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Deployment in the service of combat, peacekeeping, relief, and training missions around the globe can spark substantial anxiety for military families. Service members and their romantic partners may worry about each other's safety, their ability to handle responsibilities at home or overseas, the risk of infidelity, the threat of physical and mental illness, and the welfare of children (e.g., Faber, Willerton, Clymer, MacDermid, & Weiss, 2008; Knobloch, Theiss, & Wehrman, 2015). Communication is a key way for military personnel and at-home partners to manage their anxiety during the separation (e.g., Maguire, Heinemann-LaFave, & Sahlstein, 2013; Merolla, 2010). Communication between partners can mollify apprehension, facilitate support, and assuage worry during deployment (e.g., Carter et al., 2015; Rossetto, 2013; Wheeler & Torres Stone, 2010). Indeed, military couples identify communicating effectively as an important mechanism for handling the stress of deployment (Knobloch, Basinger, Wehrman, Ebata, & McGlaughlin, 2016).

Despite a growing literature documenting the pivotal role of communication during deployment (Carter & Renshaw, 2016a), questions remain about whether its associations with anxiety endure after military couples are reunited. Does communication during deployment have implications for people's generalized anxiety upon reunion? Symptoms of generalized anxiety include extreme fears or chronic worry about everyday events; behavioral avoidance; and physical difficulties such as hyperarousal, muscle tension, sleep disturbances, and concentration problems (American Psychiatric Association, 2013). Both returning service members (Kim, Thomas, Wilk, Castro, & Hoge, 2010; McNulty, 2005) and at-home partners (Fields, Nichols, Martindale-Adams, Zuber, & Graney, 2012) experience symptoms of generalized anxiety during the postdeployment transition. In turn, symptoms of anxiety correspond with impaired work productivity for military personnel (Adler et al., 2011), poorer physical health for at-home partners (Fields et al., 2012), and more reintegration stress for both individuals (Marek & D'Aniello, 2014).

We use the emotional cycle of deployment model (Pincus et al., 2001) to examine the valence of communication during deployment as a predictor of generalized anxiety upon reunion. We begin by reviewing the model and the literature on communication during deployment. Next, we report data from 555 military couples who participated in an 8-wave longitudinal study beginning at homecoming. We conclude by examining the implications of our results for understanding how people's communication during deployment corresponds with their generalized anxiety during reintegration.

Communication and Generalized Anxiety

The emotional cycle of deployment model provides a descriptive framework for understanding the experiences of deployed service members and at-home partners (Pincus et al., 2001). The model divides the deployment trajectory into 5 stages: predeployment, deployment, sustainment, redeployment, and postdeployment (also termed *reunion* or *reintegration*), and it defines unique challenges for each stage. A key premise of the model is that military couples who are unable to master the demands of each stage will experience anxiety and distress. A second core tenet is that

people's communication behavior in each stage lays a foundation for their emotional well-being in subsequent stages.

The emotional cycle of deployment model suggests that people's communication during deployment has implications for the anxiety they experience upon reunion (Pincus et al., 2001). For example, the model contends that communication during deployment can be a double-edged sword with respect to anxiety (see also Greene, Buckman, Dandeker, & Greenberg, 2010). Communication can help calm fears, boost security about the future, and enhance confidence in the relationship, but it also can exacerbate distress, provoke conflict, and intensify feelings of distance between partners (see also Carter et al., 2015; Maguire et al., 2013; Rossetto, 2013). Moreover, the model emphasizes that problems with inaccessible or unreliable communication technology can heighten people's anxiety about each other's safety, priorities, and commitment to the relationship (see also Hinojosa, Hinojosa, & Högnäs, 2012; Maguire et al., 2013). Finally, the model explains how a lack of communication during deployment can pave the way for anxiety fostered by rumors, secrets, and gossip.

The emotional cycle of deployment model implies a connection between people's communication during deployment and their anxiety after homecoming. Notably, however, the model stops short of specifying the features of communication that may generate more or less anxiety upon reunion. Consequently, we turn to the literature on communication during deployment to theorize about the characteristics of communication that may contribute to the anxiety of returning service members and at-home partners during reintegration.

Communication During Deployment

Scholarship on communication during deployment has privileged the frequency of the exchanges between military couples as its central predictor and relationship well-being as its focal outcome. Conflicting results exist (Greene et al., 2010). On one hand, Joseph and Afifi (2010)found that military wives who reported more frequent communication with their deployed husband were less satisfied with their relationship. On the other hand, Cigrang et al. (2014) observed that Air Force personnel who communicated more frequently with their romantic partner during deployment showed a reduction in relationship distress from predeployment to deployment. Likewise, Ponder and Aguirre (2012)reported that service members who communicated with their spouse every day during deployment were more satisfied with their relationship upon reunion than those who communicated with their spouse less than once per week. Mixed outcomes also are apparent in the same study: Houston, Pfefferbaum, Sherman, Melson, and Brand (2013) found that military wives who communicated more frequently with their deployed husband were more lonely but less likely to lose their temper with their spouse. These divergent findings hint that the role of communication during deployment is broader than the frequency of interaction.

Other studies have considered the frequency of channel use. The channels of communication available to military couples depend in part on the security requirements of the deployment (Hinojosa et al., 2012; MacDermid et al., 2005), but service members and at-home partners typically use some combination of channels that vary by the richness of the cues (i.e., email vs. Skype) and the synchrony of the exchanges (i.e., letters vs. telephone; Carter & Renshaw, 2016b). Although some work suggests that synchronous communication channels such as the telephone may be desirable for complex

interaction tasks (Schumm, Bell, Ender, & Rice, 2004), other research shows that asynchronous communication channels, including email, letters, cards, and care packages, correspond with more relationship satisfaction (Ponder & Aguirre, 2012). This work implies that a nuanced understanding of communication during deployment involves considering other dimensions in addition to the frequency of channel use.

Conspicuously missing from prior work is systematic attention to the valence of communication during deployment as a predictor of generalized anxiety as an outcome. Notably, however, research with civilian couples suggests a link between communication valence and anxiety (Newman & Erickson, 2010; Whisman & Beach, 2010). Both deficits in constructive communication (e.g., less problem-solving, less supportiveness) and the presence of destructive communication (e.g., criticism, hostility) correspond with anxiety among civilian couples (Chambless et al., 2002; Zinbarg, Lee, & Yoon, 2007). We are not aware of any work investigating the valence of communication between military couples during deployment as a predictor of mental health outcomes. Consequently, we echo Maguire's (2015) call for more sophisticated conceptualizations of communication during deployment. One benefit is to advance theory: The emotional cycle of deployment model could be augmented by delineating how the tenor of communication between military couples during deployment corresponds with generalized anxiety during reintegration. A second benefit is to advance research: The disparate findings for the frequency of communication during deployment imply that predictive precision could be enhanced by examining valence (e.g., Carter et al., 2015; Greene et al., 2010).

Hypotheses

Our goal is to investigate how the valence of people's communication during deployment predicts their generalized anxiety upon reunion. On the basis of the theorizing of the emotional cycle of deployment model (Pincus et al., 2001), we hypothesize that people's generalized anxiety is highest at homecoming and declines as the transition unfolds:

> *Hypothesis 1 (H1):* The generalized anxiety reported by military couples decreases over time across the postdeployment transition.

Two other hypotheses integrate the model's logic with research connecting the valence of communication to anxiety among civilian couples (Newman & Erickson, 2010; Whisman & Beach, 2010). Namely, we theorize that the constructiveness and destructiveness of communication during deployment predicts people's generalized anxiety upon reunion beyond the frequency of their exchanges during deployment:

> *Hypothesis 2 (H2):* Controlling for the frequency of communication during deployment, the constructiveness of communication during deployment reported by military couples corresponds with less generalized anxiety (H2a) and a stronger decline in generalized anxiety across time (H2b) upon reunion.

> *Hypothesis 3 (H3):* Controlling for the frequency of communication during deployment, the

destructiveness of communication during deployment reported by military couples corresponds with more generalized anxiety (H3a) and a weaker decline in generalized anxiety across time (H3b) upon reunion.

Method

We conducted a longitudinal study in which U.S. service members and at-home partners completed an online questionnaire once per month beginning at homecoming. Data collection spanned 8 months to cover the 6-month window that the emotional cycle of deployment model defines as the postdeployment transition (Pincus et al., 2001). Observations were spaced 1 month apart to be sensitive to changes in people's generalized anxiety over time. Responses were collected from dyads to illuminate the extent to which people's reports of communication during deployment predicted both their own generalized anxiety (actor effects) and their partner's generalized anxiety (partner effects; Kenny, Kashy, & Cook, 2006).

After receiving institutional review board approval, we recruited participants by (a) posting to online forums frequented by military families, (b) circulating information to military installation newspapers, and (c) enlisting the help of military family life professionals located in all 50 states. Military couples were eligible if (a) partners had separate email accounts, (b) one or both partners had recently returned home from deployment, and (c) both partners completed the Wave 1 questionnaire within the first 7 days after reunion. Most couples reserved a spot in the study in advance of their projected reunion date, but others enrolled upon homecoming.

Procedures

After both partners replied to an email soliciting their consent, we emailed each person a link to the Wave 1 questionnaire along with a unique login and a temporary password. Participants logged into the Wave 1 questionnaire to select a permanent password for the duration of the study. We sent reminder emails on the 4th day and the 6th day after reunion, and on the 7th day the Wave 1 logins expired. We eliminated 32 military couples because one or both partners failed to complete the Wave 1 questionnaire by the 1-week deadline.

Data collection continued with the remaining 555 military couples for 7 consecutive months. On the monthly anniversary of their reunion date, we emailed participants a link to the next questionnaire, which remained open for 7 days. We also sent reminder emails on the 4th day and the 6th day. Individuals received a $15 e-gift card from a national retailer for each wave of the study they completed plus a bonus $50 e-gift card if they completed all waves.

Participants

The sample of 555 military couples (n = 1,110 individuals) contained 554 men and 556 women (n = 554 cross-sex couples, 1 same-sex couple). Individuals were Caucasian (81%), Latino/a (10%), African American (4%), Asian or Pacific Islander (3%), or American Indian or Alaskan Native (2%). Participants ranged from 19 to 59 years of age (M = 31.18 years, SD = 6.39 years) and hailed from 44 U.S. states, the District of Columbia, and Guam. They described their education as some high school (1%), high school

graduate (13%), some college (31%), associate's degree (15%), bachelor's degree (28%), or advanced graduate degree (12%). Most individuals reported an annual household income of between $21,000 and $40,000 (23%), $41,000 and $60,000 (32%), or $61,000 and $80,000 (18%).

Most military couples were married (95%), and of those who were married, most were involved in their first marriage (81%) versus a remarriage (19%). The majority of military couples lived in the same residence upon reunion (96%) and had children (71%). The length of their romantic relationship averaged 8.43 years (*SD* = 5.40 years).

Most returning service members were men (*n* = 547) and at-home partners were women (*n* = 548). The majority of at-home partners were civilians (88%), but others were current (5%) or former (7%) members of the military. Returning service members were affiliated with the U.S. Army (40%), Navy (21%), Marines (18%), Air Force (10%), Army National Guard (8%), Air National Guard (2%), or Coast Guard (1%). The length of their deployment averaged 7.71 months (*SD* = 2.31 months), and their primary mission during deployment was combat (60%), peacekeeping (17%), training (15%), relief (3%), or undisclosed (5%). Approximately 30% of returning service members had deployed for the first time; others had completed one (24%), two (17%), three (13%), four (8%), or five or more (8%) previous deployments.

Individuals completed the Wave 1 questionnaire an average of 4.27 days after reunion (*SD* = 1.81 days). Their rate of participation remained relatively high across the duration of the study: (a) 91% at Wave 2, (b) 92% at Wave 3, (c) 88% at Wave 4, (d) 89% at Wave 5, (e) 88% at Wave 6, (f) 86% at Wave 7, and (g) 88% at Wave 8.

Measures

Secondary covariates

We assessed several secondary control variables at Wave 1 to facilitate a rigorous test of our predictions. Individual attributes included each person's sex, race, age, education, and the number of days elapsed between reunion and participation in Wave 1. Relationship attributes included household income, relationship length, marital status, prior marriage for the at-home partner, prior marriage for the returning service member, living together in the same residence upon reunion, and the presence of children. Military attributes included military branch, dual-military couple status, first deployment for the returning service member, length of deployment, and mission during deployment.

Core covariates

We used multi-item scales to measure three core covariates at Wave 1: relationship satisfaction, combat exposure during deployment, and the frequency of communication during deployment. We conducted confirmatory factor analyses to verify the factor structure of these scales, and we set the model fit criteria to comparative fit index (CFI) >.950 and root mean square error of approximation (RMSEA) <.060 (Hu & Bentler, 1999).

Relationship satisfaction

Participants completed the Couples Satisfaction Index (CSI; Funk & Rogge, 2007). Four items comprised the measure: (a) please indicate the degree of happiness, all things considered, of your relationship (0 = *extremely unhappy*, 6 = *perfect*), (b) how warm and comfortable is your relationship with your

partner? (c) how rewarding is your relationship with your partner? and (d) in general, how satisfied are you with your relationship? (0 = *not at all*, 5 = *completely*). We summed the responses to compute the variable (*M* = 17.20, *SD* = 3.32, range = 2.00–21.00, α = .83, CFI = 0.987, RMSEA = .051).

Combat exposure during deployment

Keane et al.'s (1989) Combat Exposure Scale (CES) contains 7 items rated on a 5-point scale. The items ask about the frequency with which the service member (a) went on combat patrols; (b) fired rounds at the enemy; (c) saw people hit by rounds; (d) was under enemy fire; (e) was surrounded by the enemy; (f) was in danger of being injured or killed; and (g) had personnel in his or her unit who were wounded, killed, or missing in action. Returning service members responded to the original scale; at-home partners responded to the same items prefaced with instructions developed by Renshaw, Rodrigues, and Jones (2008) to provide the rating that "best describes your understanding of your partner's experiences" during deployment (p. 588). We calculated the scale as the average of the items (*M* = 0.51, *SD* = 0.64, range = 0.00–4.00, α = .75, CFI = .964, RMSEA = .058).

Frequency of communication during deployment

We constructed a measure based on the channels commonly reported by military couples in prior work (see Carter & Renshaw, 2016a). The scale was introduced by the question "How frequently did you use the following channels to communicate with your romantic partner during deployment?" (0 = *did not use*, 1 = *once per month*, 2 = *every other week*, 3 = *once per week*, 4 = *several times per week*, 5 = *once per day*, 6 = *more than once per day*). The items referenced six channels: (a) telephone (*M* = 2.26, *SD* = 1.99), (b) video chat/Skype (*M* = 2.80, *SD* = 1.96), (c) email (*M* = 3.15, *SD*= 2.12), (d) Facebook (*M* = 3.08, *SD* = 2.38), (e) instant messaging (*M* = 2.97, *SD* = 2.68), and (f) cards and letters (*M* = 0.84, *SD* = 0.97). We computed the measure as the average of people's scores across channels (*M* = 2.56, *SD* = 1.00, range = 0.00–6.00, CFI = .977, RMSEA = .045).

Substantive variables

Participants reported the valence of their communication during deployment at Wave 1, and they reported their symptoms of generalized anxiety at each wave.

Valence of communication during deployment

We wrote items specifically for this study that were prefaced by the following stem: "Communicating with your partner during deployment was . . ." (1 = *strongly disagree*, 5 = *strongly agree*). Five items assessed *constructive communication*: (a) helpful, (b) satisfying, (c) effective, (d) useful, and (e) valuable (*M* = 4.39, *SD* = 0.73, range = 1.00–5.00, α = .88). Three items indexed *destructive communication*: (a) frustrating, (b) upsetting, and (c) disappointing (*M* = 2.11, *SD* = 0.95, range = 1.00–5.00, α = .78). CFA results verified the unidimensionality of the 5-item measure of constructive communication (CFI = .979, RMSEA = .057) and the 3-item measure of destructive communication (CFI = .986, RMSEA = .052), but an 8-item scale with the destructive communication items reverse scored did not form a unidimensional factor (CFI = .920, RMSEA = .092). On the basis of these results, we treated the two scales as separate constructs that shared 32% of their variance in common, $r = -.57$, $p < .001$.

Generalized anxiety

The first 268 couples (48%) completed the 21-item Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), but given the substantial per-use licensing cost of administrating the BAI, the remaining 287 couples (52%) completed the 14-item anxiety subscale of the Depression, Anxiety, and Stress Scale (DASS; Lovibond & Lovibond, 1995). For both measures, participants rated how much they were bothered by a series of symptoms during the past week (0 = *not at all*, 3 = *most of the time*). Sample DASS items included (a) feeling terrified, (b) difficulty breathing, and (c) feeling close to panic (BAI: *M* = 3.96, *SD* = 7.22; DASS: *M* = 1.86, *SD* = 3.74).

To put the scales on a common metric, we followed guidelines by Cohen, Cohen, Aiken, and West (1999) to convert the responses to the percent of maximum possible score (POMP). The POMP metric is advantageous because (a) it is a simple linear transformation grounded in the original units of the scale, (b) it is not sample dependent or population dependent, and (c) it is superior to other ways of facilitating comparisons across different measures of the same construct. The POMP scores in our sample averaged 5.32 across waves (*SD* = 10.26, range = 0–100), with 412 individuals (37%) meeting or exceeding clinical cutoff scores for moderate anxiety (Beck et al., 1988; Lovibond & Lovibond, 1995) at one or more waves of the study.

Repeated-measures analysis of variance indicated no difference between the POMP scores for the two versions of the measure for returning service members, $F(1, 385) = 0.13$, *ns*, but at-home partners reported higher POMP scores on the BAI than the DASS, $F(1, 426) = 12.77$, $p < .001$. Consequently, we covaried the version of the measure in the tests of our hypotheses.

Descriptive statistics for the POMP scores were (a) Wave 1 *M* = 6.80, *SD* = 10.27, range = 0.00–90.00; (b) Wave 2 *M* = 5.71, *SD* = 10.01, range = 0.00–96.83; (c) Wave 3 *M* = 5.32, *SD* = 9.98, range = 0.00–82.54; (d) Wave 4 *M* = 5.32, *SD* = 10.47, range = 0.00–93.65; (e) Wave 5 *M* = 4.69, *SD* = 9.99, range = 0.00–90.48; (f) Wave 6 *M* = 4.81, *SD* = 10.44, range = 0.00–90.48; (g) Wave 7 *M* = 5.00, *SD* = 10.56, range = 0.00–100.00; and (h) Wave 8 *M* = 4.73, *SD* = 10.20, range = 0.00–77.78. Within-person correlations across time indicated that anxiety was somewhat stable from wave to wave for both returning service members (*r*s ranged from .42 to .80, all *p*s < .001) and at-home partners (*r*s ranged from .56 to .84, all *p*s < .001).

Results

Preliminary Analyses

We conducted two preliminary analyses to examine communication during deployment and anxiety at Wave 1. A first preliminary analysis involved paired-sample *t* tests comparing returning service members (*n* = 555) versus at-home partners (*n* = 555). Findings indicated no differences for the frequency or constructiveness of communication during deployment, but at-home partners reported more destructive communication during deployment (*M* = 2.16, *SD* = 0.98) than returning service members reported (*M* = 2.06, *SD* = 0.91), $t(554) = 2.05$, $p = .041$. At-home partners also reported more anxiety at Wave 1 (*M* = 8.59, *SD* = 11.61) than returning service members reported (*M* = 5.00, *SD* = 8.35), $t(554) = 6.59$, $p < .001$.

A second preliminary analysis evaluated the bivariate correlations among the core covariates, independent variables, and dependent variable at Wave 1 (see Table 1). For both partners, (a) relationship satisfaction was positively correlated with the frequency and constructiveness of communication during deployment, (b) relationship satisfaction was negatively correlated with both the destructiveness of communication during deployment and anxiety, and (c) constructive and destructive communication during deployment were negatively correlated. Anxiety was negatively correlated with constructive communication during deployment and positively correlated with destructive communication during deployment. For returning service members, combat exposure was negatively correlated with relationship satisfaction and positively correlated with anxiety. For at-home partners, the frequency and constructiveness of communication during deployment were positively associated.

Table 1
Bivariate Correlations at Wave 1

Variable	V1	V2	V3	V4	V5	V6
V1: Relationship Satisfaction	.37***	−.10*	.12**	.26***	−.27***	−.23***
V2: Combat Exposure	−.04	.75***	.04	−.03	.02	.14**
V3: Communication Frequency	.14**	.05	.49***	.08	−.05	.03
V4: Constructive Communication	.46***	.01	.22***	.26***	−.56***	−.14**
V5: Destructive Communication	−.39***	.07	−.08	−.58***	.25***	.25***
V6: Generalized Anxiety	−.18***	.06	.03	−.14**	.29***	.20***

Note. $N = 555$ returning service members, at-home partners, or military couples. Wave 1 bivariate correlations for returning service members appear above the diagonal, Wave 1 bivariate correlations for at-home partners appear below the diagonal, and Wave 1 within-couple correlations appear on the diagonal and are underlined.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 1. *Bivariate Correlations at Wave 1*

	Variable	V1	V2	V3	V4	V5	V6
V1:	Relationship Satisfaction	.37***	-.10*	.12**	.26***	-.27***	-.23***
V2:	Combat Exposure	-.04	.75***	.04	-.03	.02	.14**
V3:	Communication Frequency	.14**	.05	.49***	.08	-.05	.03
V4:	Constructive Communication	.46***	.01	.22***	.26***	-.56***	-.14**
V5:	Destructive Communication	-.39***	.07	-.08	-.58***	.25***	.25***
V6:	Generalized Anxiety	-.18***	.06	.03	-.14**	.29***	.20***

Note. *N* = 555 returning service members, at-home partners, or military couples. Wave 1 bivariate correlations for returning service members appear above the diagonal, Wave 1 bivariate correlations for at-home partners appear below the diagonal, and Wave 1 within-couple correlations appear on the diagonal and are underlined.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Substantive Analyses

Unconditional model

We conducted the substantive analyses using dyadic growth curve modeling within a structural equation modeling framework (Kenny et al., 2006; Peugh, DiLillo, & Panuzio, 2013). We began by modeling the trajectory of anxiety reported by returning service members and at-home partners separately in an unconditional model without predictors (see Figures 1 and 4A in the online

supplemental material), correlating the intercepts and slopes within couples, and correlating the residuals of anxiety within couples at each wave (following Kenny et al., 2006).

The unconditional model had a marginal fit to the data, $\chi^2/df = 3.80$, CFI = .953, RMSEA = .071 [90% confidence interval {CI} = .064 to .078]. Consistent with H1, the statistically significant negative slopes showed that anxiety decreased across time for both returning service members and at-home partners (see Table 2). For both partners, variance in their initial levels of anxiety (intercepts) and the change in their anxiety across time (slopes) was available to be explained by the predictors. The intercepts, but not the slopes, were positively correlated between partners. Results of χ^2 difference tests (not shown) indicated that returning service members and at-home partners differed in their intercepts, slopes, and associated variance components.

Table 2
Growth Parameters for the Unconditional Model Predicting Generalized Anxiety

	Generalized anxiety of returning service members		Generalized anxiety of at-home partners	
Parameter	Estimate	Variance	Estimate	Variance
Intercept	4.71***	48.49***	7.32***	95.92***
Slope	−0.14**	0.69***	−0.33***	0.88***
r of intercept and slope	−0.11		−0.30***	

Note. N = 555 military couples. The within-couple correlation of the intercepts for generalized anxiety was $r = .18$, $p < .001$. The within-couple correlation of the slopes for generalized anxiety was $r = .11$, *ns*.
** $p < .01$. *** $p < .001$.

Table 2. *Growth Parameters for the Unconditional Model Predicting Generalized Anxiety*

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Intercept	4.71***	48.49***	7.32***	95.92***
Slope	-0.14**	0.69***	-0.33***	0.88***
r of intercept and slope	-0.11		-0.30***	

Note. *N* = 555 military couples. The within-couple correlation of the intercepts for generalized anxiety was *r* = .18, *p* < .001. The within-couple correlation of the slo es for generalized anxiety was *r* = .11, *ns*.
** *p* < .01. *** *p* <

Preliminary conditional model

A second step involved estimating two preliminary conditional models with predictors (see Figure 2 in the online supplemental material). These models contained people's Wave 1 reports of the frequency of communication during deployment along with their Wave 1 reports of either constructive or destructive communication. The independent variables were modeled as actor and partner effects predicting each person's intercept and slope.

Results indicated a marginal fit to the data for the constructive and destructive communication models, respectively, χ^2/df = 3.07 and 3.09, CFI = .953 and .953, RMSEA = .061 [90% CI = .055 to .067] and .061 [90% CI = .055 to .068]. The constructive communication model explained slightly less variation than the destructive communication model, respectively, for both returning service members (intercept R^2 = .016 and .064; slope R^2 = .009 and .022) and at-home partners (intercept R^2 = .032 and .095; slope R^2 = .029 and .035).

Actor effects but not partner effects were apparent. Consistent with H2a, constructive communication during deployment predicted less initial anxiety for both returning service members (β = −.11, p = .02) and at-home partners (β = −.16, p = .001). As proposed by H3a, destructive communication during deployment predicted more initial anxiety for both returning service members (β = .24, p < .001) and at-home partners (β = .29, p < .001). Contrary to H2b and H3b, constructive communication during deployment did not predict the slope of anxiety for either partner, and returning service members who reported more destructive communication during deployment experienced a stronger (rather than weaker) decline in their anxiety over time (β = −.15, p = .02). No effects emerged for the frequency of communication during deployment.

Final conditional model

A third step involved estimating a final conditional model as a comprehensive test of our hypotheses (see Figure 3 in the online supplemental material). We again modeled actor and partner effects of each independent variable and covariate predicting each person's intercept and slope. The two independent variables were Wave 1 reports of constructive (H2) and destructive (H3) communication during deployment. The three core covariates were Wave 1 reports of relationship satisfaction, combat exposure, and frequency of communication during deployment.

We included 18 secondary Wave 1 covariates modeled as predictors of each person's intercept and slope. We streamlined the number of parameters to be estimated by converting each categorical covariate into a single dummy-coded term. Five covariates represented individual attributes for each person: (a) sex (1 = male, 0 = female), (b) race (1 = White, 0 = non-White), (c) age, (d) education, and (e) the number of days elapsed between reunion and participation. Seven covariates indexed relationship attributes: (a) household income, (b) relationship length, (c) marital status (1 = married, 0 = not married), (d) prior marriage for the at-home partner, (e) prior marriage for the returning service member, (f) living together in the same residence upon reunion, and (g) the presence of children. Five covariates represented military attributes: (a) military branch (1 = active-duty Army, 0 = all other branches), (b) dual-military couple status, (c) first deployment for the returning service member, (d) length of deployment, and (e) mission during deployment (1 = combat mission, 0 = noncombat mission). A final covariate indexed the measure of anxiety the participant completed (1 = BAI, 0 = DASS). To simplify the interpretation of the intercepts, we grand-mean centered both the time-based measures and the multi-item scales.

The final conditional model showed reasonable fit, χ^2/df = 1.85, CFI = .965, RMSEA = .039 [90% CI = .035 to .043], and it explained a modest degree of variation for both returning service members (intercept R^2 = .182; slope R^2 = .130) and at-home partners (intercept R^2 = .209; slope R^2 = .153). Of note, the core covariates and independent variables accounted for the downward slope of generalized anxiety over time for both returning service members and at-home partners (see Figure 4B in the

online supplemental material for the trajectory of generalized anxiety based on the final conditional model).

Results for the core covariates indicated that the Wave 1 relationship satisfaction reported by returning service members and at-home partners negatively predicted their own initial levels of anxiety (see Table 3). Moreover, the combat exposure reported by returning service members was positively associated with their own initial level of anxiety as well as the slope of anxiety for at-home partners. Frequency of communication during deployment did not predict the intercepts or slopes of anxiety for either returning service members or at-home partners.

Table 3
Actor Effects for the Final Conditional Model Predicting Generalized Anxiety

Parameter	Generalized anxiety of returning service members		Generalized anxiety of at-home partners	
	B (*SE*)	β	B (*SE*)	β
Predictors of the intercepts				
Constructive communication	0.74 (0.54)	.08	0.94 (0.76)	.07
Destructive communication	1.98 (0.43)	.26***	2.91 (0.55)	.29***
Relationship satisfaction	−0.33 (0.12)	−.15**	−0.34 (0.15)	−.12*
Combat exposure	1.83 (0.78)	.17*	0.10 (0.99)	.01
Communication frequency	0.05 (0.35)	.01	0.73 (0.51)	.07
Predictors of the slopes				
Constructive communication	−0.03 (0.09)	−.03	−0.31 (0.10)	−.24**
Destructive communication	−0.15 (0.07)	−.16*	−0.16 (0.07)	−.16*
Relationship satisfaction	0.03 (0.02)	.09	0.04 (0.02)	.14
Combat exposure	0.08 (0.13)	.06	−0.13 (0.13)	−.09
Communication frequency	0.03 (0.06)	.04	−0.11 (0.07)	−.11
Variance parameters	Estimate (*SE*)		Estimate (*SE*)	
Intercept variance	39.59*** (3.09)		76.14*** (5.57)	
Slope variance	0.61*** (0.08)		0.76*** (0.10)	

Note. $N = 555$ military couples. The model included 18 other Wave 1 covariates. The sole partner effect was that combat exposure reported by returning service members was positively associated with the slope of generalized anxiety for at-home partners (β = .21, $p = .03$).
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3. *Actor Effects for the Final Conditional Model Predicting Generalized Anxiety*

	Generalized anxiety of returning service members		Generalized anxiety of at-home partners	
Parameter	*B* (*SE*)	*β*	*B* (*SE*)	*β*
Predictors of the intercepts				
Constructive communication	0.74 (0.54)	.08	0.94 (0.76)	.07
Destructive communication	1.98 (0.43) .	26***	2.91 (0.55)	.29***
Relationship satisfaction	-0.33 (0.12)	-.15**	-0.34 (0.15)	-.12*
Combat exposure	1.83 (0.78)	.17*	0.10 (0.99)	.01
Communication frequency	0.05 (0.35)	.01	0.73 (0.51)	.07
Predictors of the slopes				

Constructive communication	-0.03 (0.09)	-.03	-0.31 (0.10)	-.24**
Destructive communication	-0.15 (0.07)	-.16*	0.16 (0.07)	-.16*
Relationship satisfaction	0.03 (0.02)	.09	0.04 (0.02)	.14
Combat exposure	0.08 (0.13)	.06	-0.13 (0.13)	-.09
Communication frequency	0.03 (0.06)	.04	-0.11 (0.07)	-.11

Note. *N* = 555 military couples. The model included 18 other Wave 1 covariates. The sole partner effect was that combat exposure reported by returning service members was positively associated with the slope of generalized anxiety for at-home partners (

With respect to the other covariates, the intercept for returning service members was predicted by their race (β = −.10, *p* = .028), and the slope for returning service members corresponded with their level of education (β = .25, *p* = .002). The intercept for at-home partners was predicted by the returning service member's level of education (β = −.14, *p* = .010), the length of the deployment (β = −.09, *p* = .049), and the version of the anxiety measure that at-home partners completed (β = .17, *p* < .001). Moreover, the slope for at-home partners was predicted by deployment mission (β = −.15, *p* = .028).

Five actor effects emerged in the tests of our multivariate hypotheses (see Table 3) that were similar to the results of the preliminary conditional models. Contrary to H2a, constructive communication during deployment did not predict the intercept for either partner. H2b was only supported for at-home partners: Constructive communication during deployment reported by at-home partners negatively predicted their slope, suggesting a steeper decline in anxiety over time. H3 also received mixed support. As predicted, destructive communication during deployment reported by returning service members and at-home partners was a positive predictor of their intercept (H3a); opposite expectations, it was a negative predictor of their slope (H3b). In other words, destructive communication during deployment corresponded with higher levels of anxiety at Wave 1 but a steeper decline in anxiety over time.

In a follow-up analysis, we conducted χ^2 difference tests of structural invariance to compare the paths for the independent variables and core covariates between returning service members and at-home partners. No differences emerged. These results suggest that the associations between communication during deployment and anxiety upon reunion were largely similar for returning service members and at-home partners.

Discussion

The return home of service members after deployment is portrayed by the media as an overwhelmingly joyful celebration, but such depictions cast reunion as an endpoint rather than the beginning of a potentially challenging period for military families (Howard & Prividera, 2015). Following Greene et al.'s (2010) call for data on the mental health ramifications of communication during deployment, we conducted a longitudinal study in which 555 military couples reported on their

generalized anxiety once per month for 8 months starting at homecoming. We next consider how our results advance theory, research, and practice.

Implications of the Results

A recent critique of the literature on communication during deployment contends that much of the knowledge claims are "based on anecdotal and indirect evidence" (Cigrang et al., 2014, p. 335). We sought to strengthen the theoretical foundation of the literature by using the logic of the emotional cycle of deployment model (Pincus et al., 2001). The model is popular for describing the experiences of military couples across the trajectory, but it has not been subjected to extensive empirical testing. Our findings provided mixed support for hypotheses we derived from the model's reasoning and research linking communication and anxiety.

As predicted, returning service members and at-home partners reported that their generalized anxiety declined over time across the postdeployment transition (H1), and at-home partners who retrospectively reported more constructive communication during deployment experienced a more rapid decline in anxiety over time (H2b). Returning service members and at-home partners who retrospectively reported more destructive communication during deployment experienced more anxiety at Wave 1 (H3a), but contrary to expectations, they also experienced a more rapid decline in anxiety over time (H3b). These findings endured across waves (over 8 months of reintegration); were apparent after controlling for core covariates (relationship satisfaction, combat exposure, frequency of communication during deployment); and were robust beyond a heterogeneous set of individual characteristics (sex, race, age, education, number of days since reunion), relationship qualities (household income, relationship length, marital status, prior marriage for either partner, cohabitation, presence of children), and military features (branch of service, dual-military couple status, deployment experience, length, mission).

Our study provides more insight into communication during deployment than previously available. Whereas extant work has focused on the frequency of communication and/or channel use (Carter & Renshaw, 2016b; Cigrang et al., 2014; Ponder & Aguirre, 2012), our findings revealed that the valence of communication during deployment was a unique predictor of anxiety after controlling for frequency. Two implications are noteworthy. First, results from both the confirmatory factor analyses and the dyadic growth curve models demonstrated that positively valenced versus negatively valenced communication are not opposite ends of the same continuum; the presence of both constructive communication and destructive communication mattered across the trajectory (see also Lavner & Bradbury, 2012). More broadly, our longitudinal data bolster recent cross-sectional retrospective work suggesting that communication dynamics during deployment have implications for people's outcomes after homecoming (e.g., Carter & Renshaw, 2016b; LeBlanc & Olson, 2015; Ponder & Aguirre, 2012). These findings underscore the importance of understanding how the stages of the deployment cycle are connected within people's experiences.

Our investigation also contributes to the literature on generalized anxiety. Scholars have stressed the importance of distinguishing specific interpersonal processes related to anxiety (Beck, 2010; Newman & Erickson, 2010), and our findings suggest constructive and destructive communication as two potential pathways. Perhaps a lack of constructive communication inhibits the provision of social

support, which is a significant contributor to people's physical and mental health (Cunningham & Barbee, 2000; Cutrona, 1996); alternatively, it may demarcate the interpersonal skill deficits that perpetuate anxiety (Alden & Taylor, 2004). Another possibility is that destructive communication fosters perceived criticism between partners (Hooley & Teasdale, 1989), which may heighten people's apprehension (e.g., Renshaw, Chambless, & Steketee, 2003). Our suggestions regarding these two potential pathways are speculative, but our data open the door to additional work elucidating the mechanisms connecting the valence of communication with anxiety among military couples.

Theorizing about the pathways of constructive and destructive communication is complicated by our contradictory findings predicting the decline in people's generalized anxiety over time. When at-home partners retrospectively reported more constructive communication during deployment (H2b), and when both returning service members and at-home partners retrospectively reported more destructive communication during deployment (H3b), individuals showed swifter improvement in their anxiety over time. In other words, both positive and negative interactions during deployment coincided with an accelerated drop in anxiety across reintegration. These results are reminiscent of research showing incongruous outcomes for the frequency of communication during deployment (cf. Cigrang et al., 2014; Houston et al., 2013; Joseph & Afifi, 2010), and they invite speculation about the explanation for the incongruity. Perhaps the findings reflect a statistical artifact of greater Wave 1 generalized anxiety for individuals who engaged in more destructive communication during deployment. On the other hand, perhaps communicative exchanges of any sort during deployment (compared to overtly avoidant behaviors) exemplify a deep, abiding, and intertwined interdependence between partners (e.g., Berscheid, 1983) that helps to alleviate anxiety more quickly upon reunion. Or perhaps the combination of both constructive and destructive communication during deployment signals that military couples are confronting challenging topics immediately rather than sidestepping issues of conflict that resurface during reintegration and prolong anxiety (e.g., Joseph & Afifi, 2010; Knobloch, Ebata, McGlaughlin, & Theiss, 2013). We look forward to future work sorting out these possibilities, but in the meantime, our results broadly underscore the role of communication in the experience of anxiety (e.g., Whisman & Beach, 2010).

Our study suggests three clinical recommendations aimed at preserving the mental health of returning service members and at-home partners during the transition from deployment to reunion. First, our results imply that military couples who enact constructive communication and refrain from destructive communication during deployment derive the most mental health benefits at reunion. A major caveat is that our data do not resolve conflicting advice regarding communication during deployment (Greene et al., 2010)—for example, whether to share openly or to avoid stressful topics to protect each other from worry (Durham, 2010; Joseph & Afifi, 2010)—because both constructive and destructive communication during deployment corresponded with a more rapid decline in anxiety across the reintegration period. Second, with respect to intervention, our findings emphasize the value of offering services to military couples at key junctures throughout the trajectory. Whereas communication skills training (e.g., Butler & Wampler, 1999) may be a valuable addition to predeployment education to help military couples interact effectively during deployment, clinical intervention to manage generalized anxiety may be beneficial immediately upon homecoming, when people's symptoms of anxiety may be most severe. Third, regarding prevention, research evaluating the long-term effectiveness of

communication skills education in preventing or treating anxiety among military couples (e.g., Arnow, Taylor, Agras, & Telch, 1985) is an important next step.

Limitations and Directions for Future Research

Despite the relatively large size of our sample compared with other work on this topic, limitations temper the conclusions drawn from our data. First, our measures of communication during deployment were new rather than established scales. Further construct validation work is required. Second, we relied on a convenience recruitment strategy that attracted returning service members and at-home partners who reported relatively low levels of anxiety. Additional research is needed to evaluate our findings among military couples experiencing more substantial symptoms. Third, we lacked information about the mental health and relationship functioning of military couples before deployment. The emotional cycle of deployment model (Pincus et al., 2001) and prior research (Cigrang et al., 2014) suggest that the interpersonal dynamics of military couples before separation shape how they navigate subsequent stages. Moreover, we asked people to report on their communication during deployment after homecoming rather than during the separation, which raises the possibility of recall biases. Finally, we did not account for the communication of military couples after reunion. A prospective longitudinal investigation is vital both for testing the entirety of the emotional cycle of deployment model and for disentangling the extent to which predeployment, during-deployment, and after-deployment communication dynamics drive outcomes.

Other directions for future research involve devoting more nuanced attention to communication during deployment. Our findings regarding valence offer a starting point by highlighting the merits of considering communication during deployment in more complex ways than sheer frequency. However, constructiveness and destructiveness are hardly exhaustive of the ways to conceptualize communication during deployment. Scholars could build on in-depth work examining particular functions of communication during deployment, such as how military couples seek support (Rossetto, 2013), maintain their relationship (Maguire et al., 2013; Merolla, 2010), preserve their autonomy (Sahlstein, Maguire, & Timmerman, 2009), and decide what to disclose (Durham, 2010; Joseph & Afifi, 2010; Knobloch et al., 2015). We see value in future investigations that attend to more diverse aspects of communication during deployment.

Opportunities for advancement also exist with respect to outcomes. We selected generalized anxiety as our dependent variable because it is explicitly implicated in the theorizing of the emotional cycle of deployment model (Pincus et al., 2001), but communication during deployment is likely to correspond with other individual and relational outcomes as well. Scholars could consider other mental health symptoms such as depression and posttraumatic stress (e.g., Wilcox et al., 2015), other aspects of functioning such as reintegration difficulty (e.g., Knobloch, Ebata, McGlaughlin, & Ogolsky, 2013; Marek & D'Aniello, 2014), and other markers of dyadic well-being such as relational turbulence (e.g., Theiss & Knobloch, 2014). We look forward to future research that builds on our findings by considering an expanded range of outcomes to help military couples navigate the deployment cycle.

Footnotes

1 Our sample was slightly less diverse than the U.S. military population as a whole. According to the U.S. Department of Defense, Office of the Deputy Assistant Secretary of Defense for

Military Community and Family Policy (2015), approximately 71% of the total military force identify as White, 17% as Black or African American, 4% as Asian, 1% as American Indian or Alaska Native, and 1% as Native Hawaiian or Pacific Islander. Approximately 12% of the total military force identify as Hispanic or Latino/a.

2 We measured people's reports of relationship satisfaction at each wave, but the variable showed notable consistency from month to month (intraclass correlation = .92 for returning service members and .94 for at-home partners), so we covaried covaried only their Wave 1 scores for the sake of parsimony.

3 We covaried only the sex of the returning service member because 554 of the 555 military couples in the sample were heterosexual.

References

Adler, D. A., Possemato, K., Mavandadi, S., Lerner, D., Chang, H., Klaus, J., . . .Oslin, D. W. (2011). Psychiatric status and work performance of veterans of Operations Enduring Freedom and Iraqi Freedom. *Psychiatric Services*, *62*, 39–46. 10.1176/appi.ps.62.1.39

Alden, L. E., & Taylor, C. T. (2004). Interpersonal processes in social phobia. *Clinical Psychology Review*, *24*, 857–882. 10.1016/j.cpr.2004.07.006

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Arnow, B. A., Taylor, C. B., Agras, W. S., & Telch, M. J. (1985). Enhancing agoraphobia treatment outcome by changing couple communication patterns. *Behavior Therapy*, *16*, 452–467. 10.1016/S0005-7894(85)80024-1

Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, *56*, 893–897. 10.1037/0022-006X.56.6.893

Beck, J. G. (2010). What lies ahead: Steps in understanding interpersonal processes in the anxiety disorders. In J. G.Beck (Ed.), *Interpersonal processes in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 287–296). Washington, DC: American Psychological Association. 10.1037/12084-011

Berscheid, E. (1983). Emotion. In H. H.Kelley, E.Berscheid, A.Christensen, J. H.Harvey, T. L.Huston, G.Levinger, . . .D. R.Peterson (Eds.), *Close relationships* (pp. 110–168). New York, NY: Freeman.

Butler, M. H., & Wampler, K. S. (1999). A meta-analytic update of research on the Couple Communication Program. *American Journal of Family Therapy*, *27*, 223–237. 10.1080/019261899261943

Carter, S. P., Loew, B., Allen, E. S., Osborne, L., Stanley, S. M., & Markman, H. J. (2015). Distraction during deployment: Marital relationship associations with spillover for deployed Army soldiers. *Military Psychology*, *27*, 108–114. 10.1037/mil0000067

Carter, S. P., & Renshaw, K. D. (2016a). Spousal communication during military deployments: A review. *Journal of Family Issues*, *37*, 2309–2332.

Carter, S. P., & Renshaw, K. D. (2016b). Communication via different media during military deployments and postdeployment relationship satisfaction. *Military Behavioral Health*, *4*, 260–268. 10.1080/21635781.2016.1153535

Chambless, D. L., Fauerbach, J. A., Floyd, F. J., Wilson, K. A., Remen, A. L., & Renneberg, B. (2002). Marital interaction of agoraphobic women: A controlled, behavioral observation study. *Journal of Abnormal Psychology*, *111*, 502–512. 10.1037/0021-843X.111.3.502

Cigrang, J. A., Wayne Talcott, G., Tatum, J., Baker, M., Cassidy, D., Sonnek, S., . . .Smith Slep, A. M. (2014). Intimate partner communication from the war zone: A prospective study of relationship functioning, communication frequency, and combat effectiveness. *Journal of Marital and Family Therapy*, *40*, 332–343. 10.1111/jmft.12043

Cohen, P., Cohen, J., Aiken, L. S., & West, S. G. (1999). The problem of units and the circumstances for POMP. *Multivariate Behavioral Research*, *34*, 315–346. 10.1207/S15327906MBR3403_2

Cunningham, M. R., & Barbee, A. P. (2000). Social support. In C.Hendrick & S. S.Hendrick (Eds.), *Close relationships: A sourcebook* (pp. 272–285). Thousand Oaks, CA: Sage. 10.4135/9781452220437.n20

Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress*. Thousand Oaks, CA: Sage. 10.4135/9781483327563

Durham, S. W. (2010). In their own words: Staying connected in a combat environment. *Military Medicine*, *175*, 554–559. 10.7205/MILMED-D-09-00235

Faber, A. J., Willerton, E., Clymer, S. R., MacDermid, S. M., & Weiss, H. M. (2008). Ambiguous absence, ambiguous presence: A qualitative study of military reserve families in wartime. ***Journal of Family Psychology***, *22*, 222–230. 10.1037/0893-3200.22.2.222

Fields, J. A., Nichols, L. O., Martindale-Adams, J., Zuber, J., & Graney, M. (2012). Anxiety, social support, and physical health in a sample of spouses of OEF/OIF service members. *Military Medicine*, *177*, 1492–1497. 10.7205/MILMED-D-12-00036

Funk, J. L., & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. ***Journal of Family Psychology***, *21*, 572–583. 10.1037/0893-3200.21.4.572

Greene, T., Buckman, J., Dandeker, C., & Greenberg, N. (2010). How communication with families can both help and hinder service members' mental health and occupational effectiveness on deployment. *Military Medicine*, *175*, 745–749. 10.7205/MILMED-D-09-00278

Hinojosa, R., Hinojosa, M. S., & Högnäs, R. S. (2012). Problems with veteran-family communication during operation enduring freedom/operation Iraqi freedom military deployment. *Military Medicine*, *177*, 191–197. 10.7205/MILMED-D-10-00385

Hooley, J. M., & Teasdale, J. D. (1989). Predictors of relapse in unipolar depressives: Expressed emotion, marital distress, and perceived criticism. *Journal of Abnormal Psychology*, *98*, 229–235. 10.1037/0021-843X.98.3.229

Houston, J. B., Pfefferbaum, B., Sherman, M. D., Melson, A. G., & Brand, M. W. (2013). Family communication across the deployment experience: Child and spouse report of communication frequency and quality and associated emotions, behaviors, and reactions. *Journal of Loss and Trauma*, *18*, 103–119. 10.1080/15325024.2012.684576

Howard, J. W., II, & Prividera, L. C. (2015). Nationalism and soldiers' health: Media framing of soldiers' returns from deployment. In E.Sahlstein Parcell & L. M.Webb (Eds.), *A communication perspective on the military: Interactions, messages, and discourses* (pp. 217–236). New York, NY: Peter Lang.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55. 10.1080/10705519909540118

Joseph, A. L., & Afifi, T. D. (2010). Military wives' stressful disclosure to their deployed husbands: The role of protective buffering. *Journal of Applied Communication Research*, *38*, 412–434. 10.1080/00909882.2010.513997

Keane, T. M., Fairbank, J. A., Caddell, J. M., Zimering, R. T., Taylor, K. L., & Mora, C. A. (1989). Clinical evaluation of a measure to assess combat exposure. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *1*, 53–55. 10.1037/1040-3590.1.1.53

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York, NY: Guilford Press.

Kim, P. Y., Thomas, J. L., Wilk, J. E., Castro, C. A., & Hoge, C. W. (2010). Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatric Services*, *61*, 582–588. 10.1176/ps.2010.61.6.582

Knobloch, L. K., Basinger, E. D., Wehrman, E. C., Ebata, A. T., & McGlaughlin, P. C. (2016). Communication of military couples during deployment and reunion: Changes, challenges, benefits, and advice. *Journal of Family Communication*, *16*, 160–179. 10.1080/15267431.2016.1146723

Knobloch, L. K., Ebata, A. T., McGlaughlin, P. C., & Ogolsky, B. (2013). Depressive symptoms, relational turbulence, and the reintegration difficulty of military couples following wartime deployment. *Health Communication*, *28*, 754–766. 10.1080/10410236.2013.800440

Knobloch, L. K., Ebata, A. T., McGlaughlin, P. C., & Theiss, J. A. (2013). Generalized anxiety and relational uncertainty as predictors of topic avoidance during reintegration following military deployment. *Communication Monographs*, *80*, 452–477. 10.1080/03637751.2013.828159

Knobloch, L. K., Theiss, J. A., & Wehrman, E. C. (2015). Communication of military couples during deployment: Topic avoidance and relational uncertainty. In E.Sahlstein Parcell & L. M.Webb (Eds.), *A communication perspective on the military: Interactions, messages, and discourses* (pp. 39–58). New York, NY: Peter Lang.

Lavner, J. A., & Bradbury, T. N. (2012). Why do even satisfied newlyweds eventually go on to divorce?***Journal of Family Psychology***, *26*, 1–10. 10.1037/a0025966

LeBlanc, S. S., & Olson, L. N. (2015). Communicating identity: The impact of veterans' identity negotiation on family communication. In E.Sahlstein Parcell & L. M.Webb (Eds.), *A communication perspective on the military: Interactions, messages, and discourses* (pp. 139–160). New York, NY: Peter Lang.

Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the depression anxiety stress scales* (2nd ed.). Sydney, New South Wales, Australia: Psychology Foundation.

MacDermid, S., Schwarz, R., Faber, A., Adkins, J., Mishkind, M., & Weiss, H. M. (2005). Military fathers on the front lines. In W.Marsiglio, K.Roy, & G. L.Fox (Eds.), *Situated fathering: A focus on physical and social spaces* (pp. 209–231). Lanham, MA: Rowman & Littlefield.

Maguire, K. C. (2015). Military family communication: A review and synthesis of the research related to wartime deployment. In E.Sahlstein Parcell & L. M.Webb (Eds.), *A communication perspective on the military: Interactions, messages, and discourses* (pp. 39–58). New York, NY: Peter Lang.

Maguire, K. C., Heinemann-LaFave, D., & Sahlstein, E. (2013). “To be so connected, yet not at all”: Relational presence, absence, and maintenance in the context of a wartime deployment. *Western Journal of Communication*, *77*, 249–271. 10.1080/10570314.2012.757797

Marek, L. I., & D’Aniello, C. (2014). Reintegration stress and family mental health: Implications for therapists working with reintegrating military families. *Contemporary Family Therapy: An International Journal*, *36*, 443–451. 10.1007/s10591-014-9316-4

McNulty, P. A. F. (2005). Reported stressors and health care needs of active duty Navy personnel during three phases of deployment in support of the war in Iraq. *Military Medicine*, *170*, 530–535. 10.7205/MILMED.170.6.530

Merolla, A. J. (2010). Relational maintenance during military deployment: Perspectives of wives of deployed U.S. soldiers. *Journal of Applied Communication Research*, *38*, 4–26. 10.1080/00909880903483557

Newman, M. G., & Erickson, T. M. (2010). Generalized anxiety disorder. In J. G.Beck (Ed.), *Interpersonal processes in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 235–259). Washington, DC: American Psychological Association. 10.1037/12084-009

Peugh, J. L., DiLillo, D., & Panuzio, J. (2013). Analyzing mixed-dyadic data using structural equation models. *Structural Equation Modeling*, *20*, 314–337. 10.1080/10705511.2013.769395

Pincus, S. H., House, R., Christenson, J., & Adler, L. E. (2001). The emotional cycle of deployment: A military family perspective. *U.S. Army Medical Department Journal*, 15–23.

Ponder, W. N., & Aguirre, R. T. P. (2012). Internet-based spousal communication during deployment: Does it increase post-deployment marital satisfaction?*Advances in Social Work*, *13*, 216–228.

Renshaw, K. D., Chambless, D. L., & Steketee, G. (2003). Perceived criticism predicts severity of anxiety symptoms after behavioral treatment in patients with obsessive-compulsive disorder and panic disorder with agoraphobia. *Journal of Clinical Psychology*, *59*, 411–421. 10.1002/jclp.10048

Renshaw, K. D., Rodrigues, C. S., & Jones, D. H. (2008). Psychological symptoms and marital satisfaction in spouses of Operation Iraqi Freedom veterans: Relationships with spouses’ perceptions of veterans’ experiences and symptoms. ***Journal of Family Psychology***, *22*, 586–594. 10.1037/0893-3200.22.3.586

Rossetto, K. R. (2013). Relational coping during deployment: Managing communication and connection in relationships. *Personal Relationships*, *20*, 568–586. 10.1111/pere.12000

Sahlstein, E., Maguire, K. C., & Timmerman, L. (2009). Contradictions and praxis contextualized by wartime deployment: Wives’ perspectives revealed through relational dialectics. *Communication Monographs*, *76*, 421–442. 10.1080/03637750903300239

Schumm, W. R., Bell, D. B., Ender, M. G., & Rice, R. E. (2004). Expectations, use, and evaluations of communications media among deployed peacekeepers. *Armed Forces and Society*, *30*, 649–662. 10.1177/0095327X0403000407

Theiss, J. A., & Knobloch, L. K. (2014). Relational turbulence and the post-deployment transition: Self, partner, and relationship focused turbulence. *Communication Research*, *41*, 27–51. 10.1177/0093650211429285

U.S. Department of Defense, Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy. (2015). *Demographics report*. Retrieved from http://www.militaryonesource.mil/footer?content_id=279104

Wheeler, A. R., & Torres Stone, R. A. (2010). Exploring stress and coping strategies among National Guard spouses during times of deployment: A research note. *Armed Forces and Society*, *36*, 545–557. 10.1177/0095327X09344066

Whisman, M. A., & Beach, S. R. H. (2010). Models for understanding interpersonal processes and relationships in anxiety disorders. In J. G.Beck (Ed.), *Interpersonal processes in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 9–35). Washington, DC: American Psychological Association. 10.1037/12084-001

Wilcox, S. L., OH, H., Redmond, S. A., Chicas, J., Hassan, A. M., Lee, P. J., & Ell, K. (2015). A scope of the problem: Post-deployment reintegration challenges in a National Guard Unit. *Work: Journal of Prevention, Assessment & Rehabilitation*, *50*, 73–83.

Zinbarg, R. E., Lee, J. E., & Yoon, K. L. (2007). Dyadic predictors of outcome in a cognitive-behavioral program for patients with generalized anxiety disorder in committed relationships: A “spoonful of sugar” and a dose of non-hostile criticism may help. *Behaviour Research and Therapy*, *45*, 699–713. 10.1016/j.brat.2006.06.005

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