases, veteran's family adaptive functioning increases and relationship satisfaction increase. As spouse anxiety increased, veteran family maladaptive functioning increased and relationship satisfaction decreased. As veteran anxiety increased, the spouse's adaptive family functioning increased (which indicates anxiety buffered family functioning) and relationship satisfaction slightly increased.

Thus, this researcher proposes an intervention that integrates knowledge gathered from reviewed articles and findings of this dissertation.

Intervention Situation: Pre-deployment, the spouse's attachment system gets activated due in large part to no perceived control or power. It is at this point the anxiety begins from simply a lack of information.

Previously Used Intervention Activities: Historically the formal structure used involved the brigade commander's spouse informing the battalion commander's spouse who then relayed it to the company and on to the platoon. This is outdated and inefficient.

Proposed Pre-Deployment Intervention Activities: The dyad needs psycho-education about the upcoming deployment. This can be achieved through educational websites or more traditional DoD or Family Support Group entities. Given the current climate in which people have smart phones that can get on the internet or access an "app", these are simple and inexpensive alternatives. It is recommended that an interactive "app" be created for battalion and below. Optimally, it would be input from battalion and company so that the stateside spouses feel as though it is direct access, which will provide them a semblance of control and/or power. To directly address the issues of lack of control or power a built in tool for the "app" can be provided so that the spouses can request dates/times for communication in Kuwait before the unit arrives in country. By seeking input from the spouses it inherently gives them an opportunity to feel that they have some control over the situation and it might lay the groundwork for healthy communication patterns during the deployment.

Policy can be centered on the phases of a deployment. Spouses reported a lack of control/power surrounding the impending deployment (Lapp et al., 2010; Sahlstein et al., 2009). Simple communication through official channels to the spouses about deployment logistics may empower them. Obviously there is a necessity for op-sec but the DoD could provide at least adequate explanations about brigade or battalion timelines.

Proposed Deployment Activities: During the deployment, the spouse becomes anxious about the safety of their loved one which later transitions to anxiety about reunification. Policy and adherence to op-sec are vital so details of any operation cannot be divulged. However, institutional controls may provide benefit. Since spouses exhibit hyper-activation and interactive communications are preferred by them, ensuring certain times for interactive communication might help. Also, veterans report that there are privacy concerns since interactive communication is generally done in a group setting like a Morale Welfare, and Recreation (MWR) location. If a platoon or company could reserve a more private setting so instant

messaging with video can be used, this would extinguish the stateside spouse's anxiety about safety of their loved one.

a. The VA National Center for PTSD (NCPTSD) has created a mobile "app" called the PTSD Coach. This is a tool for veterans to identify and manage their PTSD symptoms. As a complement to this, it is recommended that an "app" be created with the special purpose of addressing the spouse's anxiety surrounding the safety of the veteran. The "app" can mimic the PTSD coach or Quick Series eGuides and could focus on the perceived vs. actual amount of control a stateside spouse has. At the same time the spouse needs a sense of control, the veteran continues to need to control and limit communication (Durham, 2010).

b. During the deployment, stateside spouses turn to the media and FSG (Faber, et al., 2008). Unfortunately the media only exacerbates the anxiety (Faber, et al., 2008) and reinforces the justification for the attachment system being activated. If regular blocks of times were reserved for veterans to communicate with their stateside family, then spousal anxiety could decrease. Usually communication occurs in a community setting with other military personnel around. For example, if a platoon or company size element can reserve the community setting for a given amount of time on a regular basis, this might quell some of the safety concerns the spouse has.

Proposed Post-Deployment Intervention Activities: The largest issue that faces a dyad upon reunification is moving from closed to open communication. Returning veterans are required to attend briefing on a variety of topics to include family reunification. Briefings are usually done in a very large assembly hall which turns into a lecture as opposed to a didactic process. It is recommended that dyads that want or need more in-depth training have that set up in a 10-15 couple format. Closed can be conceptualized as continuing your preferred method of coping (veteran avoidance and spouse anxiety) and not being sensitive or aware of your significant other's needs. Changing the way an individual functions for 12 to 15 months

during a deployment can be very laborious. Simply put, when veterans use their preferred method of avoidance, post-deployment this increases the stateside spouse's self-reported depression, stress, and perception of their veteran's PTSD. When the stateside spouse uses avoidance, the veteran reports lower PTSD, depression and perception of spouse stress.

Making the transition from coping skills used during deployment to post-deployment can be challenging. While in a combat theatre where the veteran's attention and focus need to be on the mission, it is understandable that closed communication is preferred. However, for example, when a unit knows they are leaving to Kuwait for a couple weeks before returning stateside, there is virtually no threat for safety. During this time, the DoD could educate veterans about transitioning from closed to open emotional expression, which will be used at home.

6.7.4 Practice

When clinically engaging with a client or client system, social workers can use the main effect results to highlight how communication during the deployment affects post-deployment constructs. Topic avoidance was a commonly cited technique for the stateside spouses and veterans who were deployed. For example, the relationship maintenance task factor is centered on day to day activities the dyad does together. During the deployment, delayed relationship maintenance tasks produced higher depression post-deployment whereas ractive relationship maintenance increased relationship satisfaction and family functioning. Clinicians might want to recommend maximizing interactive tasks.

Once the veteran is getting close to returning home, clinicians can use the avoidance and anxiety 2-way interactions as guidance. Clinicians will want to stress the importance of deployment vs. post-deployment secondary attachment strategies. Spouses' avoidance is associated with lower veterans' perceived stress, depression, and PTSD whereas veterans' avoidance is related to higher stress, depression, and perceived PTSD. Also, spousal anxiety is associated with a decrease in relationship satisfaction and family functioning. The clinician can

review the model of attachment-system activation and functioning in adulthood (Figure 3-1) to provide psycho-education that the threat is no longer present, therefore the hyper-activation is not needed.

When a veteran or dyad first presents for treatment the clinician can request that assessment instruments be completed. This can be beneficial for all parties. For example, the ECR and PCL-5 can be completed by the veteran and spouse. The social worker can score the instruments quickly in-session and use this to build the therapeutic alliance. For example, the clinician can make general statements about the four symptom clusters of PTSD. This can also be a great place for psycho-education at the beginning of treatment to normalize the clients' experiences and set realistic expectations.

Courtney (2012) a social worker along with clinicians at the Stratton VA Medical Center PTSD Clinic in Albany New York developed the PTSD Family Workshop over the course of six years. The PTSD Family workshop uses the ecological systems framework but is also heavily rooted and guided by attachment theory (Courtney, 2012). The workshop is three sessions which covers a wide swath of information, psycho-education about PTSD, empathetic concern, caregiver burden, and adaptive coping behavior among others. Parts of this program could be modified and adapted for effective communication.

6.7.5 Future Research

All qualitative articles reviewed described a closed system of communication during the deployment and that transitioning to an open system of communication post-deployment was difficult. Durham (2010) examined a veteran's closed system of communication during a combat deployment. Four themes emerged for veterans: need to control communication, need to limit contact with home, value of peer communication, and observed for involved in a traumatic event. The need to control and limit contact (frequency) of communication was an attempt to control or suppress their emotions. Also a closed system of communication benefited the stateside spouse.

All studies reviewed reported that during the deployment phase, couples attempted to keep the content of their communication on day-to-day events rather than the content of the veteran's combat missions. The relationship maintenance tasks factor was a significant predictor variable in three of the main effects. The relationship maintenance factor has four questions: shares in the joint responsibilities that face use; performs his/her household responsibilities; helps with the tasks that need to be done; and does not shirk his/her duties. Though not intended by this researcher, it is hypothesized that the relationship maintenance factor daily tasks is what other researchers refer to as topic avoidance. Future research should pay special attention to quantifying day-to-day events.

6.8 Limitations

This study is not without limitations. This was a quasi-experimental design in which participants answered retrospective questions about their most recent deployment communication with their stateside partner. Therefore, true temporal ordering could not be established—a longitudinal design would be optimal. The survey was somewhat laborious for respondents due to its length. Though it was argued that since this was somewhat exploratory, a lot of information needed to be sifted through. This might be able to be addressed in follow up studies that examine a narrow topic in great detail as this survey was a cursory look at a wide swath of instruments.

This researcher did not collect data on level of education of the respondents; this should not be overlooked in future research. Some of the scales had modified wording so that it would be applicable to different modes of communication. There were also a decent amount of the scales that were not normally distributed. It is hypothesized that this is in part due to the small sample. This study conceptualized delayed and interactive forms of communication like the Carter and colleagues (2011) brief report. Special attention should be given to email as this might be interactive if they are emailing in real time. This study did not collect data on whom

and what circumstances the veteran turned to for support. Durham (2010) suggests that peer to peer support among the veterans is highly valued. This should be followed up on.

6.9 Concluding Remarks

From the onset, this dissertation was a tall order: to examine communication in the context of a war-time separation from many disciplines and theoretical frameworks while trying to interpret them under one umbrella. From undergraduate literature to APIM used in this study, very clear attachment trends emerged that others can build upon. This hopefully will be the beginning of a consolidated effort by researchers and clinicians to improve our fighting force because you never know when or where the next war will be. We were woefully unprepared for treating our combat veterans and families pre 9/11; let's ensure it never happens again!

Appendix A

Letters of Support from Various Organizations

Hi Warren,

Our schools are willing to participate. We're Northern Wyoming Community College District, consisting of Sheridan College and Gillette College. I'll be your primary POC. Looks like a good project; different than what I've seen so far.

Brett

Brett K. Burtis, LtCol USMC (Ret)
Director, Veteran Services
Northern Wyoming Community College District
Sheridan College/Gillette College/SC in Johnson County
307-674-6446 ext 2720

Warren,

I believe our director forwarded your email through his email list (which is huge) and asked for participation. That's how you got my response. I will send it on through my email groups.

Good luck!

V/R Alisa Cochrane

State Veterans Service Officer Wyoming Military Department Wyoming Veterans Commission 5905 CY Avenue Casper WY 82604

office: (307) 472-0212 cell: (307) 315-4187 fax: (307) 265-7392

alisa.cochrane@wyo.gov<mailto:alisa.cochrane@wyo.gov>

Hi Warren,

I hope this message finds you well. My name is Matthew Thacker, I am the founder and current president of the Pride & Service Project. Our Director of Correspondence, Marcus Segura, forwarded me your email regarding organizational recruitment to participate in your dissertation. I wanted to contact you myself and express our appreciation for the invitation. Myself, and all the members of our organization would be more than happy to help you in anyway.

Please feel free to contact me with anything you may need.

Sincerely, Matt

Matthew Thacker
President/Founder
Cpl. USMC 2001-2006
(859) 967-8202 (m)
Matthew.thacker@prideandservice.org<mailto:Matthew.thacker@prideandservice.org>
www.prideandservice.org

Warren,

It is gratifying to read that you are keeping your research up to date by taking into account the new reality of the repeal of DOMA. Yesterday, the Secretary of Defense announced that the DoD would implement full benefits inclusion for married gay service members asap. That changes everything.

Same sex spouses will have the same right to join their partners in deployments to Europe and other countries where families can join the service member. It will change the dynamic of separation for thousands of military families.

I am the AVER contact that would disseminate the solicitation for participants in your research. As I probably asked previously, I would want to see the actual survey protocol. It is likely that AVER will support this research by sending out participant solicitation to our veterans.

Denny Meyer AVER Veterans Affairs

Hi Warren:

I hope that you are doing well. I have spoken to some of my teammates about how we could deploy the survey and the best advice that we can give you is once you have your link, feel free to post on our Facebook page. We have over a million followers and I am sure that there are many who qualify that would be willing to assist you. I hope this helps you. If you have any further questions, please let me know. Good luck!

DANA DRECKMAN family support director

A Decade of Service.
A Lifetime of Commitment.
wwp10.org<http://wwp10.org/>

O: 904.405.1108 M: 904.382.9079 F: 904.296.7347

Wounded Warrior Project 4899 Belfort Road, Suite 300 Jacksonville, Florida 32256 Hey Ponder,

I'm glad to help buddy. Sorry for delay. The last few weeks have been crazy. How many responses are you looking for?

Regardless, I can get this onto our blog at least with a URL for sure. Hope you've been well. Warm Regards,

Blake

__

Blake Hall
Founder & CEO
ID.me<https://www.ID.me>
Troop ID | Student ID | First Responder ID
(c) 615.293.4702<tel:615.293.4702>

Warren,

Absolutely happy to help. We can get your information posted up on Community of Veterans again. I did want to flag for you that we are in the process of completely re-vamping our Community of Veterans to create a more robust experience. This will involve some transition time to the new site, but depending on your timeline, I don't think it should impact data collection. Additionally, we can certainly roll everything over to the new site as well, once it is up and running. Thanks again for passing along and we will work on getting it posted.

Best,

Laura Slusarczyk
Program Coordinator
Iraq and Afghanistan Veterans of America
292 Madison Ave, 10th Floor
New York, NY 10017
Iaura@iava.org<mailto:laura@iava.org>

Appendix B

Email, Internet, and Social Media Introduction

EMAIL

Greetings!

My name is Warren Ponder and I am a doctoral student at the University of Texas at Arlington School of Social Work. Prior to graduate school, I was a combat infantryman assigned to the 3rd Stryker BDE from Fort Lewis; I completed a 15 month OIF deployment. I am currently collecting data for my dissertation studying veteran and partner communication during a deployment and how that affects the couple stateside. Your PARTICIPATION is voluntary and each respondent has the chance to WIN A \$20.00 Wal-Mart gift CARD. TO LEARN MORE AND PARTICIPATE, PLEASE VISIT

Veteran: https://www.surveymonkey.com/s/NVPMP9L
Thank you for your help and service to our great nation.

Warren Ponder, LCSW

INTERNET/SOCIAL MEDIA

Greetings!

I am a combat veteran and current doctoral student studying the impact of communication by a couple during deployment and how that affects them once the veteranis stateside. Your PARTICIPATION is voluntary and each respondent has the chance to WIN A \$20.00 Wal-Mart gift CARD. TO LEARN MORE AND PARTICIPATE, PLEASE VISIT

Veteran: https://www.surveymonkey.com/s/NVHKV67 Partner: https://www.surveymonkey.com/s/NVPMP9L

Warren Ponder, LCSW

Appendix C

Recruitment Letters for Veteran Organizations



THE UNIVERSITY

OF TEXAS

AT ARLINGTON

School of Social Work

Box 19129 211 S. Cooper Street Arlington, Texas 76019-0129

T 817.272.3181 rtpaguirre@uta.edu www.uta.edu/ssw June 26, 2013

Greetings!

My name is Warren Ponder and I am a doctoral student at the University of Texas at Arlington School of Social Work. Prior to graduate school, I was a combat infantryman assigned to the 3rd Stryker BDE from Fort Lewis; I completed a 15 month OIF deployment. After ETS, I earned a master's degree in social work and completed a thesis focusing on relationship satisfaction among returning OEF/OIF combat vets. Currently I am a clinical social worker at the Fort Worth Vet Center (Readjustment Counseling Service, Department of Veterans Affairs) assisting combat veterans and their families readjust to civilian life.

My master's thesis was an online survey assessing marital satisfaction, PTSD, and communication among OIF/OEF vets and their significant others which produced three peer-reviewed articles. My dissertation will be similar in which the vet and their partner answer retrospective questions regarding communication during deployment and how it relates to post-combat mental health issues—e.g., PTSD, depression, anxiety, relationship satisfaction, and substance abuse. The inclusion criteria will be that the vet and partner have to have been in a committed relationship during the veteran's most recent deployment. There are many potential gains from this study:

- Identification of deficits in communication patterns which can produce the template of a healthy style of communication to be used in training military and their partners for future deployments
- Higher relationship satisfaction
- · Higher family functioning
- Lower PTSD
- · Lower probability of suicide
- Lower substance abuse
- Lower domestic violence rates

I plan to use an online survey. Specifically, if you agree to assist me in contacting veterans, I will email the link to a person within your organization that you designate who can then send to your members. Therefore, I will not need you to share any information about your members with me. Once the participants have completed the survey, there will be a link they can forward to their partner. There will be a place for the vet and partner to provide an email address if they wish to be in the drawing for awards or prizes to the first 250 couples who finish the survey.

In sum, your organization was chosen due to its advocacy for our veterans and families. I plan to submit my dissertation proposal to the University Institutional Review Board in the upcoming months. Data collection will most likely begin September 2013. In that process I will be required to identify organizations that agree to participate. If you wish to assist me in studying and helping the returning veterans, please respond with an email so I can include your organization. If you have any questions, comments, or concerns please feel free to call or respond via email! The contact information for my major professor who is supervising the project is also included below.

Respectfully,

Warren Ponder, LCSW

PhD student

warren.ponder@mavs.uta.edu (253) 495-1797—personal cell phone

Regina T. P. Aguirre, PhD

Chair of Dissertation
Assistant Professor, School of Social Work
The University of Texas at Arlington
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Be A Maverick. TH



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June 26, 2013

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In sum, your organization was chosen due to its advocacy for our Lesbian, Gay, Bisexual, and Transgendered (LGBT) veterans and families. I plan to submit my dissertation proposal to the University Institutional Review Board in the upcoming months. Data collection will most likely begin September 2013. In that process I will be required to identify organizations that agree to participate. If you wish to assist me in studying and helping the returning veterans, please respond with an email so I can include your organization. If you have any questions, comments, or concerns please feel free to call or respond via email! The contact information for my major professor who is supervising the project is also included below.

Respectfully

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Regina T. P. Aguirre, PhD

Regina S. B. agime

Chair of Dissertation

Assistant Professor, School of Social Work The University of Texas at Arlington

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Appendix D

Survey for Veteran

1. Demographics

PRINCIPAL INVESTIGATOR NAME:

Warren N. Ponder

TITLE OF PROJECT

Communication in combat through the lens of Internal Working Models

INTRODUCTION

You are being asked to participate in a research study. Your participation is voluntary. During this study, you will be asked to answer questions about your communication frequency and content with your significant other. Questions will be asked about you and your significant other. Additionally, you will be asked to provide names and contact information for yourself and partner so your responses can be linked to your significant other's and to be contacted for compensation.

CONTACT FOR QUESTIONS

Questions about this research study may be directed to Warren Ponder (warren.ponder@mavs.uta.edu or work phone 253-495-1797) or Regina Aguirre (rtpaguirre@uta.edu or work phone 817 272-2011). Any questions you may have about your rights as a research participant or a research related injury may be directed to the Office of Research Administration; Regulatory Services at 817-272-2105 or regulatoryservices@uta.edu.

CONFIDENTIALITY

While confidentiality of this one-time survey will be maintained, your responses will be linked to your names, contact information (email address) and those of your spouse/partner. This is to serve the purpose of allowing the principal investigator to link your responses with those of your partner. Coding will be 1V (vet) and 1P (partner), 2V/2P and so on. Once the participants have been assigned a code all identifying information except contact information (email address for the raffle) will be deleted. Every attempt will be made to see that your study results are kept confidential. The results of this survey will only be available to Warren Ponder and his supervising professor, Dr. Regina Aguirre. A copy of the data from this study will be stored on the password protected, encrypted computer of Dr. Aguirre and 2 encrypted USB drives in her locked office at the University of Texas at Arlington in room GACB 113, for at least three (3) years after the end of this research. The results of this study may be published and/or presented at meetings without naming you or your partner/spouse as a participant. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the UTA Institutional Review Board (IRB), and personnel particular to this research have access to the study records. If you contact the researcher with questions or discomfort, your identity will be kept separate from your answers on the survey. Your records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

THE SPECIFIC PURPOSES OF THIS RESEARCH STUDY ARE TO DETERMINE:

- The purpose of this project is to study communication patterns (frequency and content) between a veteran and their partner during a combat deployment. From this positive and negative communication patterns for each adult attachment style can be identified.

DURATION

This survey will take approximately 30 minutes to complete depending upon your answers which may increase how many questions you are asked.

PROCEDURES

The procedures, involving you as a research participant, include you completing an online survey. You will be asked to complete questions regarding your branch of service, combat deployment, age, race, ethnicity, sexual orientation, sex, gender, and other demographic information.

- You will also be asked to complete the following questionnaires; their names below are followed by a brief description of their purpose:
- -Experiences in Close Relationships Inventory in order to determine attachment style.
- Dyadic Adjustment Scale in order to determine relationship satisfaction.
- Positive and Negative Affect Schedule in order to determine the different emotional states during communication with your partner.
- Routine and Strategic Relational Maintenance Scale in order to determine relationship maintenance behaviors in the long-distance relationship.
- Dyadic Sexual Communication in order to determine patterns of sexual communication during a combat deployment.
- Relationship Continuity Constructional Units in order to determine the continuity of the relationship.
- Combat Experiences in order to determine combat exposure.
- PTSD Checklist 5 in order to determine post-traumatic stress levels.
- PHQ-9 in order to assess for depressive symptoms.
- Impact of Event Scale Revised in order to determine the impact of deployment on the stateside partner.
- Self-Report Family Inventory: Version II in order to determine level of family functioning.
- Global Measure of Sexual Satisfaction in order to determine sexual satisfaction.

POSSIBLE BENEFITS

There are no direct benefits for participating in this study.

COMPENSATION

Each participant will be entered into the raffle regardless of completion, and it is not a requirement for your partner to also participate in order to be entered into the drawing. The survey link will be operational for 30 calendar days. After that time period has elapsed the raffle will be a random selection of one hundred Wal-Mart gift cards. The number and amount of prizes are listed below:

• one hundred \$20.00 Wal-Mart gift cards

POSSIBLE RISKS/DISCOMFORTS

There are no perceived risks for participating in this research study. Certain questions may cause some emotional discomfort. If at any time you experience discomfort, you may exit the survey at no consequence to you. If you would like to talk to someone or are in crisis please call 1-800-273-TALK.

ALTERNATIVE PROCEDURES

There are no alternative procedures offered for this study. However, you can elect not to participate in the study or quit at any time with no negative consequences. Should you choose not to complete all questions (leave some questions blank or decline to respond), you will still be eligible for the raffle. Likewise, the decision to participate and the decision to NOT participate in this study WILL IN NO WAY AFFECT YOUR OR YOUR PARTNER'S STANDING OR AFFILIATION WITH THE UNIVERSITY, COLLEGE, OR INSTITUTE OF HIGHER EDUCATION YOU ARE ATTENDING NOR WITH ANY MILITARY ORGANIZATION.

WITHDRAWAL FROM THE STUDY

Participation in this study is voluntary. You may refuse to participate or quit at any time by closing the survey window.

NUMBER OF PARTICIPANTS:

We expect 600 participants; 300 will be veterans and 300 will be their partners.

1. CONSENT

By clicking "accept" below, you confirm that you are 18 years of age or older and have read or had this document read to you. You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time.

You voluntarily agree to participate in this study. By clicking "accept" to this form, you are not waiving any of your legal rights. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

	accept
П	decline

2. Veteran inclusion

2. Are you a veteran of Operation Iraqi Freed (OEF)?	dom (OIF) or Operation Enduring Freedom
C Yes	
C No	
	172

3. Veteran out
Unfortunately, you must be a veteran of Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) to participate in this study. If you are NOT, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
173

174

5. Deployment out
Unfortunately, you must be out of the war-zone (Afghanistan or Iraq) to participate in this study. If you ARE currently in Iraq or Afghanistan, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
175

o. Relationship inclusion	
4. During your most recent deployment, were you in a committed relationship? ☐ Yes	
□ No	
176	

7. Relationship out
Unfortunately, you must have been in a committed relationship during your most recent deployment to participate in this survey. If you were NOT in a committed relationship during your most recent deployment, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
177

8. Current Relationship

5. Are you currently in the same relationship as you were during your most recent deployment?	
O Yes	
O No	
170	

9. Current Relationship Out	
Unfortunately, you must currently be in the same relationship you were during your most recent deployment. I thank yo for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.	u ;
179	

10. Demographics
6. What is/was the orientation of the relationship?
C Heterosexual
C Same-sex
7. What is your sex?
☐ Male
☐ Female
□ Intersex
8. What is your ethnicity?
☐ White
□ Black
☐ Hispanic
☐ Asian
Other
9. How old are you today?
10. What was your rank during your last combat tour?
☐ E1 through E4
☐ E5 through E9
Warrant or Commissioned Officer
11. How many times have you been deployed?
☐ Twice
Three times
Four times
Five or more
180

se enter the	lengths of ye	our deploy	ments in number o	f months.	
nent					
oyment					
ment					
yment					
nent					
re was your	most recent	deployme	nt?		
nistan					
a vou wound	od or injured	l by the on	omy during your co	ombat danlaymant?	
, you woulld	eu or mjureu	a by the en	enily during your co	mbat deployment:	
many childr	en do you cı	urrently ha	ve?		
				4. 4	
t is your fam	ily's combin	ed annual i	income (rounded to	the nearest thousand)?	
	-		income (rounded to committed relation	·	
	have you be	en in your	committed relation	·	
many years	have you be	en in your	committed relation	·	
many years many hours	have you be	en in your	committed relation	·	
many years many hours e does not work	have you be	en in your	committed relation	·	
many years many hours e does not work	have you be	en in your	committed relation	·	
many years many hours does not work hours hours	have you be	en in your	committed relation	·	
many years many hours does not work hours hours hours	have you be	en in your	committed relation	·	
many years many hours does not work hours hours hours hours	have you be	en in your	committed relation	·	
many years many hours does not work hours hours hours hours	have you be	en in your	committed relation	·	
1 C T S T T T T T T T T T T T T T T T T T	ment ment ment ment ment re was your i mistan a you wound many month ment?	ment ment ment ment ment re was your most recent mistan e you wounded or injured many months have you ment?	ment yment re was your most recent deployment sistan e you wounded or injured by the end many months have you been back nent?	ment yment re was your most recent deployment? e you wounded or injured by the enemy during your commany months have you been back in the United State	ment yment tent re was your most recent deployment? e you wounded or injured by the enemy during your combat deployment? many months have you been back in the United States since your most recent nent?

20. What is the marital status of your parents?
Never Married
☐ Married
☐ Separated
☐ Divorced
Widowed
21. How close geographically are your family members (immediate or distant) to you post
deployment?
☐ Within 50 miles
51 to 100 miles
☐ 101 to 200 miles
201 or more miles
If at any time during this survey you feel distressed and would like to talk with someone at the National Suicide Prevention Hotline click here or call 1-800-273-8255 (Veterans press 1).
If at any time you feel like you need to query for a mental health provider in your local area click here.
182

11. Demographics	
22. During your most recent	deployment, what mode(s) of commun

	ring your most recent deployment, what mode(s) of communication did yo	u u	se
☐ Let	ers		
☐ Ca	e packages		
□ Em	ails		
☐ Tel	ephone		
☐ Te	t messaging via telephone		
☐ So	ial networking (Facebook, MySpace, etc)		
☐ Sky	pe		
☐ Ins	ant messenger		
☐ Ins	ant messenger w/ video		
metho you be MOST	r this question, please answer what you perceive was your PARTNER'S produced of communication. Please rank from 1 (most preferred) to 9 (least preferred lieve your partner's preferred method of communication was with you during RECENT deployment. If a mode is listed that you did not use, please select	ed) ing : N/	what the A.
	Letters		N/A
	Care packages		N/A
	Emails		N/A
	Telephone		N/A
	Text messaging via telephone		N/A
	Social networking (Facebook, MySpace, etc)		N/A
	Skype		N/A
	Instant messenger		N/A
	Instant messenger w/ video		N/A
	183		

24. How often per v	veek di	d you com	municate	with you	ır statesi	de partne	r?	
	None	1 day a week	2 days a week	3 days a week	4 days a week	5 days a week	6 days a week	7 days a wee
Letters	0	0	O	0	0	0	0	0
Care packages	0	0	0	0	0	0	0	0
Emails	0	0	0	0	\circ	0	0	0
Telephone	\circ	0	\circ	\circ	0	\circ	\circ	0
Text messaging via telephone	0	0	0	0	0	0	0	0
Social networking (Facebook, MySpace, etc)	0	0	0	0	0	0	0	0
Skype	0	0	0	0	0	0	0	0
Instant messenger	0	0	0	0	0	0	0	0
Instant messenger w/ video	0	0	\circ	0	0	0	0	0
of communication listed that you did I		• •	•					
Letters								N/A
Care packages							[N/A
Emails							[N/A
Telephone							Ī	N/A
Text messagin	g via telepho	one					Ī	N/A
Social networki	ng (Faceboo	ok, MySpace, et	c)				ſ	N/A
Skype							ſ	N/A
Instant messen	ger						Γ	N/A
Instant messen	ger w/ video						Ī	N/A
f at any time during this surve	press 1).					al Suicide Preve	ention Hotline <u>c</u>	<u>lick here</u> or

12. Branch of military

	What branch of the military were you in during your MOST RECENT combat
	Navy
0	Army
0	Air Force
0	Marine Corps
0	Coast Guard

185

13. Navy 27. What component of the Navy were you in during your MOST RECENT combat deployment? Active Reserve

14. Army

	What component of the Army were you in during your MOST RECENT combat ployment?
0	Active Duty
0	Reserve
0	National Guard
	187

15. Air Force

	What component of the Air Force were you in during your MOST RECENT combat bloyment?
	Active Duty
0	Reserve
0	Air National Guard
	188

16. USMC

30. What component of the Marine Corps we deployment?	ere you in during your MOST RECENT combat
C Active Duty	
C Reserve	
	189

17. Coast Guard

	What component of the Coast Guard were you in during your MOST RECENT combat
	Active Duty
0	Reserve
	Reserve
	190

18. Experiences in Close Relationships (1 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

32. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
I prefer not to show a partner how I feel deep down.	0	0	0	0	0	0	•
2. I worry about being abandoned.	O	0	0	O	0	\circ	0
3. I am very comfortable being close to romantic partners.	0	O	О	0	0	0	O
4. I worry a lot about my relationships.	O	0	0	O	0	O	0
5. Just when my partner starts to get close to me I find myself pulling away.	0	O	0	0	0	0	0
6. I worry that romantic partners won't care about me as much as I care about them.	0	O	O	О	O	0	0
7. I get uncomfortable when a romantic partner wants to be very close.	O	О	О	0	0	0	0
8. I worry a fair amount about losing my partner.	O	0	0	O	0	O	0
9. I don't feel comfortable opening up to romantic partners.	0	O	О	0	0	0	O
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.	0	O	O	O	O	O	O
11. I want to get close to my partner, but I keep pulling back.	O	©	0	O	O	O	O

19. Experiences in Close Relationships (2 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

33. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
12. I often want to merge completely with romantic partners, and this sometimes scares them away.	О	O	O	С	0	О	О
13. I am nervous when partners get too close to me.	O	0	O	0	0	0	0
14. I worry about being alone.	0	0	0	0	О	O	O
15. I feel comfortable sharing my private thoughts and feelings with my partner.	0	O	O	O	O	0	0
16. My desire to be very close sometimes scares people away.	O	O	O	0	0	0	O
17. I try to avoid getting too close to my partner.	0	0	0	0	0	0	0
18. I need a lot of reassurance that I am loved by my partner.	0	0	O	0	0	0	0
19. I find it relatively easy to get close to my partner.	O	0	O	0	0	O	0
20. Sometimes I feel that I force my partners to show more feeling, more commitment.	O	0	0	0	0	O	O
21. I find it difficult to allow myself to depend on romantic partners.	O	0	\odot	O	0	0	0
22. I do not often worry about being abandoned.	O	O	0	0	0	0	0
23. I prefer not to be too close to romantic partners.	O	0	O	0	0	0	0

20. Experiences in Close Relationships (3 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

34. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
24. If I can't get my partner to show interest in me, I get upset or angry.	0	O	O	0	0	0	0
25. I tell my partner just about everything.	O	O	0	O	0	O	0
26. I find that my partner(s) don't want to get as close as I would like.	О	O	O	0	0	O	O
27. I usually discuss my problems and concerns with my partner.	0	O	O	O	0	O	0
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.	O	0	О	O	0	O	О
 I feel comfortable depending on romantic partners. 	0	O	О	O	0	O	0
30. I get frustrated when my partner is not around as much as I would like.	0	O	O	0	0	O	0
31. I don't mind asking romantic partners for comfort, advice, or help.	0	O	0	0	0	O	0
32. I get frustrated if romantic partners are not available when I need them.	0	O	О	0	0	0	0
33. It helps to turn to my romantic partner in times of need.	0	O	О	O	0	O	0
34. When romantic partners disapprove of me, I feel really bad about myself.	O	O	О	O	О	O	0
35. I turn to my partner for many things, including comfort and reassurance.	O	O	О	O	0	O	0
36. I resent it when my partner spends time away from me.	0	0	O	0	0	0	0

21. Dyadic Adjustment Scale (DAS)

35. Most persons have disagreements with their relationships. Please indicate below the appropriate extent of the agreement or disagreement between you and your partner have on each item on the following list.

	0 = Always disagree	1 = Almost always disagree	2 = Frequently disagree	3 = Occasionally disagree	4 = Almost always agree	5 = Always agree
1. Handling family finances	0	0	0	0	O	0
2. Matters of recreation	0	0	0	0	0	\circ
3. Religious matters	0	0	0	\circ	0	0
4. Demonstration of affection	O	O	O	0	O	O
5. Friends	0	0	0	0	0	0
6. Sex relations	\circ	\circ	0	0	O	0
7. Conventionality (correct or proper behavior)	O	0	O	0	0	O
8. Philosophy of life	0	0	0	0	0	0
9. Ways of dealing with in- laws	0	0	0	0	O	0
10. Aims, goals, and things believed important	O	O	O	0	O	O
11. Amount of time spent together	O	0	0	0	O	0
12. Making major decisions	O	0	0	0	O	0
13. Household tasks	0	0	0	0	0	0
14. Leisure time interests	O	0	0	0	O	0
15. Career decisions	0	0	0	0	0	0

	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
6. How often do you discuss or have you considered divorce, separation, or terminated the relationship?	О	6	0	O	6	0
7. How often do you or your mate leave the house after a fight?	O	O	О	O	C	O
8. In general, how often to you think things between you and your partner are poing well?	O	О	О	O	С	О
9. Do you confide in your nate?	O	O	O	0	O	O
20. Do you ever regret that you married? (or lived ogether)	0	0	O	0	0	0
21. How often do you and your partner quarrel	O	O	O	0	O	0
22. How often do you and	0	0	0	0	0	O
our mate "get on each others nerves"?						
7. Do you kiss you				Almost overve	av.	Eveny day
7. Do you kiss you Never	Rarely		occasionally	Almost everyd		Every day
7. Do you kiss you	Rarely C r mate enga	age in outsid	occasionally	O	g. sporting,	0
7. Do you kiss you Never 8. Do you and you r professional action	Rarely r mate enga vities) Very few of the	age in outsid nem So	e interests to	Ogether? (e.g	j. sporting,	recreation All of them
7. Do you kiss you Never 8. Do you and your r professional actions None of them	Rarely r mate enga vities) Very few of the	age in outsid nem So	e interests to	Most of then The control of twice a section of the control of twice a section of twice a	j. sporting,	recreation All of them
7. Do you kiss you Never 8. Do you and your r professional actions None of them	r mate engalivities) Very few of the	age in outsid	e interests to	Most of then Most of then The street of twice a so the street of the s	y. sporting,	recreation All of them C ar mate?
7. Do you kiss you Never 8. Do you and your r professional acti None of them 9. How often wou	Rarely r mate enga vities) Very few of the ld you say to 1 = never	nem So the following 2 = Less than month	e interests to	Most of then	g. sporting, Tou and you Duce a day	recreation All of them C Ir mate? 5 = More often
7. Do you kiss you Never 8. Do you and your r professional acti None of them 9. How often wou 25. Have a stimulating exchange of ideas	Rarely C r mate enga (vities) Very few of the C Id you say to 1 = never	nem So the following 2 = Less than month	e interests to	Most of then	g. sporting, rou and you Once a day	recreation All of them C rr mate? 5 = More often

40. There are s	ome things	about which d	ouples sor	netimes agre	e and sometime	es
disagree. Indic	ate if either	item below c	aused diffe	rences of opi	nions or proble	ms in your
relationship du	ring the pas	t few weeks (Select yes	or no)		
		Yes			No	
29. Being too tired for	sex	0			0	
30. Not showing love		O			O	
41. The number	rs on the fol	lowing line re	present dif	ferent degre	es of happiness	in your
relationship. T	he middle po	int, "happy",	represents	the degree	of happiness of	most
relationships.	Please pick t	the number th	at best des	cribes the de	egree of happine	ess, all
things conside	red, of your	relationship.				
0- Extremely unhappy	= Fairly unhappy	2= A little unhappy	3= Нарру	4= Very happy	5= Extremely happy	6= Perfect
0	0	0	0	0	0	0
42 Please sele	oct one of the	a following st	stamants th	at hast dasc	ribes how you f	eel about
the future of yo		•	atements ti	iai besi uesc	ilibes flow you i	eei about
My relationship can	It would be nice	-	e if mv		I wa	int desperately for
never succeed, and		efuse relationship suc	I want ve	ry much for my I war nip to succeed, relat	nt very much for my m	y relationship to
there is no more that I	to do any more th		much and wi		will do all that I can	eed, and would go
can do to keep the relationship going.	am doing now to o	deep more than I an bing. now to make it s	snare to s	see that it does. to	see that it does	most any length to ee that it does.
0	0	0		0	0	\circ

22. Positive and Negative Affect Schedule (PANAS)

Indicate the extent to which each of the following statements accurately reflects emotions or feelings you experienced while communicating with your partner during your MOST RECENT deployment. Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

43. I felt active when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters care packages, email)	, ⊙	0	0	0	0	•
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	С к,	O	O	0	О	0

44. I felt guilty when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	•	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	© ;	O	0	0	0	O

45. I felt enthusiastic when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	C	O	O	О	О	O

46. I felt attentive	when commur	icating o	ver			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	© ,	0	O	0	0	O
47. I felt afraid wh		ıting over				
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	0	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О,	C	C	O	C	C
48. I felt nervous v	when commun	icating ov	/er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O,	0	C	O	O	С
49. I felt distresse	d when comm	unicating	over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	•	O	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О,	C	C	O	C	O
			198			

50. I felt excited w	vhen communic	cating ove	er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	O	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)		0	0	O	0	0
51. I felt determin	ed when comn Very slightly or not	nunicating A little	y over Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters,	at all	O	O	O O	©	· ·
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	© ,	O	0	0	0	0
*52. I felt strong	when commun	nicating o	ver			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О,	C	C	O	C	O
*53. I felt hostile	when commu	nicating o	ver			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	⊙	0	0	O	0	0
			199			

≭ 54. I felt alert w	hen communic	ating ove	r			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	O	0	О	0	О
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	O	O	0	C
*55. I felt jittery v	when communi	icating ov	er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	С	C	C	С
≭ 56. I felt interes	ted when com	municatin	ıg over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	C	С	С	C
*57. I felt irritable	e when commu	ınicating	over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	0	О
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	0	0
			200			

≭58. I felt upset v	when commun	icating ov	er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	С	O	О	0	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	С	C	C	C	C	O
≭ 59. I felt asham	ed when comn	nunicating	g over			
	Very slightly or not at all	A little	Moderately	Qutie a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C	O	С	С	С	O
st 60. I felt proud $^{\circ}$	when commun	icating ov	/er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	O	O	0	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	0	O
≭61. I felt inspire	d when comm	unicating	over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C	O	C	С	С	C
			201			

^k 62. I felt scared	when comm	unicating o	ver			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, are packages, email)	O	0	O	O	O	0
	0	©	C C			C C
			202			

23. Relational Maintenance Behavior Measure (RMBM)

Indicate the extent to which each of the following statements accurately reflects the way that you maintained your relationship during your MOST RECENT deployment. Do not indicate agreement with things that you think you should or should not do. That is, think about the everyday things you actually did on the most recent deployment. Remember that much of what you do to maintain your relationship can involve mundane or routine aspects of day-to-day life. Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

*63. Acted positively with me when we were communicating over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	O	О	O	О	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	O	0	О	O	0	O

*64. Was upbeat when we were communicating over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	0	O	©	0	O	O

*65. Acted cheerfully with me when we were communicating over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	О	0	0	0	O	O	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	0	O	0	O	О	С

*66. Acted optim	istically w	hen he/	she was c	ommunic	ating with	n me ove	er	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	O	0	O	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	O	O	O	O	0	0
★67. Was underst	anding w	nen con	nmunicati	ng with n	ne over			
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	O	O	0	O	0	0
*68. Was forgivin	g of me w	hen cor	nmunicati	ing with n	ne over			
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	О	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	0	O	O	О	O	O	0
*69. Apologized v	when he/s	he was	wrong du	ring com	municatio	ns with	me over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	O	O	O	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	6	O	0	O	O	O
			20	04				

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	O	O	O	O	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	©	0	0	0	O	0	©	0
^k 71. Talked abou	t his/her fo	ears wh	en commi	unicating	with me	over		
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0	0	0
NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	O	O	O	0	O	O
^k 72. Was open ab	out his/he	er feelin	gs when d	communic	cating wi	th me ov	ver er	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	0	O	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	С	O	O	O	0	0	0
^k 73. Encouraged	me to sha	re my tl	houghts v	vith him/h	er when	commun	icating wit	h me
ver	1 Strongly	2	3	4	5	6	7 Strongly	N/A
DELAYED MODES (letters, care packages, email)	disagree	0	O	O	O	O	agree ©	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	O	O	O	O	O	O

over								
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	0	0	0	О	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	С	C	0	0	O	0
f^* 75. Discussed th	ne quality	of our re	elationshi	p when c	ommunic	ating wi	th me over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	O	O	0	0	O	С
[≮] 76. Told me how	he/she fe	lt about	the relat	ionship w	hen com	municati	ing with me	over
	1 Strongly	2	3		5		7 Strongly	N/A
	disagree		Ü	4	5	6	agree	N/A
•	disagree O	O	0	4 ⊙	0	6	agree ©	N/A
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)								
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	0	0	0	0	0	0	0
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	bout our r	0	0	0	0	0	C C Ver 7 Strongly	0
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	o o bout our r	o o elations	o o ship when	commun	o o	o o	o o ver	0
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) *77. Has talked a DELAYED MODES (letters,	bout our r 1 Strongly disagree	© © elations	o Ship when	Commun	o o o icating w	cith me o	C Ver 7 Strongly agree	C C
care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) *77. Has talked a DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	bout our r 1 Strongly disagree	elations	Ship when	Commun	© © Sicating w	o o o o o o o o o o o o o o o o o o o	C Ver 7 Strongly agree C	O N/A

·	nicating was 1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	O	O	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	0	O	C	O	O	O	O	0
^k 79. Talked abou	t our plans	s for the	future w	hen comn	nunicatin	g with m	e over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	O	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	0	O	O	O	O	0	O	O
^k 80. Told me how	much I m	eant to	him/her v	vhen com	municati	ng with ı	ne over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	0	O	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	O	С	С	O	O	O	O	0
I.		l mean	t to him/h	er when o	communi	cating w		
^k 81. Showed me			2	4	5	6	7 Strongly agree	N/A
^k 81. Showed me	1 Strongly disagree	2	3					
ELAYED MODES (letters, care packages, email)		2	0	0	0	0	O	0
DELAYED MODES (letters,	disagree				0	0		0

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0	O	O
NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	•	0	0	O	O	0	©	0
^K 83. As best as ho esponsibilities th					ormed hi	s/her ho	usehold	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	O	O	O	0	0	O	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	0	О	0	0	0	О	O	O
_	e/she was	able du	e to dista	nce, help	ed with th	ne tasks	that neede	d to be
k 84. As best as he lone through com				nce, help	ed with th	ie tasks	that neede 7 Strongly agree	d to be
K84. As best as he lone through com	munication 1 Strongly	ns over	•				7 Strongly	
^k 84. As best as he	munication 1 Strongly disagree	ons over	3	4	5	6	7 Strongly agree	N/A
*84. As best as he lone through com DELAYED MODES (letters, care packages, email) NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	1 Strongly disagree	ons over	3 O	4 O	5 •••	6	7 Strongly agree	N/A
k84. As best as helper through complete through the through through through the through thro	nunication 1 Strongly disagree	ons over	3 O	4 O	5 •••	6	7 Strongly agree	N/A
k 84. As best as he lone through complete through the long through through the long through the long through the long through through through the long through through the long through through the long through through the long through thr	1 Strongly disagree	ons over	3 O O	4 O	5 O	6 O	7 Strongly agree	N/A O
*84. As best as he lone through com DELAYED MODES (letters, care packages, email) NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	1 Strongly disagree C his/her disagree	ons over 2 O O uties in 0	3 O O	4 O Cations o	5 ••••••••••••••••••••••••••••••••••••	6 •	7 Strongly agree	N/A C

disagree DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	7 Strongly	N/A
INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C	agree	
telephone, text, social hetworking sites [Face book, WySpace], Skype, instant messenger, instant messenger with video) **R7. As best as he/she was able due to distance, did things with our same packages, email) **PELAYED MODES (letters,	©	0
1 Strongly disagree 2 3 4 5 6 DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C		О
disagree 2 3 4 5 6 DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	r friends	
Pare packages, email) NTERACTIVE MODES C C C C C C C C C C C C C C C C C C C	7 Strongly agree	N/A
telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) **88. As best as he/she was able due to distance, spent time with our sites of the property of the pro	0	0
1 Strongly disagree 2 3 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0	0
disagree 2 3 4 5 6 DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	r families	
NTERACTIVE MODES Communications over 1 Strongly disagree 2 3 4 5 DELAYED MODES (letters, care packages, email) NTERACTIVE MODES Communications over 1 Strongly disagree Communications over 1 Strongly disagree Communications over C	7 Strongly agree	N/A
telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video) **R9. Asked a family member for help in communications over 1 Strongly disagree 2 3 4 5 DELAYED MODES (letters, care packages, email) NTERACTIVE MODES Clelephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant	0	0
1 Strongly disagree 2 3 4 5 6 DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C	O	O
1 Strongly disagree 2 3 4 5 6 DELAYED MODES (letters, C C C C C care packages, email)		
DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	7 Strongly agree	N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	0	0
	0	0

*90. As best as he/she was able due to distance, turned to a family member for advice in communications over									
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A	
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0	O	O	
		O O	©	©	©				

24. Dyadic Sexual Communication Scale

Indicate the extent to which each of the following statements accurately reflects the way that you sexually communicated with your partner during your MOST RECENT DEPLOYMENT. Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

*91. My partner rarely responded when I wanted to talk about our sex life when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	О	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О	O	0	0	O	O	O

*92. Some sexual matters were too upsetting to discuss with my sexual partner when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	О	0	0	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	C	0	0

*93. There were sexual issues or problems in our sexual relationship that we never discussed when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	O	0	O	C	O

when communicatii	Disagree						
	strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	О	O	O	0	0
NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	0	0	0	O	0
^k 95. Whenever my	partner an	d I talked	about sex	, I feel like	she or he	was lecturin	g me
vhen communicatiı	ng over						
	Disagree strongly					Agree Strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	О	0	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant	0	O	O	O	O	0	O
messenger with video)	en compla	ined that I	l am not ve	erv clear al	oout what	I want sexua	ıllv
messenger with video) *96. My partner oft	ng over Disagree	ined that I	l am not ve	ery clear al	oout what	I want sexua	nlly N/A
*96. My partner oft when communication DELAYED MODES (letters,	ng over	ined that I	l am not ve	ery clear al	oout what		
*96. My partner oft when communication DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	ng over Disagree strongly					Agree strongly	N/A
messenger, instant messenger with video) *96. My partner oft when communication DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) *97. My partner and	Disagree strongly C d I have ne	0	0	0	0	Agree strongly	N/A C
*96. My partner oft when communication DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	Disagree strongly C d I have near	0	0	0	0	Agree strongly	N/A C
*96. My partner oft when communication DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) *97. My partner and	Disagree strongly C d I have ne	0	0	0	0	Agree strongly	N/A C
*96. My partner oft when communication DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) *97. My partner and	Disagree strongly C d I have near	0	0	0	0	Agree strongly C	N/A C C

lesires when comm	Disagree					Agree strongly	N/A
	strongly						
DELAYED MODES (letters, care packages, email)	О	O	O	O	O	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	O	0	0	O	O
^k 99. Even when an	gry with m	e, my par	tner was a	ble to app	reciate m	y views on se	xuali
hen communicatiı	ng over						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	О	0	0	0	0	0	0
NTERACTIVE MODES telephone, text, social	O	O	0	0	0	0	0
networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)							
MySpace], Skype, instant messenger, instant messenger with video) K 100. Talking abou	ıt sex was	a satisfyi	ng experie	ence for bo	th of us w	hen commun	icati
MySpace], Skype, instant messenger, instant messenger with video)	I t sex was Disagree strongly	a satisfyi	ng experie	ence for bo	th of us w	rhen commun Agree strongly	i cati i _{N/A}
MySpace], Skype, instant messenger, instant messenger with video) K 100. Talking about the control of the cont	Disagree	a satisfyi	ng experie	ence for bo	th of us w		
MySpace], Skype, instant messenger, instant messenger with video) K 100. Talking abou	Disagree strongly					Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) **100. Talking about the state of the stat	Disagree strongly	0	0	0	0	Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) K 100. Talking about the second s	Disagree strongly	0	0	0	0	Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) K 100. Talking about the second s	Disagree strongly C C Musuall Disagree	0	0	0	0	Agree strongly C	N/A O

*102. I had little dif	fficulty in t	elling my	partner wh	at I do or d	lon't do s	exually when	
communicating ove	r						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	0	0	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	C	O	C	O	C
*103. I seldom felt			talking abo	out the det	ails of ou	r sex life with	my
partner when comm		over					
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	O	О	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C		C	C			C
			214				

25. Relationship Continuity Constructional Units

Below are questions regarding the amount of time spent doing a behavior before, during and post-deployment.

*104. How often did you perform this behavior prior to absence (pre-deployment)?

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Tell your partner what you will be doing during the time you are apart	0	0	0	0	0	0	0	0	0	0	0	O
Tell your partner when you expect to return home	0	O	O	O	0	0	0	0	0	0	0	O
Tell your partner goodbye	0	0	0	0	0	0	0	0	0	0	0	0
Kiss your partner good bye	0	0	0	0	0	0	0	0	0	0	0	0
Tell your partner you love them	0	O	0	0	0	0	0	0	0	0	0	0
Make plans to do something with your partner once you are back together	0	0	0	0	0	O	O	0	0	0	O	0
Attempt to spend time together before you have to be apart	0	0	0	0	0	0	0	0	0	0	0	0

*105. How often did you perform this behavior during the absence (deployment)?

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Telephone them when you are apart	0	O	0	0	0	0	0	0	0	0	0	0
Leave a message for them on the answering machine	0	0	0	0	0	0	0	0	0	0	0	0
E-mail them when you are apart	0	0	0	0	0	0	0	0	0	0	0	0
Leave notes for them	0	0	0	0	0	0	0	0	0	0	0	0
Wear something which reminds you of your partner, for example, jewelry or clothing	0	O	O	O	O	0	O	O	0	O	О	O
Bring your partners name into the conversation when you are talking to others	0	O	O	O	O	0	O	0	0	O	0	O
Buy your partner flowers	0	\circ	0	0	0	0	0	0	0	0	0	0
Buy your partner a gift	0	0	0	0	0	0	0	0	0	0	0	0
Do something nice for your partner while they are gone	O	O	0	0	0	0	0	0	0	0	0	0
Meet them for lunch	0	\circ	0	0	0	0	0	0	0	0	0	0
Display pictures of your partner	0	O	O	O	O	O	O	O	O	O	0	0

★106. How often did you perform this behavior post-absence (post-deployment)?												
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Greet your partner (say hi)	0	0	0	0	0	0	0	0	O	0	0	0
Kiss and/or hug your partner hello	0	O	O	O	O	O	O	O	O	0	O	0
Ask how their day went	0	\odot	0	0	0	0	0	0	\circ	0	0	0
Discuss how your day went	0	\circ	\circ	0	0	0	0	0	0	0	0	0

26. Combat Experiences (1 of 2)

The statements below are about your combat experiences during your MOST RECENT deployment. As used in these statements, the term "unit" refers to those you lived and worked with on a daily basis during deployment. Please mark how often you experienced each circumstance.

*107. While deployed...

	1 = Never	2 = Once or twice	3 = Several times over the entire deployment	4 = A few times each month	5 = A few times each week	6 = Daily or almost daily
1I went on combat patrols or missions.	0	O	0	0	0	O
2I took part in an assault on entrenched or fortified positions that involved naval and/or land forces.	С	О	О	0	О	O
3I personally witnessed someone from my unit or an ally unit being seriously wounded or killed.	O	О	О	O	O	О
4I encountered land or water mines, bobby traps, or roadside bombs (for example, IEDs)	O	O	0	0	O	O
5I was exposed to hostile incoming fire.	0	O	O	0	0	0
6I was exposed to "friendly" incoming fire	O	O	O	O	0	O
7I was in a vehicle (for example, a humvee", helicopter, or boat) or part of a convoy that was attacked.	O	О	О	O	О	С
8I was part of a land or naval artillery unit that fired on enemy combatants	O	O	O	0	O	0
9I personally witenessed enemy combatants being seriously wounded or killed	0	0	0	0	0	O

27. Combat Experiences (2 of 2)

The statements below are about your combat experiences during your MOST RECENT deployment. As used in these statements, the term "unit" refers to those you lived and worked with on a daily basis during deployment. Please mark how often you experienced each circumstance.

*108. While deployed...

	1 = Never	2 = Once or twice	3 = Several times over the entire deployment	4 = A few times each month	5 = A few times each week	6 = Daily or almost daily
10I personally witnessed civilians (for example, women and children) being seriously wounded or killed.	O	O	О	О	С	O
11I was injured in a combat-related incident	O	O	O	O	0	O
12I fired my weapon at enemy combatants	0	0	O	0	0	O
13I think i wounded or killed someone during combat operations	O	0	0	O	O	O
14I was involved in locating or disarming explosive devices.	0	O	0	O	O	O
15I was involved in searching or clearing homes, buildings, or other locations	0	O	0	0	O	0
16I participated in hand-to-hand combat.	0	O	O	0	0	0
17I was involved in searching and/or disarming potential enemy combatants	0	O	O	0	O	0

28. PCL-5 (1 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

*109. In the past month, how much were you bothered by:

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
 Repeated, disturbing, and unwanted memories of the stressful experience? 	0	О	О	О	О
2. Repeated, disturbing dreams of the stressful experience?	0	O	O	O	0
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	С	С	С	С	C
4. Feeling very upset when something reminded you of the stressful experience?	0	0	0	0	0
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	С	С	С	С	C
6. Avoiding internal reminders of the stressful experience (for example, thoughts, feelings, or physical sensations)?	0	O	O	O	0
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, objects, activities, or situations)?	O	0	0	0	O

29. PCL-5 (2 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

*110. In the past month, how much were you bothered by:

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
8. Trouble remembering important parts of the stressful experience?	О	О	О	О	O
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	0	0	C	0
10. Blaming yourself or someone else strongly for the stressful experience or what happened after it?	О	C	C	С	О
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	O	O	0	O
12. Loss of interest in activities that you used to enjoy?	0	О	O	O	0
13. Feeling distant or cut off from other people?	O	O	O	O	0
14. Having trouble experiencing positive feelings (for example, being unable to have loving feelings for those close to you, or feeling emotionally numb)?	0	0	O	С	O

30. PCL-5 (3 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

*111. In the past month, how much were you bothered by:

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
15. Feeling irritable or angry or acting aggressively?	О	О	О	О	О
16. Taking too many risks or doing things that cause you harm?	0	O	0	0	0
17. Being "super alert" or watchful or on guard?	0	0	0	0	0
18. Feeling jumpy or easily startled?	O	O	O	O	O
19. Having difficulty concentrating?	0	0	0	0	0
20. Trouble falling or staying asleep?	O	0	0	0	O

31. PHQ-9

*112. Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all (0)	Several Days (1)	More than half the days (2)	Nearly every day (3)
Little interest or pleasure in doing things	O	0	О	0
2. Feeling down, depressed, or hopeless	O	O	O	O
Trouble falling or staying asleep, or sleeping too much	О	O	O	О
Feeling tired or having little energy	0	O	O	O
5. Poor appetite or overeating	0	0	0	0
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	O	O	O	O
7. Trouble concentrating on things, such as reading the newspaper or watching television	О	C	C	0
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	O	O	0	C
9. Thoughts that you would be better off dead of or hurting yourself in some way	⊙	©	•	©

32. Impact of Event Scale - Revised (IES-R) (1 of 2)

Below is a list of difficulties people sometimes have after stressful life events (deployment separation). Please read each item, and then indicate how distressing each difficulty has been for your partner DURING THE PAST SEVEN DAYS with respect to the most recent deployment. On the continuum of not at all to extremely please mark what best describes YOUR UNDERSTANDING of your partner's experience.

*113..

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Any reminder brought back feelings about it.	0	O	O	0	0
2. I had trouble staying asleep.	O	0	O	0	O
3. Other things kept making me think about it.	O	0	0	0	0
4. I felt irritable and angry.	O	0	0	O	O
5. I avoided letting myself get upset when I thought about it or was reminded of it.	О	O	C	O	O
6. I thought about it when I didn't mean to.	0	0	O	O	O
7. I felt as if it hadn't happened or wasn't real	0	0	0	0	0
8. I stayed away from reminders of it.	0	0	0	0	O
9. Pictures about it popped into my mind.	0	0	0	O	0
10. I was jumpy and easily startled.	O	0	0	O	O
11. I tried not to think about it.	0	0	0	0	O
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	O	O	O	О	О

33. Impact of Event Scale - Revised (IES-R) (2 of 2)

Below is a list of difficulties people sometimes have after stressful life events (deployment separation). Please read each item, and then indicate how distressing each difficulty has been for your partner DURING THE PAST SEVEN DAYS with respect to the most recent deployment. On the continuum of not at all to extremely please mark what best describes YOUR UNDERSTANDING of your partner's experience.

*114..

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
13. My feelings about it were kind of numb.	O	0	O	0	0
14. I found myself acting or feeling like I was back at that time.	O	O	O	O	0
15. I had trouble falling asleep.	0	0	O	0	O
16. I had waves of strong feelings about it.	0	O	0	\odot	O
17. I tried to remove it from my memory.	0	0	O	O	O
18. I had trouble concentrating.	O	O	O	O	O
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	О	С	О	О	0
20. I had dreams about it.	0	0	0	0	0
21. I felt watchful and onguard.	O	O	O	O	O
22. I tried not to talk about it	0	0	0	O	O

34. Self-Report Family Inventory: Version II (1 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

*****115..

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
Family members pay attention to each others feelings	О	O	С	0	О
Our family would rather do things together than with other people.	С	O	C	O	C
3. We all have a say in family plans	0	0	O	0	O
 The grownups in this family understand and agree on family decisions 	C	O	0	O	O
5. The grownups in the family compete and fight with each other	С	О	С	0	С
6. There is closeness in my family but each person is allowed to be special and different	0	0	0	O	0
7. We accept each others fiends	0	0	O	0	0
8. There is confusion in our family because there is no leader	С	O	O	O	O
9. Our family members touch and hug each other	0	0	O	0	O
10. Family members put each other down	O	0	O	0	O
11. We speak our minds, no matter what	0	0	O	0	0
12. In our home, we feel loved	0	О	O	O	O

35. Self-Report Family Inventory: Version II (2 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

*****116..

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
13. Even when we feel close, our family is embarrassed to admit it	С	0	C	O	O
14. We argue a lot and never solve problems	O	0	С	0	0
15. Our happiest times are at home	O	0	O	0	0
16. The grownups in this family are strong leaders	O	O	C	0	O
17. The future looks good to our family	0	0	O	0	O
18. We usually blame one person in our family when things aren't going right	О	O	O	O	O
19. Family members go their own way most of the time	C	0	C	O	O
20. Our family is proud of being close	O	O	O	0	O
21. Our family is good at solving problems together	O	0	O	0	0
22. Family members easily express warmth and caring towards each other	С	O	C	O	C
23. Its okay to fight and yell in our family	0	0	O	0	O
24. One of the adults in this family has a favorite child	0	0	O	0	0

36. Self-Report Family Inventory: Version II (3 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

*117...

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
25. When things go wrong we blame each other	0	0	0	O	O
26. We say what we think and feel	0	O	O	0	O
27. Our family members would rather do things with other people than together	О	0	O	О	0
28. Family members pay attention to each other and listen to what is said	С	O	О	0	0
29. We worry about hurting each other's feelings	0	0	O	O	O
30. The mood in my family is usually sad and blue	0	O	O	0	O
31. We argue a lot	0	0	0	0	0
32. One person controls and leads our family	0	O	O	0	O
33. My family is happy most of the time	0	0	O	0	O
34. Each person takes responsibility for his/her behavior.	O	O	O	O	0
118. On a scale of	1 to 5, I would rat	te my famil	ly as:		
My family functions very well together		•	-	N	My family does not function well together at all.
0	0	(0		0

119. On a scale of 1 to 5, I would rate the independence in my family as:

No one is independent. There are no open arguments. Family members rely on each other for satisfaction rather than on outsiders		Somtimes independent. There are some disagreements. Family members find satisfaction both within and outside the family.		Family members usually go their own way. Disagreements are open. Family members look outside the family for satisfaction
O	O	0	0	O

37. Global Measure of Sexual Satisfaction 120. Overall, how would you describe your sexual relationship with your partner? Very Bad Very Good 121. Overall, how would you describe your sexual relationship with your partner? Very Unpleasant Very Pleasant 0 0 0 2. 0 0 0 122. Overall, how would you describe your sexual relationship with your partner? Very Negative Very Positive 0 0 3. 0 123. Overall, how would you describe your sexual relationship with your partner? Very Very Satisfying Unsatisfying 0 0 0 0 4. 124. Overall, how would you describe your sexual relationship with your partner? Worthless Very Valuable 0 0 0 0 5. 228

38. THANK YOU

You may forward the link to your partner or provide an email address in the next question so that it may be emailed to him/her.

https://www.surveymonkey.com/s/NVPMP9L

*125. Please provide your name and your partner's name so that I can match them in the data set.

126. Please provide an email address so that the link may be forwarded to your partner.

I am extremely grateful for completion of this survey and although data will be combined for analysis there will not be anything shared with their partner in the process, their responses will be maintained and reported without identifiers so nothing could be linked back to them individually.

To compensate you for your time I have included one hundred different prizes which will be drawn at random.

The prizes are listed below:

• one hundred \$20.00 Wal-Mart gift cards

If you are interested in being included in this random drawing, <u>click here</u> to be directed to a separate web page to provide contact information. If you choose to provide your contact information it will not be linked to your answers in any way. If you are not interested in providing your contact information click Done.

If at any time during this survey you feel distressed and would like to talk with someone at the National Suicide Prevention Hotline <u>click here</u> or call 1-800-273-8255 (Veterans press 1).

If at any time you feel like you need to query for a mental health provider in your local area <u>click here</u>.

Appendix E

Survey for Partner

1. Demographics

PRINCIPAL INVESTIGATOR NAME:

Warren N. Ponder

TITLE OF PROJECT

Communication in combat through the lens of Internal Working Models

INTRODUCTION

You are being asked to participate in a research study. Your participation is voluntary. During this study, you will be asked to answer questions about your communication frequency and content with your significant other. Questions will be asked about you and your significant other. Additionally, you will be asked to provide names and contact information for yourself and partner so your responses can be linked to your significant other's and to be contacted for compensation.

CONTACT FOR QUESTIONS

Questions about this research study may be directed to Warren Ponder (warren.ponder@mavs.uta.edu or work phone 253-495-1797) or Regina Aguirre (rtpaguirre@uta.edu or work phone 817 272-2011). Any questions you may have about your rights as a research participant or a research related injury may be directed to the Office of Research Administration; Regulatory Services at 817-272-2105 or regulatoryservices@uta.edu.

CONFIDENTIALITY

While confidentiality of this one-time survey will be maintained, your responses will be linked to your names, contact information (email address) and those of your spouse/partner. This is to serve the purpose of allowing the principal investigator to link your responses with those of your partner. Coding will be 1V (vet) and 1P (partner), 2V/2P and so on. Once the participants have been assigned a code all identifying information except contact information (email address for the raffle) will be deleted. Every attempt will be made to see that your study results are kept confidential. The results of this survey will only be available to Warren Ponder and his supervising professor, Dr. Regina Aguirre. A copy of the data from this study will be stored on the password protected, encrypted computer of Dr. Aguirre and 2 encrypted USB drives in her locked office at the University of Texas at Arlington in room GACB 113, for at least three (3) years after the end of this research. The results of this study may be published and/or presented at meetings without naming you or your partner/spouse as a participant. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the UTA Institutional Review Board (IRB), and personnel particular to this research have access to the study records. If you contact the researcher with questions or discomfort, your identity will be kept separate from your answers on the survey. Your records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above.

THE SPECIFIC PURPOSES OF THIS RESEARCH STUDY ARE TO DETERMINE:

- The purpose of this project is to study communication patterns (frequency and content) between a veteran and their partner during a combat deployment. From this positive and negative communication patterns for each adult attachment style can be identified

DURATION

This survey will take approximately 30 minutes to complete depending upon your answers which may increase how many questions you are asked.

PROCEDURES

The procedures, involving you as a research participant, include you completing an online survey. You will be asked to complete questions regarding your branch of service, combat deployment, age, race, ethnicity, sexual orientation, sex, gender, and other demographic information.

- You will also be asked to complete the following questionnaires; their names below are followed by a brief description of their purpose:

-Experiences in Close Relationships Inventory in order to determine attachment style.

- Dyadic Adjustment Scale in order to determine relationship satisfaction.
- Positive and Negative Affect Schedule in order to determine the different emotional states during communication with your partner.
- Routine and Strategic Relational Maintenance Scale in order to determine relationship maintenance behaviors in the long-distance relationship.
- Dyadic Sexual Communication in order to determine patterns of sexual communication during a combat deployment.
- Relationship Continuity Constructional Units in order to determine the continuity of the relationship.
- Combat Experiences in order to determine combat exposure.
- PTSD Checklist 5 in order to determine post-traumatic stress levels.
- PHQ-9 in order to assess for depressive symptoms.
- Impact of Event Scale Revised in order to determine the impact of deployment on the stateside partner.
- Self-Report Family Inventory: Version II in order to determine level of family functioning.
- Global Measure of Sexual Satisfaction in order to determine sexual satisfaction.

POSSIBLE BENEFITS

There are no direct benefits for participating in this study.

COMPENSATION

Each participant will be entered into the raffle regardless of completion, and it is not a requirement for your partner to also participate in order to be entered into the drawing. The survey link will be operational for 30 calendar days. After that time period has elapsed the raffle will be a random selection of one hundred Wal-Mart gift cards. The number and amount of prizes are listed below:

· one hundred \$20.00 Wal-Mart gift cards

POSSIBLE RISKS/DISCOMFORTS

There are no perceived risks for participating in this research study. Certain questions may cause some emotional discomfort. If at any time you experience discomfort, you may exit the survey at no consequence to you. If you would like to talk to someone or are in crisis please call 1-800-273-TALK.

ALTERNATIVE PROCEDURES

There are no alternative procedures offered for this study. However, you can elect not to participate in the study or quit at any time with no negative consequences. Should you choose not to complete all questions (leave some questions blank or decline to respond), you will still be eligible for the raffle. Likewise, the decision to participate and the decision to NOT participate in this study WILL IN NO WAY AFFECT YOUR OR YOUR PARTNER'S STANDING OR AFFILIATION WITH THE UNIVERSITY, COLLEGE, OR INSTITUTE OF HIGHER EDUCATION YOU ARE ATTENDING NOR WITH ANY MILITARY ORGANIZATION.

WITHDRAWAL FROM THE STUDY

Participation in this study is voluntary. You may refuse to participate or quit at any time by closing the survey window.

NUMBER OF PARTICIPANTS:

We expect 600 participants; 300 will be veterans and 300 will be their partners.

1. CONSENT

O decline

By clicking "accept" below, you confirm that you are 18 years of age or older and have read or had this document read to you. You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time.

You voluntarily agree to participate in this study. By clicking "accept" to this form, you are not waiving any of your legal rights. Refusal to participate will involve no penalty or loss of

benefits to which you are otherwise entitled. You may discontinue participation at any time
without penalty or loss of benefits, to which you are otherwise entitled.
C accept

2. Veteran inclusion

2. Are you the partner of an Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) veteran?	
C Yes	
O No	
233	
200	

3. Partner out			
Unfortunately, you must be a partner of an Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) veteran to participate in this study. If you are NOT, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.			
234			

4. Deployment inclusion		
3. Is your partner currently deployed? ☐ Yes		
□ No		
	235	
	200	

5. Deployment out
Unfortunately, your partner must be out of the war-zone (Afghanistan or Iraq) to participate in this study. If your partner is CURRENTLY in Iraq or Afghanistan, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
236

6. Relationship inclusion
4. During your partner's most recent deployment, were you in a committed relationship?
237

7. Relationship out
Unfortunately, you must have been in a committed relationship during your partner's most recent deployment to participate in this survey. If you were NOT in a committed relationship during your partner's most recent deployment, I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
238
230

8. Current Relationship

5. Are you currently in the same relationship recent deployment?	as you were during your partner's most
C Yes	
C No	
:	239

9. Current Relationship Out
Unfortunately, you must currently be in the same relationship you were during your most recent deployment. I thank you for your time and interest and ask that you please exit the survey now by closing the browser window or clicking on the Exit Survey link.
240

10. Demographics 6. What is/was the orientation of the relationship? C Heterosexual Same-sex 7. What is your sex? ☐ Male ☐ Female ☐ Intersex 8. What is your ethnicity? ☐ White Black ☐ Hispanic Asian Other 9. How old are you today? 10. Was your partner injured during the combat deployment? Yes □ No 11. How many children do you currently have? 12. What is your family's combined annual income (rounded to the nearest thousand)? 13. How many years have you been in your committed relationship?

14. How many hours a week do you work?
☐ Spouse does not work
☐ 1 to 10 hours
☐ 11 to 20 hours
21 to 30 hours
☐ 30 to 40 hours
☐ More than 40 hours
15. What is the marital status of your parents?
□ Never Married
☐ Married
☐ Separated
☐ Divorced
Widowed
16. How close geographically are your family members (immediate or distant) to you post deployment?
Within 50 miles
51 to 100 miles
101 to 200 miles
201 or more miles
If at any time during this survey you feel distressed and would like to talk with someone at the National Suicide Prevention Hotline click here or call 1-800-273-8255 (Veterans press 1).
If at any time you feel like you need to query for a mental health provider in your local area click here.
242

11. Demographics	

17. During your partner's most recent deployment, what mode(s) of communication did you use when communicating with your partner?									
	Letters								
	Care p	ackages							
	Emails								
	Teleph	one							
	Text m	essaging via telephone							
	Social	networking (Facebook, MySpace, etc)							
	Skype								
	Instant	messenger							
	Instant	messenger w/ video							
COI	mmuı	se rank from 1 (most preferred) to 9 (least preferred) YOUR preferred met nication with your partner during the MOST RECENT deployment? If a mo at you did not use, please select N/A.							
	▼	Letters		N/A					
	T	Care packages		N/A					
	V	Emails		N/A					
	-	Telephone		N/A					
	V	Text messaging via telephone		N/A					
	▼	Social networking (Facebook, MySpace, etc)		N/A					
	T	Skype		N/A					
	T	Instant messenger		N/A					
	V	Instant messenger w/ video		N/A					
		243							

etters									
/11010		0	0	0	0	0	0	0	0
are packages		0	\odot	\odot	0	\circ	\circ	O	0
mails		\odot	0	0	0	0	0	0	\odot
elephone		0	0	0	0	0	0	\circ	0
ext messaging lephone	g via	0	О	0	0	0	O	0	0
ocial networki acebook, MyS	-	0	0	0	0	O	0	0	0
куре		0	0	0	0	0	0	0	0
stant messen	ger	0	0	0	0	0	0	\circ	0
stant messen	ger w/ video	0	0	0	0	0	0	0	0
u believ	communic e your part ENT deplo	ner's	preferred r	nethod (of commu	ınication	was with	you durir	ng the
▼ L	_etters								N/A
•	Care packages							ſ	N/A
•	Emails								N/A
T	Telephone								N/A
7	Text messaging v	ia telepho	ne						N/A
T 5	Social networking	(Facebool	k, MySpace, etc)						N/A
T 5	Skype								N/A
Ţ I	nstant messenger								N/A
▼	nstant messenger	w/ video							N/A
I 1-800-273-8.	ring this survey yo 255 (Veterans pre u feel like you nee	ess 1).					n Suicide Preve	∌riūon Hotline <u>c</u>	<u>пск nere</u> о

12. Experiences in Close Relationships (1 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

21. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
I prefer not to show a partner how I feel deep down.	0	0	0	0	0	O	O
2. I worry about being abandoned.	O	O	0	O	0	0	0
3. I am very comfortable being close to romantic partners.	0	0	0	0	0	O	O
4. I worry a lot about my relationships.	O	O	0	O	0	0	O
5. Just when my partner starts to get close to me I find myself pulling away.	0	O	0	0	0	0	O
6. I worry that romantic partners won't care about me as much as I care about them.	O	O	0	0	O	O	O
7. I get uncomfortable when a romantic partner wants to be very close.	0	0	0	0	0	O	O
8. I worry a fair amount about losing my partner.	O	O	0	O	0	0	0
9. I don't feel comfortable opening up to romantic partners.	0	O	0	0	0	0	O
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.	0	O	O	0	O	0	O
11. I want to get close to my partner, but I keep pulling back.	0	0	0	О	0	C	O

13. Experiences in Close Relationships (2 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

22. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
12. I often want to merge completely with romantic partners, and this sometimes scares them away.	О	0	О	O	0	С	О
13. I am nervous when partners get too close to me.	O	0	0	0	0	0	0
14. I worry about being alone.	0	0	O	0	0	0	O
15. I feel comfortable sharing my private thoughts and feelings with my partner.	0	0	0	0	0	0	0
16. My desire to be very close sometimes scares people away.	0	0	0	O	0	O	O
17. I try to avoid getting too close to my partner.	0	0	0	0	0	O	O
18. I need a lot of reassurance that I am loved by my partner.	0	0	O	0	0	0	O
19. I find it relatively easy to get close to my partner.	O	0	0	0	0	0	O
20. Sometimes I feel that I force my partners to show more feeling, more commitment.	0	0	0	0	0	0	O
21. I find it difficult to allow myself to depend on romantic partners.	0	O	O	O	O	O	0
22. I do not often worry about being abandoned.	O	0	0	0	0	O	O
23. I prefer not to be too close to romantic partners.	O	0	O	O	O	O	O

14. Experiences in Close Relationships (3 of 3)

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it.

23. Please select one response per question

	1 Strongly disagree	2	3	4 Neutral/Mixed	5	6	7 Strongly agree
24. If I can't get my partner to show interest in me, I get upset or angry.	0	O	O	0	0	0	O
25. I tell my partner just about everything.	O	0	0	0	0	O	О
26. I find that my partner(s) don't want to get as close as I would like.	0	O	O	0	0	0	O
27. I usually discuss my problems and concerns with my partner.	O	O	O	O	O	O	0
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.	O	O	О	О	0	O	О
 I feel comfortable depending on romantic partners. 	0	O	O	O	O	O	0
30. I get frustrated when my partner is not around as much as I would like.	0	O	O	0	0	0	O
31. I don't mind asking romantic partners for comfort, advice, or help.	0	O	O	O	O	O	0
32. I get frustrated if romantic partners are not available when I need them.	0	O	O	0	0	0	O
33. It helps to turn to my romantic partner in times of need.	0	O	O	O	0	O	O
34. When romantic partners disapprove of me, I feel really bad about myself.	О	0	0	О	0	O	О
35. I turn to my partner for many things, including comfort and reassurance.	O	O	O	0	0	O	0
36. I resent it when my partner spends time away from me.	0	O	O	С	0	С	0

15. Dyadic Adjustment Scale (DAS)

24. Most persons have disagreements with their relationships. Please indicate below the appropriate extent of the agreement or disagreement between you and your partner have on each item on the following list.

	0 = Always disagree	1 = Almost always disagree	2 = Frequently disagree	3 = Occasionally disagree	4 = Almost always agree	5 = Always agree
1. Handling family finances	0	0	0	0	O	0
2. Matters of recreation	0	0	0	0	0	\circ
3. Religious matters	0	0	0	\circ	0	0
4. Demonstration of affection	O	O	O	0	O	O
5. Friends	0	0	0	0	0	0
6. Sex relations	\circ	\circ	0	0	O	0
7. Conventionality (correct or proper behavior)	O	0	O	0	0	O
8. Philosophy of life	0	0	0	0	0	0
9. Ways of dealing with in- laws	O	0	0	0	O	0
10. Aims, goals, and things believed important	O	O	O	0	O	O
11. Amount of time spent together	O	0	0	0	O	0
12. Making major decisions	O	0	0	0	O	0
13. Household tasks	0	0	0	0	0	0
14. Leisure time interests	O	0	0	0	O	0
15. Career decisions	0	0	0	0	0	0

nd your partner.	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminated the relationship?	С	O	C	C	О	С
17. How often do you or your mate leave the house after a fight?	O	O	O	O	O	O
8. In general, how often to you think things between you and your partner are going well?	С	С	С	О	С	О
19. Do you confide in your mate?	0	0	O	O	O	O
20. Do you ever regret that you married? (or lived ogether)	O	O	0	0	0	0
21. How often do you and your partner quarrel	O	0	O	O	O	O
22. How often do you and your mate "get on each	0	0	0	O	0	O
others nerves"?						
26. Do you kiss you			accasionally.	Almost everyo	av.	Every day
	r mate? Rarely	C	occasionally	Almost everyo	lay	Every day
26. Do you kiss you Never	Rarely C r mate enga	ige in outsid	O	O	g. sporting,	0
Never C T. Do you and your professional actions of them	Rarely r mate enga vities) Very few of th	ige in outsid em So	e interests to	Ogether? (e.g	j. sporting,	recreation All of them
Never 7. Do you and your professional actions of them	Rarely r mate enga vities) Very few of th	ige in outsid em So	e interests to	Most of ther Cur between y or twice a 4 = 0	j. sporting,	recreation All of them
Never C T. Do you and your professional actions of them	Rarely r mate enga vities) Very few of th	em So he following 2 = Less than	e interests to	Most of ther Most of ther The street of twice a so the street of the s	y. sporting,	recreation All of them C ar mate?
Never C T. Do you and your professional action None of them C R. How often would be a stimulating	Rarely r mate enga vities) Very few of th C Id you say t 1 = never	em So he following 2 = Less than month	e interests to	Most of ther Mo	g. sporting, Tou and you Duce a day	recreation All of them o recreation All of them o rmate? 5 = More often
Never 7. Do you and your r professional action of them 8. How often would exchange of ideas	Rarely r mate enga vities) Very few of the C Id you say to 1 = never	em So he following 2 = Less than month	e interests to	Most of ther Mo	g. sporting, rou and you Duce a day	recreation All of them C rr mate? 5 = More often

29. There are s	ome things	about which o	ouples son	netimes agre	e and sometime	es
disagree. Indic	ate if eithe	item below ca	aused diffe	ences of opi	nions or proble	ms in your
relationship du	ring the pas	st few weeks (Select yes	or no)		
		Yes			No	
29. Being too tired for	sex	O			O	
30. Not showing love		O			O	
30. The numbe	rs on the fo	llowing line re	present dif	ferent degre	es of happiness	in your
		_	-	•	of happiness of	-
relationships. I	Please pick	the number th	at best des	cribes the de	egree of happine	ess, all
things conside	-					•
0= Extremely unhappy	= Fairly unhappy	2= A little unhappy	3= Нарру	4= Very happy	5= Extremely happy	6= Perfect
О	0	0	0	•	0	0
04 8:			4 4	41 4 .	.,	
		_	atements th	at best desc	ribes how you f	eel about
the future of yo		-	.,			
My relationship can never succeed, and	It would be nice succeeded, but I	e if it It would be nic refuse relationship suc	I want ver	y much for my I war	it very much for my	int desperately for y relationship to
there is no more that I	to do any more t		much and wil	ip to succeed, relati Il do my fair and v	vill do all that I can	eed, and would go
can do to keep the relationship going.	am doing now to the relationship of	deep more than I am joing. now to make it s	snare to s	ee that it does. to	see that it does	most any length to ee that it does.
0	0	0		0	0	0
			250			

16. Positive and Negative Affect Schedule (PANAS)

Indicate the extent to which each of the following statements accurately reflects emotions or feelings you experienced while communicating with your partner during your partner's MOST RECENT deployment. Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

32. I felt active when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	C	O	O	0	0	0

33. I felt guilty when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	⊙	O	O	O	0	O

34. I felt enthusiastic when communicating over

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	O	0	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book MySpace], Skype, instant messenger, instant messenger with video)	C s,	O	O	0	О	C

35. I felt attentive	when commun	icating ov	ver			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	O	0	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	© ,	0	0	O	0	0
36. I felt afraid wh		iting over				
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O,	O	C	O	C	0
37. I felt nervous v	when commun	icating ov	/er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O,	0	0	0	0	O
38. I felt distresse	d when comm	unicating	over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	С,	C	C	O	C	O
			252			

39. I felt excited w	hen communic	cating ove	er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	©	0	0	0	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	O	O	С	O
40. I felt determin		nunicating	g over			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	C	О	С	0
41. I felt strong wl	hen communic	ating ove	r			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	С	O	C	O
42. I felt hostile w	hen communic	ating ove	r			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	C	C	0	C	O
			253			

BELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C		n communicat Very slightly or not					
INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C			A little	Moderately	Quite a bit	Extremely	N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) 14. I felt jittery when communicating over Very slightly or not at all letephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) 15. I felt interested when communicating over Very slightly or not at all letephone, text, social networking sites (Face book, MySpace], Skype, instant messenger, instant messenger messenger messenger messenger messenger messenger	DELAYED MODES (letters, care packages, email)	O	0	0	O	0	O
A little Moderately Quite a bit Extremely N/A DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant		C	С	C	C	O
at all A little Moderately Quite a bit Extremely N/A DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	4. I felt jittery wh	en communica	ting over				
Citelephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) ### A little			A little	Moderately	Quite a bit	Extremely	N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) ### A little Moderately Quite a bit Extremely N/A little Moderately Extremely N/A little Moderately Citelephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) #### A little Moderately Quite a bit Extremely N/A little Provided Sites (Relephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) #### A little Moderately Quite a bit Extremely N/A little Moderately Quite a bit Extremely N/A at all Quite a bit Extremely N/A little Moderately Cite A little N/A little Moderately Cite A little N/A li	•	O	0	0	O	O	0
Very slightly or not at all Moderately Quite a bit Extremely N/A DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger with video) 46. I felt irritable when communicating over Very slightly or not at all Moderately Quite a bit Extremely N/A DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES (telephone, text, social	(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant		O	C	0	C	0
At all at all Moderately Quite a bit Extremely NA DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES Cometworking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) Interpolation of the property of the pro	l5. I felt intereste	d when commu	ınicating o	over			
INTERACTIVE MODES O O O O O O O O O O O O O O O O O O O			A little	Moderately	Quite a bit	Extremely	N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 46. I felt irritable when communicating over Very slightly or not at all Moderately Quite a bit Extremely N/A DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES O O O O O O (telephone, text, social		O	O	0	O	0	0
at all A little Moderately Quite a bit Extremely N/A DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant		C	С	О	C	О
at all DELAYED MODES (letters, C C C C C C are packages, email)	l6. I felt irritable v	vhen communi	cating ove	er			
care packages, email) INTERACTIVE MODES C C C C C C (telephone, text, social			A little	Moderately	Quite a bit	Extremely	N/A
(telephone, text, social		O	0	0	O	0	0
MySpace], Skype, instant messenger, instant messenger with video)	(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant		O	C	С	C	О

47. I felt upset wh	en communica	ting over				
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)		0	C	C	C	С
48. I felt ashamed	when community or not	nicating o	ver			
	at all	A little	Moderately	Qutie a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	0	O
49. I felt proud wh	en communica	ating over	•			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	C	C	C	O
50. I felt inspired v	when communi	icating ov	ver er			
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	0	0
			255			

51. I felt scared w	hen communica	ating over				
	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely	N/A
DELAYED MODES (letters, care packages, email)	0	O	0	O	0	O
	0	O O	O O		C	
			256			

17. Relational Maintenance Behavior Measure (RMBM)

Indicate the extent to which each of the following statements accurately reflects the way that you maintained your relationship during your partner's MOST RECENT deployment. Do not indicate agreement with things that you think you should or should not do. That is, think about the everyday things you actually did on the most recent deployment. Remember that much of what you do to maintain your relationship can involve mundane or routine aspects of day-to-day life.

Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

52.	Acted	positively	, with me	when we	were	communicating	over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	О	0	0	0	0	0	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	O	C	0	О	C	0

53. Was upbeat when we were communicating over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	O	0	0	O	0

54. Acted cheerfully with me when we were communicating over

	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	O	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	0	O	0	O	O	0

55. Acted optimisti	cally whe	n he/she	e was con	nmunicat	ing with n	ne over		
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	C	O	O	0	0	O	O
56. Was understand	ding whe	n comm	unicating	with me	over			
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	0	0	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	С	O	C	C	O	C	O	C
57. Was forgiving o	f me whe	n comm	unicating	, with me	over			
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	O	0	0	O	0	0	О
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О	O	O	O	0	0	O	C
58. Apologized who	en he/she	was wr	ona durin	ia commi	ınications	s with m	e over	
,	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	O	0	0	O	O	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	C	©	0	0	0	0	O

	1 Strongly disagree	2	3	4	5	6	7 Strongly	N/A
DELAYED MODES (letters,	disagree	0	0	0	0	0	agree	0
care packages, email)								
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	0	O	O	O	0	0	0	O
0. Talked about h	is/her feaı	s when	communi	cating w	ith me ov	er		
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	O	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	O	O	O	O	O	O	©	0
1. Was open abou	ıt his/her f	eelings	when co	mmunica	ting with	me over		
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	O	С	O	O	O	O	O	C
2. Encouraged me	a to share	my tho	uahte wit	h him/her	when co	mmunic	ating with n	ne ove
zi ziioodiagea iii	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	0	0	O	O	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	0	0	0	0	0	O	0	С

	1 Strongly						7 Strongly	
	disagree	2	3	4	5	6	agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	0	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	C	С	C	С	0	C	C	О
4. Discussed the	quality of	our rela	tionship v	when con	nmunicati	ng with	me over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	O	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	O	O	O	C	0	0	O	O
5. Told me how he	e/she felt	about th	ne relation	nship whe	n commu	nicating	g with me ov	/er
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	0	0	O	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	О	O	O	O	0	O	C	0
6. Has talked abo	ut our rela	ationshi	p when c	ommunic	ating with	me ove	er	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	O	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant nessenger, instant nessenger with video)	C	C	O	C	0	C	O	0

	nicating w	vith me	over					
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	0	O	O	0	0	0	0
8. Talked about o	ur plans f	or the fu	iture whe	n commu	nicating v	vith me	over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	O	0	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	0	O	O	C	O	0
9. Told me how m	uch I mea	nt to hi	m/her who	en commi	unicating	with me	over	
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
	-	0	0	0	•	_	0	
•	0			O	O	O	0	0
DELAYED MODES (letters, care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	O	0	0	© ©	0	0	0
care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	0	0	O	0	0	0	0	
care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	0	0	O	0	0	0	0	
care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	w much I	o meant t	o him/her	o when co	o mmunicat	o ting with	o me over	0
care packages, email) NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) O. Showed me ho	w much I	meant t	o him/her	when co	o mmunicat	ting with	n me over 7 Strongly agree	O N/A
care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) O. Showed me ho DELAYED MODES (letters, care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	w much I of the strongly disagree	meant t	o him/her	when co	o mmunicat 5	ting with	o me over 7 Strongly agree	N/A

	1 Strongly						7 Strongly	
	disagree	2	3	4	5	6	agree	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	0	0	0	0	O
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	O	O	0	С	O	0
2. As best as he/s					med his/h	er hous	ehold	
esponsibilities th	•	nmunica	itions ove	er				
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	0	0	0	0	0
NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	О	O	O	O	O	0	0	0
48 8					with the			
one through com	municatio 1 Strongly disagree	ons over	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	1 Strongly			4				
DELAYED MODES (letters,	1 Strongly disagree	2	3		5	6	agree	N/A
DELAYED MODES (letters, care packages, email) NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	1 Strongly disagree	2 ©	3 ©	0	5 ©	6	agree	N/A
DELAYED MODES (letters, care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	1 Strongly disagree	2 ©	3 ©	0	5 ©	6	agree	N/A
DELAYED MODES (letters, care packages, email) NTERACTIVE MODES telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	1 Strongly disagree C Sher duti 1 Strongly	2 O	3 O O	o o	5 ©	6 •	agree C 7 Strongly	N/A C
DELAYED MODES (letters, care packages, email) NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 24. Did not shirk himself and the second shirk himself and the shirt himself an	1 Strongly disagree C S Sher duti 1 Strongly disagree	2 O O	3 C C mmunica	o tions ove	5 ©	6	agree 7 Strongly agree	N/A

telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger, instant messenger with video) 77. As best as he/she was able due to distance, spent time with our families 1 Strongly disagree 2 3 4 5 6 7 Strongly agree N/A agree N/A agree C C C C C C C C C C C C C C C C C C	'5. As best as he /s		ie due t	o distanc	e, include	ed our frie	ends in o		S
DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C			2	3	4	5	6		N/A
Relephone, text, social retworking sites [Face book, MySpace], Stype, instant nessenger, instant nessenger, with video) 6. As best as he/she was able due to distance, did things with our friends 1 Strongly disagree 2 3 4 5 6 7 Strongly agree 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			0	O	O	O	O		0
1 Strongly disagree 2 3 4 5 6 7 Strongly agree N/A	telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)								0
disagree 2 3 4 5 6 agree N/A processing packages, email) NTERACTIVE MODES (letters, cola) NTERACTIVE MODES C C C C C C C C C The processing packages, email) NTERACTIVE MODES C C C C C C C C C The processing packages, email processi	6. As best as he/s		ole due t	o distanc	e, did thi	ngs with o	our frien		
NTERACTIVE MODES O O O O O O O O O O O O O O O O O O O			2	3	4	5	6		N/A
telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger, instant messenger, instant messenger with video) 77. As best as he/she was able due to distance, spent time with our families 1 Strongly disagree 2 3 4 5 6 7 Strongly agree 2 3 4 5 6 7 Strongly agree 2 3 4 5 6 7 Strongly agree 3 5 Strongly agree 3 5 Strongly sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 88. Asked a family member for help in communications over 1 Strongly disagree 2 3 4 5 6 7 Strongly agree 3 5 Strongly disagree 3 Strongly disagree		0	0	0	0	0	0	O	0
disagree 2 3 4 5 6 agree NNA agree DELAYED MODES (letters, care packages, email) INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C	NTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C	O	O	O	О	0	O	0
disagree 2 3 4 5 6 agree NA Agree DELAYED MODES (letters, Care packages, email) INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C	7. As best as he/s	he was ab	le due t	o distanc	e, spent t	ime with	our fami	lies	
Care packages, email) INTERACTIVE MODES			2	3	4	5	6		N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 78. Asked a family member for help in communications over 1 Strongly disagree 2 3 4 5 6 7 Strongly agree N/A DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C		0	0	0	0	О	O	O	0
1 Strongly disagree 2 3 4 5 6 7 Strongly agree N/A DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (1 C C C C C C C C C C C C C C C C C C	telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	C	O	O	O	О	0	O	O
1 Strongly disagree 2 3 4 5 6 7 Strongly agree N/A DELAYED MODES (letters, C C C C C C C C C C C C C C C C C C C	8. Asked a family	member f	or help i	n commu	nications	over			
care packages, email) INTERACTIVE MODES C C C C C C C C C C C C C C C C C C C		1 Strongly	_				6	0,	N/A
(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	•	0	0	0	0	0	0	0	0
	(telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	0	©	O	O	0	0	O	0
					63				

79. As best as he/s	he was ab	le due t	o distanc	e, turned	to a fami	ly memb	er for advic	e in
communications o	ver							
	1 Strongly disagree	2	3	4	5	6	7 Strongly agree	N/A
DELAYED MODES (letters, care packages, email)	О	0	0	0	0	0	0	0
			O O	©				©
			2	64				

18. Dyadic Sexual Communication Scale

Indicate the extent to which each of the following statements accurately reflects the way that you sexually communicated with your partner during your partner's MOST RECENT DEPLOYMENT. Please provide a response for delayed modes (letters, care packages, email) and/or interactive modes (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video), if one is not applicable, select N/A.

80. My partner rarely responded when I wanted to talk about our sex life when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	O	0	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	O	О	0	O	0	О

81. Some sexual matters were too upsetting to discuss with my sexual partner when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	O	O	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	О	0	0	O	О	0

82. There were sexual issues or problems in our sexual relationship that we never discussed when communicating over

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	O	O	0	0	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	0	0	0	0	C	O

	ng over						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	O	0	0	0	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C	С	С	С	С	C	0
84. Whenever my pa	rtner and I	talked al	oout sex, I	feel like sh	ne or he w	as lecturing ı	me
when communicati	ng over						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	0	0	O	O	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	С	O	O	O	C	C	O
85. My partner ofter	n complaine	ed that I a	ım not verv	clear abo	ut what I v	vant sexuall\	/ whei
85. My partner ofter communicating ove	Disagree	ed that I a	ım not very	clear abo	ut what I v	want sexually Agree strongly	/ whe i N/A
	er	ed that I a	nm not very	clear abo	ut what I v		
communicating ove	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	Disagree strongly	0	0	0	0	Agree strongly	N/A C
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 86. My partner and I	Disagree strongly C	0	0	0	0	Agree strongly	N/A C
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 86. My partner and I	Disagree strongly C	0	0	0	0	Agree strongly	N/A
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	Disagree strongly C have never	0	0	0	0	Agree strongly C	N/A O O
DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video) 86. My partner and I communicating over	Disagree strongly C have never bisagree strongly	o o er had a ho	o o	o o rt talk abo	o o ut our sex	Agree strongly C C Agree strongly	N/A C C N/A

	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	O	О	0
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	0	0	C	С	0
88. Even when angr	y with me,	my partne	er was ablo	e to appred	ciate my v	iews on sexu	ality
when communicati	ng over						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	0	0	O	O	O	О	O
INTERACTIVE MODES (telephone, text, social	0	0	0	0	О	O	0
networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)							
MySpace], Skype, instant messenger, instant		atisfying e	experience	e for both o	of us wher	ı communica	ting
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about se	Disagree strongly	atisfying e	experience	e for both o	of us wher	a communica t	ting N/A
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about se	Disagree	atisfying e	experience	e for both o	of us wher		
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about sectors DELAYED MODES (letters,	Disagree strongly					Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about sectors DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	Disagree strongly	0	0	0	0	Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about sectors DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant	Disagree strongly	0	0	0	0	Agree strongly	N/A
MySpace], Skype, instant messenger, instant messenger with video) 89. Talking about sectors DELAYED MODES (letters, care packages, email) INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	Disagree strongly C S usually ta Disagree	0	0	0	0	Agree strongly C	N/A O O

91. I had little difficu	ulty in tellir	ng my par	tner what I	do or don'	t do sexu	ally when	
communicating ove	er						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	O	O	0	0	O	О
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	O	С	O	С	О	O	O
92. I seldom felt em		when talk	king about	the details	of our se	x life with my	partner
when communication	_						
	Disagree strongly					Agree strongly	N/A
DELAYED MODES (letters, care packages, email)	O	0	0	0	0	O	O
INTERACTIVE MODES (telephone, text, social networking sites [Face book, MySpace], Skype, instant messenger, instant messenger with video)	C	0	6	©	•		$oldsymbol{\circ}$
			268				

19. Relationship Continuity Constructional Units

Below are questions regarding the amount of time spent doing a behavior before, during and post-deployment.

93. How often did you perform this behavior prior to absence (pre-deployment)?

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Tell your partner what you will be doing during the time you are apart	0	0	0	0	0	0	0	0	0	0	0	O
Tell your partner when you expect to return home	O	O	0	0	0	0	O	O	O	O	0	O
Tell your partner goodbye	0	0	0	0	0	0	0	0	0	0	0	0
Kiss your partner good bye	0	0	0	0	0	0	0	0	0	0	0	0
Tell your partner you love them	O	0	0	0	0	0	0	0	0	0	0	0
Make plans to do something with your partner once you are back together	O	0	O	O	O	O	0	0	0	0	O	0
Attempt to spend time together before you have to be apart	0	0	0	0	0	0	0	0	0	0	0	0

94. How often did you perform this behavior during the absence (deployment)?

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Telephone them when you are apart	0	0	0	0	0	0	0	0	0	0	0	O
Leave a message for them on the answering machine	0	0	0	0	0	0	0	0	0	0	0	0
E-mail them when you are apart	0	0	0	0	0	0	0	0	0	0	0	0
Leave notes for them	0	0	0	0	0	0	0	0	0	0	0	0
Wear something which reminds you of your partner, for example, jewelry or clothing	0	0	0	0	0	0	0	0	0	0	O	0
Bring your partners name into the conversation when you are talking to others	0	0	0	0	0	0	O	0	0	0	0	O
Buy your partner flowers	0	0	0	0	0	0	0	0	0	0	0	0
Buy your partner a gift	0	0	0	0	0	0	0	0	0	0	0	0
Do something nice for your partner while they are gone	0	0	0	0	0	0	0	0	0	0	O	O
Meet them for lunch	0	0	0	0	0	0	0	0	0	0	0	0
Display pictures of your partner	0	0	0	0	0	0	0	0	0	0	0	0

95. How often did you perform this behavior post-absence (post-deployment)?												
	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	N/A
Greet your partner (say hi)	0	\odot	0	0	\odot	0	0	\odot	0	0	0	\odot
Kiss and/or hug your partner hello	0	0	0	0	0	0	0	0	0	0	O	0
Ask how their day went	0	0	0	0	0	0	0	0	0	0	0	0
Discuss how your day went	0	0	0	0	0	0	0	0	0	0	0	0

20. Combat Experiences (1 of 2)

The statements below are about combat experiences during your partner's MOST RECENT deployment. As used in these statements, the term "unit" refers to those your partner lived and worked with on a daily basis during deployment. Please answer each question as BEST DESCRIBES YOUR UNDERSTANDING OF YOUR PARTNER'S EXPERIENCE.

96. While deployed...

	1 = Never	2 = Once or twice	3 = Several times over the entire deployment	4 = A few times each month	5 = A few times each week	6 = Daily or almost daily
1Your partner went on combat patrols or missions.	О	O	O	0	0	O
2Your partner took part in an assault on entrenched or fortified positions that involved naval and/or land forces.	O	O	О	0	O	С
3Your partner personally witnessed someone from their unit or an ally unit being seriously wounded or killed.	С	С	С	О	О	О
4Your partner encountered land or water mines, bobby traps, or roadside bombs (for example, IEDs)	O	O	О	O	O	О
5Your partner was exposed to hostile incoming fire.	0	O	0	O	0	0
6Your partner was exposed to "friendly" incoming fire	O	O	O	O	O	0
7Your partner was in a vehicle (for example, a humvee", helicopter, or boat) or part of a convoy that was attacked.	©	0	•	O	0	•
8Your partner was part of a land or naval artillery unit that fired on enemy combatants	0	0	0	0	0	0
9Your partner personally witenessed enemy combatants being seriously wounded or killed	O	О	0	О	O	0

21. Combat Experiences (2 of 2)

The statements below are about combat experiences during your partner's MOST RECENT deployment. As used in these statements, the term "unit" refers to those your partner lived and worked with on a daily basis during deployment. Please answer each question as BEST DESCRIBES YOUR UNDERSTANDING OF YOUR PARTNER'S EXPERIENCE.

97. While deployed...

	1 = Never	2 = Once or twice	3 = Several times over the entire deployment	4 = A few times each month	5 = A few times each week	6 = Daily or almost daily
10Your partner personally witnessed civilians (for example, women and children) being seriously wounded or killed.	O	С	C	C	С	С
11Your partner was injured in a combat-related incident	0	O	0	0	O	0
12Your partner fired their weapon at enemy combatants	0	0	0	О	O	0
13Your partner thinks they wounded or killed someone during combat operations	0	O	О	0	O	O
14Your partner was involved in locating or disarming explosive devices.	0	0	O	О	О	0
15Your partner was involved in searching or clearing homes, buildings, or other locations	C	O	О	O	O	C
16Your partner participated in hand-to-hand combat.	0	O	0	0	O	O
17Your partner was involved in searching and/or disarming potential enemy combatants	C	O	О	O	O	0

22. PCL-5 (1 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much YOU THINK YOUR PARTNER has been bothered by that problem in the past month.

98. In the past month, how much do you think your partner has been bothered by..

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
Repeated, disturbing, and unwanted memories of the stressful experience?	0	0	0	0	0
2. Repeated, disturbing dreams of the stressful experience?	О	О	O	О	O
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	С	С	С	С	С
4. Feeling very upset when something reminded you of the stressful experience?	0	0	0	0	0
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	O	C	C	C	C
6. Avoiding internal reminders of the stressful experience (for example, thoughts, feelings, or physical sensations)?	0	0	O	O	0
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, objects, activities, or situations)?	0	0	O	0	0

23. PCL-5 (2 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much YOU THINK YOUR PARTNER has been bothered by that problem in the past month.

99. In the past month, how much do you think your partner has been bothered by..

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
8. Trouble remembering important parts of the stressful experience?	0	0	О	О	О
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	C	O	0	0	0
10. Blaming yourself or someone else strongly for the stressful experience or what happened after it?	О	О	О	О	О
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	O	0	0	0
12. Loss of interest in activities that you used to enjoy?	O	0	0	O	O
13. Feeling distant or cut off from other people?	0	O	O	O	O
14. Having trouble experiencing positive feelings (for example, being unable to have loving feelings for those close to you, or feeling emotionally numb)?	С	0	0	О	0

24. PCL-5 (3 of 3)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much YOU THINK YOUR PARTNER has been bothered by that problem in the past month.

100. In the past month, how much do you think your partner has been bothered by..

	0 Not at all	1 A little bit	2 Moderately	3 Quite a bit	4 Extremely
15. Feeling irritable or angry or acting aggressively?	О	О	О	О	О
16. Taking too many risks or doing things that cause you harm?	0	O	O	0	O
17. Being "super alert" or watchful or on guard?	O	0	O	O	0
18. Feeling jumpy or easily startled?	O	0	O	O	0
19. Having difficulty concentrating?	O	0	O	O	0
20. Trouble falling or staying asleep?	O	0	O	O	O

101. Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all (0)	Several Days (1)	More than half the days (2)	Nearly every day (3)
Little interest or pleasure in doing things	O	O	O	0
2. Feeling down, depressed, or hopeless	O	O	O	O
3. Trouble falling or staying asleep, or sleeping too much	О	O	O	О
Feeling tired or having little energy	O	0	O	O
5. Poor appetite or overeating	O	0	0	O
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	O	O	0	О
7. Trouble concentrating on things, such as reading the newspaper or watching television	C	O	C	С
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	O	O	0	C
9. Thoughts that you would be better off dead of or hurting yourself in some way	0	O	0	O

26. Impact of Event Scale - Revised (IES-R) (1 of 2)

Below is a list of difficulties people sometimes have after stressful life events (deployment separation). Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the MOST RECENT deployment. How much were you distressed or bothered by these difficulties?

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Any reminder brought back feelings about it.	О	O	O	0	0
2. I had trouble staying asleep.	O	O	O	O	O
3. Other things kept making me think about it.	O	O	0	O	0
4. I felt irritable and angry.	O	0	O	0	O
5. I avoided letting myself get upset when I thought about it or was reminded of it.	О	О	O	О	О
6. I thought about it when I didn't mean to.	O	O	O	0	O
7. I felt as if it hadn't happened or wasn't real	O	O	0	O	0
8. I stayed away from reminders of it.	0	O	0	O	O
9. Pictures about it popped into my mind.	O	О	О	O	O
10. I was jumpy and easily startled.	O	O	O	O	O
11. I tried not to think about it.	O	O	О	O	O
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	©	O	O	0	0

27. Impact of Event Scale - Revised (IES-R) (2 of 2)

Below is a list of difficulties people sometimes have after stressful life events (deployment separation). Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the MOST RECENT deployment. How much were you distressed or bothered by these difficulties?

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
13. My feelings about it were kind of numb.	0	0	O	0	0
14. I found myself acting or feeling like I was back at that time.	О	O	O	0	0
15. I had trouble falling asleep.	O	0	O	0	0
16. I had waves of strong feelings about it.	O	0	O	O	O
17. I tried to remove it from my memory.	O	0	O	0	0
18. I had trouble concentrating.	O	0	O	O	O
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	О	О	O	О	О
20. I had dreams about it.	0	0	0	0	0
21. I felt watchful and onguard.	O	0	0	0	O
22. I tried not to talk about it	O	0	O	O	0

28. Self-Report Family Inventory: Version II (1 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR PARTNER'S MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
Family members pay attention to each others feelings	С	O	O	0	О
Our family would rather do things together than with other people.	O	O	O	O	O
3. We all have a say in family plans	0	0	O	0	O
The grownups in this family understand and agree on family decisions	O	O	0	O	О
5. The grownups in the family compete and fight with each other	O	O	О	0	O
6. There is closeness in my family but each person is allowed to be special and different	O	O	C	O	О
7. We accept each others fiends	0	0	O	O	O
8. There is confusion in our family because there is no leader	O	O	O	O	О
9. Our family members touch and hug each other	0	0	O	0	0
10. Family members put each other down	0	0	O	O	0
11. We speak our minds, no matter what	0	0	O	0	0
12. In our home, we feel loved	O	0	O	0	O

29. Self-Report Family Inventory: Version II (2 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR PARTNER'S MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
13. Even when we feel close, our family is embarrassed to admit it	С	O	С	O	C
14. We argue a lot and never solve problems	0	O	O	0	O
15. Our happiest times are at home	O	O	O	0	O
16. The grownups in this family are strong leaders	O	O	O	0	O
17. The future looks good to our family	O	O	O	0	O
18. We usually blame one person in our family when things aren't going right	О	O	O	O	O
19. Family members go their own way most of the time	С	O	С	O	C
20. Our family is proud of being close	O	O	O	O	O
21. Our family is good at solving problems together	O	O	O	0	O
22. Family members easily express warmth and caring towards each other	O	O	C	O	C
23. Its okay to fight and yell in our family	O	O	O	0	O
24. One of the adults in this family has a favorite child	• •	O	0	O	O

30. Self-Report Family Inventory: Version II (3 of 3)

For each question, mark the answer that best fits how you see your family AFTER YOUR PARTNER'S MOST RECENT DEPLOYMENT. If you feel that your answer is between two of the labels numbers (the odd numbers) then choose the even number that is between them.

106. .

	1 Yes: Fits our family very well	2	3 Some: Fits our family some	4	5 No: Does not fit our family
25. When things go wrong we blame each other	0	0	O	0	0
26. We say what we think and feel	0	O	O	0	0
27. Our family members would rather do things with other people than together	О	0	O	O	О
28. Family members pay attention to each other and listen to what is said	C	O	O	O	O
29. We worry about hurting each other's feelings	0	0	O	0	0
30. The mood in my family is usually sad and blue	0	0	O	0	0
31. We argue a lot	O	0	O	0	O
32. One person controls and leads our family	0	O	O	0	0
33. My family is happy most of the time	0	0	O	0	0
34. Each person takes responsibility for his/her behavior.	O	O	O	O	O

107. On a scale of 1 to 5, I would rate my family as:

My family functions very well				My family does not function
together				well together at all.
C	0	O	О	O

108. On a scale of 1 to 5, I would rate the independence in my family as:

No one is independent.		Somtimes independent.		Family members usually as
There are no open		There are some		Family members usually go
arguments. Family members		disagreements. Family		their own way.
rely on each other for		members find satisfaction		Disagreements are open. Family members look outside
satisfaction rather than on	action rather than on both within and outside the			the family for satisfaction
outsiders		family.		the family for satisfaction
0	O	O	0	O

31. Global Measure of Sexual Satisfaction 109. Overall, how would you describe your sexual relationship with your partner? Very Bad Very Good 1. 110. Overall, how would you describe your sexual relationship with your partner? Very Unpleasant Very Pleasant 0 0 0 2. 0 0 0 111. Overall, how would you describe your sexual relationship with your partner? Very Negative Very Positive 0 0 3. 0 112. Overall, how would you describe your sexual relationship with your partner? Very Very Satisfying Unsatisfying 0 0 0 0 4. 113. Overall, how would you describe your sexual relationship with your partner? Worthless Very Valuable 0 0 0 0 5. 282

32. THANK YOU

You may forward the link to your partner or provide an email address in the next question so that it may be emailed to him/her.

https://www.surveymonkey.com/s/NVHKV67

*114. Please provide your name and your partner's name so that I can match them in the data set.

*115. Please provide an email address so that the link may be forwarded to your partner.

I am extremely grateful for completion of this survey and although data will be combined for analysis there will not be anything shared with their partner in the process, their responses will be maintained and reported without identifiers so nothing could be linked back to them individually.

To compensate you for your time I have included one hundred different prizes which will be drawn at random.

The prizes are listed below:

• one hundred \$20.00 Wal-Mart gift cards

If you are interested in being included in this random drawing, <u>click here</u>. You will be directed to a separate web page to provide contact information. If you choose to provide your contact information it will not be linked to your answers in any way. If you are not interested in providing your contact information click Done.

If at any time during this survey you feel distressed and would like to talk with someone at the National Suicide Prevention Hotline <u>click here</u> or call 1-800-273-8255 (Veterans press 1).

If at any time you feel like you need to query for a mental health provider in your local area <u>click here</u>.

Appendix F

Assessment Instruments

Experiences in Close Relationships Inventory Brennan, Clark, & Shaver (1998)

1

Disagree

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

4

Neutral/

5

6

3

7

Agree

	Strongly	Mixed	Strongly
1.	prefer not to show a partner how	I feel deep down.	
	worry about being abandoned.		
	am very comfortable being close	to romantic partners.	
	worry a lot about my relationships		
	Just when my partner starts to get		pulling away.
	worry that romantic partners won'		
	get uncomfortable when a romant		
	worry a fair amount about losing r		,
9. I	don't feel comfortable opening up	to romantic partners.	
10.	I often wish that my partner's feel	ings for me were as stron	g as my feelings for him/her.
11.	I want to get close to my partner,	but I keep pulling back.	
12.	I often want to merge completely	with romantic partners, a	nd this sometimes scares them away.
13.	I am nervous when partners get to	oo close to me.	•
14	I worry about being alone		
15.	I feel comfortable sharing my priv	ate thoughts and feelings	s with my partner.
16.	My desire to be very close someti	imes scares peoble away	'.
17.	I try to avoid getting too close to r	nv partner.	
18.	I need a lot of reassurance that I	am loved by my partner.	
19.	I find it relatively easy to get close	e to my partner.	
20.	Sometimes I feel that I force my p I find it difficult to allow myself to	partners to show more fee	eling, more commitment.
21.	I find it difficult to allow myself to	depend on romantic partr	ners.
	I do not often worry about being a		
	I prefer not to be too close to rom		
	If I can't get my partner to show in		or angry.
	I tell my partner just about everyth		
	I find that my partner(s) don't wan		
	I usually discuss my problems an		
	When I'm not involved in a relatio		nxious and insecure.
	I feel comfortable depending on re		
	I get frustrated when my partner i		
31.	I don't mind asking romantic partr	ners for comfort, advice, o	or nelp.
32.	I get frustrated if romantic partner	s are not available when	I need them.
33.	It helps to turn to my romantic par	rtner in times of need.	l als acceptance alf
	When romantic partners disappro		
	I turn to my partner for many thing		reassurance.
ან.	I resent it when my partner spend	is uitle away from me.	

Dyadic Adjustment Scale (DAS)

Most persons have disagreements with their relationships. Please indicate below the appropriate extent of the agreement or disagreement between you and your partner for each item on the following list.

5 = Always agree 4 = Almost always agree 3 = Occasionally disagree 2 = Frequently disagree 1 = Almost always disagree 0 = Always disagree

- 1. Handling of family finances
- 2. Matters of recreation
- 3. Religious matters
- 4. Demonstration of affection
- 5. Friends
- 6. Sex relations
- 7. Conventionality (correct or proper behavior)
- 8. Philosophy of life
- 9. Ways of dealing with in-laws
- 10. Aims, goals, and things believed important
- 11. Amount of time spent together
- 12. Making major decisions
- 13. Household tasks
- 14. Leisure times interests
- 15. Career decisions

Please indicate below approximately how often the following items occur between you and your partner

1 = All the time 2 = Most of the time 3 = More often than not 4 = Occasionally 5 = Rarely 6 = Never

- 16. How often do you discuss or have you considered divorce, separation, or termination of the relationship?
- 17. How often do you or your mate leave the house after a fight?
- 18. In general, how often do you think things between you and your partner are going well?
- 19. Do you confide in your mate?
- 20. Do you ever regret that you married? (or lived together)
- 21. How often do you and your partner quarrel?
- 22. How often do you and your mate "get on each other's nerves"?

23. Do you kiss your mate?

Every day Almost every day Occasionally Rarely Never 4 3 2 1 0

24. Do you and your mate engage in outside interests together?

All of them Most of them Some of them Very few of them None of them 4 3 2 1 0

How often would you say the following events occur between you and your mate?

1 = Never	
2 = Less than once	a month
3 = Once or twice a	month
4 = Once a da	ay
5 = More ofte	n

- 25. Have a stimulating exchange of ideas
- 26. Laugh together
- 27. Calmly discuss something
- 28. Work together on a project

There are some things about which couples sometimes argue and sometimes disagree. Indicate if either item below caused differences of opinions or problems in your relationship during the past few weeks (Circle year or no)

- 29. Being too tired for sex Yes No
- 30. Not showing love Yes No
- 31. The numbers on the following line represent different degrees of happiness in your relationship. The middle point, "happy" represents the degree of happiness of most relationships. Please circle the number that best describes the degree of happiness, all things considered, of your relationship.

2 0 3 4 5 6 Extremely Fairly A little Нарру Very Extremely Perfect unhappy unhappy unhappy happy happy

- 32. Please circle the number of one of the following statements that best describes how you feel about the future of your relationship.
- 5 = I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- 4 = I want desperately for my relationship to succeed, and will do all that I can to see that it does.
- 3 = I want desperately for my relationship to succeed, and will do my fair share to see that is does
- 2 = It would be nice if my relationship succeeded, but *I can't do much more than I am doing now* to make it succeed.
- 1 = It would be nice if it succeeded, but *I refuse to do any more than I am doing now* to keep the relationship going.
- 0 = My relationship can never, succeed, and there is no more that I am do to keep the relationship going.

PANAS Questionnaire

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you feel this way right now, that is, at the present moment *OR* indicate the extent you have felt this way over the past week (circle the instructions you followed when taking this measure)

1	2	3	4	5
Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
· · · · · · · · · · · · · · · · · · ·	erested		_11. Irritable	
2. Dis	tressed		_12. alert	
3. I	Excited		_13. Ashamed	
4. l	Jpset		_14. Inspired	
	Strong		15. Nervous	
	Guilty		16. Determined	
	Scared		17. Attentive	
	Hostile		18. Jittery	
	thusiastic		19. Active	
	Proud		20. Afraid	

Relational Maintenance Behavior Measure (RMBM)

Indicate the extent to which each of the following statements accurately reflects the way that you maintain your relationship. Do not indicate agreement with things that you think you should do, or with things you did at one time but no longer do. That is, think about the everyday things you actually do in your relationship right now. Remember that much of what you do to maintain your relationship can involve mundane or routine aspects of day-to-day life.

Respondents were instructed to respond to these items using a Likert scale where 1 = strongly disagree and 7 = strongly agree.

1. Acts positively with me.	
2. Is upbeat when we are together.	
3. Acts cheerfully with me.	
4. Acts optimistically when he/she is with me.	
5. Is understanding.	
6. Is forgiving of me. 7. Apologizes when he/she is wrong.	
8. Does not judge me.	
9. Talks about his/her fears.	
10. Is open about his/her feelings.	
11. Encourages me to share my thoughts with	
him/her.	
12. Encourages me to share my feelings with	
him/her.	
13. Discusses the quality of our relationship.	
14. Tells me how he/she feels about the	
relationship.	
15. Has talks about our relationship. 16. Talks about the future events (e.g., having	
children, or anniversaries, or retirement, etc.)	
17. Talks about our plans for the future.	
18. Tells me how much I mean to him/her.	
19. Shows me how much I mean to him/her.	
20. Shares in the joint responsibilities that face us.	
21. Performs his/her household responsibilities.	
22. Helps with the tasks that need to be done.	
23. Does not shirk his/her duties.	
24. Includes our friends in our activities.	
25. Does things with our friends.	
26. Spends time with our families.	
27. Asks a family member for help. 28. Turn to a family member for advice.	

Dyadic Sexual Communication Scale

The following are a list of statements different people have made about discussing sex with their primary partner. For each statement fill in the response on the answer sheet that indicates how much you agree or disagree with that statement as it applies to you.

	Disagree strongly					Agree strongly
My partner rarely responds	1	2	3	4	5	6
when I want to talk about our sex life.						
2. Some sexual matters are too upsetting to discuss with my sexual partner.	1	2	3	4	5	6
3. There are sexual issues or problems in our sexual relationship that we have never discussed.	1	2	3	4	5	6
4. My partner and I never seem to resolve our disagreements about sexual matters.	1	2	3	4	5	6
5. Whenever my partner and I talk about sex, I feel like she or he is lecturing me.	1	2	3	4	5	6
6. My partner often complains that I am not very clear about what I want sexually.	1	2	3	4	5	6
7. My partner and I have never had a heart to heart talk about our sex life together.	1	2	3	4	5	6
8. My partner has no difficulty in talking to me about his or her sexual feelings and desires.	1	2	3	4	5	6
9. Even when angry with me, my partner is able to appreciate my views on sexuality.	1	2	3	4	5	6
10. Talking about sex is a satisfying experience for both of us.	1	2	3	4	5	6
11. My partner and I can usually talk calmly about our sex life.	1	2	3	4	5	6
12. I have little difficulty in telling my partner what I do or don't do sexually.	1	2	3	4	5	6
13. I seldom feel embarrassed when talking about the details of our sex life with my partner.	1	2	3	4	5	6

Relationship Continuity Constructional Units (RCCU)

How often did you perform this behavior prior to absence (pre-deployment)?

re apart. cartner wartner goartner goartner yoartner yoartner yoartner yoartner yoartner yoartner back	hen you e bodbye bod bye bu love the omething	expect to re	g during th						
อยุธแน แ			partner you have	to		_			
	perform th	nis behavio	or during t	the absen	ce (deploy	ment)?	80%	90%	100%
m when es for the ething w example partner are talkin artner fle artner a ing nice	for them on you are appeared by the period of the period o	oart nds you of or clothin to the con rs partner wh	your g oversation						
did you	perform th	is behavions		sence (po	ost-deployr	ment)?	80%	90%	100%
	them when the story the example of t	them when you a essage for them on when you are apes for them ething which remire example, jewelry partners name in are talking to other artner flowers artner a gift ing nice for your performation of your partners of your partn	them when you are apart essage for them on the answer when you are apart es for them on the answer when you are apart es for them ething which reminds you of example, jewelry or clothing partners name into the contact at a gift artner flowers artner a gift artner where the for lunch etures of your partner where the did you perform this behavior	them when you are apart essage for them on the answering m when you are apart es for them on the answering ething which reminds you of your example, jewelry or clothing partners name into the conversation are talking to others artner flowers artner a gift ing nice for your partner while they are for lunch etures of your partner did you perform this behavior post-ab	them when you are apart essage for them on the answering mething which reminds you of your example, jewelry or clothing partners name into the conversation are talking to others artner flowers artner a gift ing nice for your partner while they are for lunch etures of your partner did you perform this behavior post-absence (post-absence (post-absence)	them when you are apart essage for them on the answering m when you are apart es for them ething which reminds you of your example, jewelry or clothing partners name into the conversation are talking to others artner flowers artner a gift ing nice for your partner while they are for lunch etures of your partner this behavior post-absence (post-deployed)	them when you are apart essage for them on the answering m when you are apart es for them ething which reminds you of your r example, jewelry or clothing partners name into the conversation are talking to others artner flowers artner a gift ing nice for your partner while they are for lunch etures of your partner did you perform this behavior post-absence (post-deployment)?	them when you are apart essage for them on the answering	them when you are apart essage for them on the answering m when you are apart es for them ething which reminds you of your rexample, jewelry or clothing a partners name into the conversation are talking to others artner flowers artner a gift ing nice for your partner while they are for lunch etures of your partner did you perform this behavior post-absence (post-deployment)?

DRRI-2

SECTION D: COMBAT EXPERIENCES
The statements below are about your combat experiences during your most recent deployment. As used in these statements, the term "unit" refers to those you lived and worked with on a daily basis during deployment. Please mark how often you experienced each circumstance.

While douboard	Never	Once or twice	Several times over entire deployment	A few times each month	A few times each week	Daily or almost daily
While deployed 1I went on combat patrols or missions.	1	2	3	4	5	6
 I took part in an assault on entrenched or fortified positions that involved naval and/or land forces. 	1	2 - 1 10 - 2 - 1	3	4	5	6
 I personally witnessed someone from my unit or an ally unit being seriously wounded or killed. 	1	2	3	4	5	6
 I encountered land or water mines, booby traps, or roadside bombs (for example, IEDs). 	1 1 a	2-	3 3	4	Albaniani Singa 5 tan	6
5I was exposed to hostile incoming fire.	1	2	3	4	5	6
5l was exposed to "friendly" incoming fire.	:1	2	3	4	5	- 6
 I was in a vehicle (for example, a "humvee", helicopter, or boat) or part of a convoy that was attacked. 	1	2	3	4	5	6
R I was part of a land or naval artillery unit that fired on enemy combatants.	- 1	2	3	4	. 5	- 6
 I personally witnessed enemy combatants being seriously wounded or killed. 	1	2	3	4	5	6
in I personally witnessed civilians (for example, women and children) being seriously wounded or killed.	1	2		10 1 10 10 10 10 10 10 10 10 10 10 10 10	1 6 5 6 1 5 6 1 6 6 5	6
11 I was injured in a combat-related incident.	1	2	3	4	5	6
2,I fired my weapon at enemy combatants.	-1	2	3	4	50 75 5 7 7 7	6
 I think I wounded or killed someone during combat operations. 	1	2	3	. 4	5	6
4 I was involved in locating or disarming explosive devices.		2	14 mm 3 mm 2	4	5	6
 I was involved in searching or clearing homes, buildings, or other locations. 	1	2	3	4	5	6

SULUL daulawad	Never	Once or twice	Several times over entire deployment	A few times each month	A few times each week	Daily or almost daily
Vhile deployed 6l participated in hand-to-hand	1	2	3	4	- 5	- 6
combat. 7I was involved in searching and/or disarming potential enemy combatants.	1	2	3	4	5	6
•						

PCL-5

<u>Instructions</u>: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem <u>in the past month</u>.

The e	vent you experienced was		on			
	(event)		((date)		
In t	the past month, how much were you bothered by:	Not at all	A little bit	Modera tely	Quite a bit	Extremely
1.	Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2.	Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3.	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4.	Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5.	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6.	Avoiding internal reminders of the stressful experience (for example, thoughts, feelings, or physical sensations)?	0	1	2	3	4
7.	Avoiding external reminders of the stressful experience (for example, people, places, conversations, objects, activities, or situations)?	0	1	2	3	4
8.	Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9.	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10.	Blaming yourself or someone else strongly for the stressful experience or what happened after it?	0	1	2	3	4
11.	Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12.		0	1	2	3	4
13.	Feeling distant or cut off from other people?	0	1	2	3	4
	Having trouble experiencing positive feelings (for example, being unable to have loving feelings for those close to you, or feeling emotionally numb)?	0	1	2	3	4
15.		0	1	2	3	4
16.	Taking too many risks or doing things that cause you harm?	0	1	2	3	4
17.	Being "superalert" or watchful or on guard?	0	1	2	3	4
18.		0	1	2	3	4
19.		0	1	2	3	4
20.	Trouble falling or staying asleep?	0	1	2	3	4

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the <u>last 2 weeks</u> , how by any of the following pro (Use "\sup" to indicate your ans	often have you been bothered blems? swer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in	n doing things	0	1	2	3
2. Feeling down, depressed,	or hopeless	0	1	2	3
3. Trouble falling or staying a	sleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little	e energy	0	1	2	3
5. Poor appetite or overeatin	9	0	1	2	3
6. Feeling bad about yoursel have let yourself or your fa	f — or that you are a failure or amily down	0	1	2	3
7. Trouble concentrating on newspaper or watching te	things, such as reading the levision	0	1	2	3
noticed? Or the opposite	wly that other people could have — being so fidgety or restless g around a lot more than usual	0	1	2	3
Thoughts that you would by yourself in some way	oe better off dead or of hurting	0	1	2	3
	For office con	NG <u>0</u>	+	÷	+
				=Total Score	e:
If you checked off any pro	blems, how <u>difficult</u> have these It home, or get along with other	problems r	nade it fo	r you to do	your
Not difficult at all	Somewhat	Very difficult □		Extrem difficu	

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.

The Impact of Events Scale -- Revised

INSTRUCTIONS: Below is a list	st of difficulties people sometimes have after stressful life events. Please
read each item, and then indica	ate how distressing each difficulty has been for you DURING THE PAST
SEVEN DAYS with respect to	, which occurred on
	How much were you distressed or bothered by these difficulties?

	Not at	A little	Moderatel	Quite a	Extremel
	all	bit	у	bit	у
1. Any reminder brought back feelings about it.	0	1	2	3	4
2. I had trouble staying asleep.	0	1	2	3	4
3. Other things kept making me think about it.	0	1	2	3	4
4. I felt irritable and angry.	0	1	2	3	4
5. I avoided letting myself get upset when I thought about it or was reminded of it.	0	1	2	3	4
6. I thought about it when I didn't mean to.	0	1	2	3	4
7. I felt as if it hadn't happened or wasn't real	0	1	2	3	4
8. I stayed away from reminders of it.	0	1	2	3	4
9. Pictures about it popped into my mind.	0	1	2	3	4
10. I was jumpy and easily startled.	0	1	2	3	4
11. I tried not to think about it.	0	1	2	3	4
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	2	3	4
13. My feelings about it were kind of numb.	0	1	2	3	4
14. I found myself acting or feeling like I was back at that time.	0	1	2	3	4
15. I had trouble falling asleep.	0	1	2	3	4
16. I had waves of strong feelings about it.	0	1	2	3	4
17. I tried to remove it from my memory.	0	1	2	3	4
18. I had trouble concentrating.	0	1	2	3	4
19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.	0	1	2	3	4
20. I had dreams about it.	0	1	2	3	4
21. I felt watchful and on-guard.	0	1	2	3	4
22. I tried not to talk about it	0	1	2	3	4

NAME			DATE				
FILE#	CHECK ONE:	FATHER	REHTOW	son _	DAUGHTER	AGE	

SELF-REPORT FAMILY INVENTORY: VERSION II

For each question, mark the answer that best fits how you see your family now. If you feel that your answer is between two of the labeled numbers (the odd numbers), then choose the even number that is between them.

	,	YES: Fits our family very well	Fits ou	ME: or family me	Does	IO: s not fit family
1.	Family members pay attention to each other's feelings.	1	2	3	4	5
2.	Our family would rather do things together than with other people.	1	2	3	4	5
3.	We all have a say in family plans.	1	2	3	4	5
4.	The grownups in this family understand and agree on family decisions.	1	2	3	4	5
5.	Grownups in the family compete and fight with each other.	1	2	3	4	5
6.	There is closeness in my family but each person is allowed to be special and different.	1	2	3	4	5
7.	We accept each other's friends.	1	2	3	4	5
8.	There is confusion in our family because there is no leader.	1	2	3	4	5
9.	Our family members touch and hug each other.	1	2	3	4	5
10.	Family members put each other down.	1	2	3	4	5
11.	We speak our minds, no matter what.	1	2	3	4	5
12.	In our home, we feel loved.	1	2	3	4	5
13.	Even when we feel close, our family is embarrassed to admit it.	1	2	3	4	5

		YES: Fits our family very well	SOME: Fits our family some		NO: Does not fit our family
14.	We argue a lot and never solve problems.	1 :	2 .3	4	5
15.	Our happiest times are at home.	1	2 3	4	5
16.	The grownups in this family are strong leaders.	1	2 3	4	5
17.	The future looks good to our family.	†	2 3	4	5
18.	We usually blame one person in our family when things aren't going right.	1	2 3	4	5
19.	Family members go their own way most of the time.	1	2 3	4	5
20.	Our family is proud of being close.	1	2 3	4	5
21.	Our family is good at solving problems together.	1	2 3	4	5
22.	Family members easily express warmth and caring towards each other.	1	2 3	4	5
23.	It's okay to fight and yell in our family.	i	2 3	4	5
24.	One of the adults in this family has a favorite child.	1	2 3	4	5
25.	When things go wrong we blame each other.	1	2 3	4	5
26.	We say what we think and feel.	1	2 3	4	5
27.	Our family members would rather do things with other people than together.	1	2 3	4	5
28.	Family members pay attention to each other and listen to what is said.	1	2 3	4	5

		YES: SOM Fits our family very well Fits our f		family	mily Does not lit	
29.	We worry about hurling each other's feelings.	1	2 3		5	
30.	The mood in my family is usually sad and blue.	1	2 3	ı 4	\$ 5	
31.	We argue a lot.	1	2 3	. 4	4 . 5	
32.	One person controls and leads our family.	1	2 3	, 4	\$ 5	-
33.	My family is happy most of the time.	1	2 3		5	
34.	Each person takes responsibility for his/her behavior.	1	2 3	1 4	4 5	

35. On a scale of 1 to 5, I would rate my family as:							
1	2	3	4	5			
My family functions very well together My family does not function well together at ail.							
36. On a scale of 1 to 5, I would rate the independence in my family as:							
36. On a scale o	f 1 to 5, I would rate	the independence in my far	nily as:				
36. On a scale o	f 1 to 5, I would rate	the independence in my far 3	nily as:	5			

Global Measure of Sexual Satisfaction (GMSEX)

1. Overall, h	now would yo	ou describe you	r sexual relatior	nship with your p	eartner?	
Very bad 1	2	3	4	5	6	Very good 7
2. Overall, h	now would yo	ou describe you	r sexual relatior	nship with your p	eartner?	
Very unpleasant 1	2	3	4	5	6	Very pleasant 7
3. Overall, h	now would yo	ou describe you	r sexual relatior	nship with your p	eartner?	
Very negative 1	2	3	4	5	6	Very positive
4. Overall, h	now would yo	ou describe you	r sexual relatior	nship with your p	partner?	
Very unsatisfying 1	2	3	4	5	6	Very satisfying 7
5. Overall, h	now would yo	ou describe you	r sexual relatior	nship with your p	eartner?	
Worthless 1	2	3	4	5	6	Very valuable 7

Appendix G

Acronyms and Definitions

AAPR- Adult Attachment Prototype Rating

ACBS- Academic Counseling Behavior Scale

ACT- Acceptance and Commitment Therapy

AES- Anger Expression Scale

ANX- Anxiety

ANX (ACTOR) - Anxiety of Actor

ANX (ACTOR) x ROLE - Anxiety of Actor x Veteran/Spouse

ANX(PARTNER) - Partner Anxiety

ANX x ROLE- Anxiety x Veteran/Spouse

ANX (PARTNER) x ROLE - Partner Anxiety x veteran/spouse

APA- American Psychiatric Association

APIM- Actor/Partner Interdependence Model

ATSPPH- Attitude toward Seeking Professional Psychological Help

AVER- American Veterans for Equal Rights

AVOID- Avoidance

AVOID (ACTOR) - Avoidance of Actor

AVOID (ACTOR) x ROLE - Avoidance of Actor x Veteran/Spouse

AVOID (PARTNER) - Partner Avoidance

AVOID x ROLE - Avoidance x Veteran/Spouse

AVOID (PARTNER) x ROLE - Partner Avoidance x Veteran/Spouse

BCM - Bernese Coping Modes

BCT- Brigade Combat Team

BDI- Beck Depression Inventory

CAPS- Clinician Administered PTSD Scale

CAPSI- Child and Adolescent Problem-Solving Inventory

CASQ- Coping across Situations Questionnaire

CBCT- Cognitive-Behavioral Conjoint Therapy

CE- Combat Experiences

CES- Combat Exposure Scale

CES-D

CFA- Confirmatory Factor Analysis

CFI- Comparative Fit Index

CISS- Coping Inventory for Stressful Situations

CPT - Cognitive Processing Therapy

CSF2 - Comprehensive Soldier and Family Fitness 2

CSI- Coping Style Inventory

CSWE- Council on Social Work Education

D- Delayed Forms of Communication

DAS- Dyadic Adjustment Scale.

DBT- Dialectical Behavioral Therapy

DCM- Diabetes's Coping Measure

DD 214- Department of Defense Form 214

DMI- Defense Mechanism Inventory

DoD - Department of Defense

DRR-I Deployment Risk and Resilience Inventory

DSC - Dyadic Sexual Communication Scale

DSI- Differentiation of Self Inventory

DSM - Diagnostic and Statistical Manual of Mental Disorders

DSM-5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition

DSM IV-TR – Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision

DSC- Dyadic Sexual Communication

DV- Dependent Variable

EEA- Environment of Evolutionary Adaptedness

ECR- Experiences in Close Relationships

ECR-R Experiences in Close Relationships-Revised

EMDR - Eye Movement Desensitization and Reprocessing

FCOPES- Family Crises-Oriented personal Evaluation Scale

FOCUS- Families Over Coming Under Stress

FRG- Family Readiness Group

FSG- Family Support Group

FY- Fiscal year

GCR- Geographically Close Relationship

GCTS- Global Constructive Thinking Scale;

GMREL- Global Measure of Relationship Satisfaction

GMSEX- Global Measure of Sexual Satisfaction

GWOT- The Global War on Terrorism

HS- Hazan and Shaver

HSCL- Hopkins Symptom Checklist

I - Interactive Forms of Communication.

IAVA- Iraq and Afghanistan Veterans of America

IEMSS- Interpersonal Exchange Model of Sexual Satisfaction Questionnaire

IES- Impact of Event Scale

IES-R Impact of Event Scale - Revised

IOS- Inclusion of Other in the Self

IRB- University of Texas at Arlington's Institutional Review Board

IRT- Imagery Rehearsal Therapy

ISCL- Intentions to Seek Counseling Inventory;

JRTC- Joint Readiness Training Center

KIA- Killed in Action

KMSS - Kansas Marital Satisfaction Scale

LDR - Long Distance Relationships

LDRR- Long-Distance Romantic Relationships

LGBT- Lesbian, Gay, Bisexual, and Transgender Community

LS- Love Scale

MARS - Military Auxiliary Radio System

MANOVA- Multiple Analysis of Variance

MB- Maintenance Behavior

MBS- Monitory Blunting Scale

MIA - Missing in Action

MODPROBE - Moderation Probe

MSPSS - Multidimensional Scale of Perceived Social Support

MSSW- Master of Science in Social Work

MST- Military Sexual Trauma

MWR- Morale Welfare and Recreation

NASW- National Association of Social Workers

NCO- Non Commissioned Officers

NTC- National Training Center

NVVRS- National Vietnam Veteran Readjustment Study

OEF- Operation Enduring Freedom

OIF -Operation Iraqi Freedom

OJC- Operation Just Cause

ORH- Operation Restore Hope

PA- Positive Affect

PANAS- Positive and Negative Affect Schedule

PANAS-X - Positive and Negative Affect Schedule-Expanded Form

PCL-5 PTSD Checklist-5

PCL-M - PTSD Checklist-Military

PCS- Permanent Change of Station

PE- Prolonged Exposure

PF-SOC- Problem-focused Styles of Coping

PHQ- Patient Healthcare Questionnaire

PHQ-9- Patient Healthcare Questionnaire-9

POW- Prisoner of War

PRR- Proximal Romantic Relationships

PSS- Perceived Stress Scale

PTSD- Posttraumatic Stress Disorder

RAAS- Revised Adult Attachment Scale

RAS- Relationship Assessment Scale

RCC- Rewards/Costs Checklist

RCCU- Relationship Continuity Constructional Units

RCI- Relationship Closeness Inventory

RMBM - Relational Maintenance Behavior Measure

RMSEA- Root Mean Square Error of Approximation

RSRMS-Routine and Strategic Relational Maintenance Scale

ROLE - veteran or spouse

RQ- Relationship Questionnaire

RSRMS - Routine and Strategic Relational Maintenance Scale

RSS-R - Responses to Sadness Scale-Revised

SCSS - Sexual Communication Satisfaction Scale

SD - Standard Deviation

SE - Standard Error

SEM - Structural Equation Model

SES- Socioeconomic Status

SF-20- Short Form Health Survey

SHTS- Seeking Help from Teacher Scale

SPSS - Statistical Package for Social Sciences

SFI Self-Report Family Inventory—Version II

SSFQ - Stress and Social Feedback Questionnaire

SSS- Support-Seeking Scale

STAI- State Anxiety Scale (A –State)

TACSAT- Tactical Satellite

TRAC - Test of Reactions and Adaptation to College

VA - Department of Veteran Affairs

VAMC - Veterans Affairs Medical Center

VFW - Veterans of Foreign Wars

WOCS - Ways of Coping Scale

WSCS - Willingness to Seek Counseling Scale

WWI - World War I

WWII - World War II

WWP - Wounded Warrior Project

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Biographical Information

Warren Ponder graduated from Texas Tech University in 2003 with a Bachelor's degree in psychology. After graduation he joined the U.S. Army as an infantryman and was deployed to Operation Iraqi Freedom for fifteen months. After an honorable discharge, he started his MSSW studies, which he completed on August 15, 2009. He started the UT Arlington social work PhD program in August 2009 and has been employed full-time at the Department of Veterans Affairs for the entirety of the program. The PhD degree will be conferred on May 9, 2014. While in the PhD program he published three peer-reviewed manuscripts and three peer-reviewed presentations at various conferences. Post-graduation, he hopes to conduct research within the Readjustment Counseling Service and to further his clinical skill set.