A relational turbulence model of military service members' relational communication during reintegration

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A Relational Turbulence Model of Military Service Members’
Relational Communication during Reintegration

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Abstract

This study employed the relational turbulence model to examine features of relational communication and dimensions of relational inferences during the postdeployment transition for military service members. We surveyed 220 military personnel who had recently returned home from deployment about their romantic relationship. Results of a structural equation model indicated that relational uncertainty and interference from partners predicted openness and aggressiveness, which in turn predicted appraisals of affiliation and dominance in the relationship. The results imply that the transition from deployment to reunion corresponds with upheaval in how service members communicate with a romantic partner and make judgments about their relationship.

*Keywords*: affiliation, dominance, military personnel, relational communication, relational turbulence model, relational uncertainty
A Relational Turbulence Model of Military Service Members’

Relational Communication During Reintegration

Relationship transitions can create upheaval for romantic couples when disruptions to the status quo require new patterns of interaction (Solomon, Weber, & Steuber, 2010). The relational turbulence model seeks to identify relationship characteristics that may account for reactivity during times of transition within romantic relationships (Solomon & Knobloch, 2004; Solomon & Theiss, 2008; Solomon et al., 2010). Relational turbulence refers to intense emotional, cognitive, and communicative responses to relationship circumstances. The relational turbulence model has been applied to a variety of relationship transitions, including the transition from casual to serious involvement in dating relationships (Solomon & Knobloch, 2004), the diagnosis of breast cancer (Solomon et al., 2010) and infertility (Stueber & Solomon, 2012), the transition to parenthood (Theiss, Estlein, & Weber, in press), and the transition to the empty nest in marriage (Nagy & Theiss, in press). Whereas those applications of the model consider situations in which romantic partners are living in relatively close geographic proximity, the model also may illuminate reunions following long-distance separation. This study evaluates the relational turbulence model during reintegration following a military deployment as a transition from long-distance separation to reunion.

The conditions of military deployment can promote a variety of communication behaviors that are adaptive during separation but impede intimacy when service members are reunited with a romantic partner (Bowling & Sherman, 2008). For example, romantic partners who are separated during wartime tend to communicate in ways that mitigate conflict, circumvent distress, express affection, offer reassurance, and convey positivity (Joseph & Afifi, 2010; Merolla, 2010). After avoiding conflicts and upsetting topics during deployment, military
couples may struggle to balance openness and privacy during reunion (Sahlstein, Maguire, & Timmerman, 2009). Moreover, service members may continue to be psychologically and communicatively distant from their romantic partner during reunion, even though they are physically present (Weins & Boss, 2006). In turn, military couples who struggle to communicate during reintegration may experience emotional numbness, insecurity, and difficulty reconnecting (Peebles-Kleiger & Kleiger, 1994; Wood, Scarville, & Gravino, 1995). Thus, understanding how military personnel engage in relational communication during reintegration can be important for helping military couples negotiate the transition effectively.

This study examines features of relational communication as markers of relational turbulence during reintegration that predict the inferences people make about their relationship. Our first goal is to examine how the mechanisms of turbulence posed by the model may predict features of relational messages upon reunion following deployment. In particular, we focus on openness and aggressiveness as two features of relational messages that are central to the communication of service members during reunion (Clark & Messer, 2006; Joseph & Afifi, 2010; Sahlstein et al., 2009). Our second goal is to document how openness and aggressiveness, in turn, correspond with the inferences returning service members make about their relationship. Specifically, we consider affiliation and dominance as two dimensions of relational judgments that service members may use to interpret relational messages (Dillard, Solomon, & Samp, 1996). Given that service members may struggle to renegotiate their relationship roles and routines following deployment (Bowling & Sherman, 2008; Gambardella, 2008), understanding how returning military personnel communicate with a romantic partner and interpret relational messages may be instrumental in fostering dyadic well-being during reintegration.
Openness and Aggressiveness as Markers of Relational Turbulence

Relational communication is constituted in the verbal and nonverbal features of everyday interactions that implicitly convey information about the nature of a relationship (Baxter, 2004; Burgoon & Hale, 1984; Foley & Duck, 2006). Two features of relational communication may be especially relevant to military personnel during reintegration: openness and aggressiveness.

*Openness* refers to communication in which partners freely exchange information about a range of topics (Baxter & Montgomery, 1996). Tensions between the desire for openness and the desire for privacy are often present in romantic relationships (Baxter & Erbert, 1999), but these tensions may be amplified for military personnel during reintegration (Frisby, Byrnes, Mansson, Booth-Butterfield, & Birmingham, 2011; Sahlstein et al., 2009). For example, service members may fear that communicating openly with their partner will breach classified information about their mission, reveal hurtful information about events that transpired during deployment, or uncover undesirable information about the future of their relationship (Bowling & Sherman, 2008; Frisby et al., 2011; Sahlstein et al., 2009). *Aggressiveness* refers to communication marked by hostility, ridicule, and combativeness (Infante & Rancer, 1996). Whereas aggressive communication may serve instrumental purposes during combat, service members who struggle to temper their aggression during reintegration are likely to have trouble relating. Indeed, aggression corresponds with decreased relationship satisfaction (Sabourin, Infante, & Rudd, 1993) and more physical violence (Infante, Chandler, & Rudd, 1989) among civilians. Thus, understanding the relationship dynamics during reintegration that undermine openness and promote aggressiveness may help service members develop more satisfying relationships.

We turn to the relational turbulence model to identify relationship characteristics that may predict service members’ relational communication behavior upon reunion following...
deployment. The model highlights relational uncertainty and interference from partners as two mechanisms that generate relational turbulence (Solomon & Knobloch, 2004; Solomon & Theiss, 2008; Solomon et al., 2010). Tests of the relational turbulence model have highlighted emotional, cognitive, and communicative markers of turbulence. In this study, we theorize about openness and aggressiveness as communicative markers of relational turbulence that are predicted by the mechanisms in the model and, in turn, correspond with relational inferences of affiliation and dominance. In the following sections, we define the mechanisms of relational turbulence and hypothesize about their potential to predict openness and aggressiveness.

**Relational uncertainty as a predictor of openness and aggressiveness.** The first mechanism in the relational turbulence model is *relational uncertainty*, which refers to the degree of confidence people have in their perceptions of a relationship (Knobloch & Solomon, 1999). Relational uncertainty stems from three interrelated sources: (a) *self uncertainty* refers to questions people have about their own involvement in the relationship; (b) *partner uncertainty* refers to questions people have about a partner’s involvement in the relationship; and (c) *relationship uncertainty* refers to questions people have about the state of the relationship itself.

Returning service members are likely to experience relational uncertainty during the postdeployment transition. For example, military couples may be unsure how to manage their emotions, how much information to share about deployment experiences, and how to coordinate daily routines (Bowling & Sherman, 2008; Gambardella, 2008; Joseph & Afifi, 2010; Sahlstein et al., 2009). Knobloch and Theiss (2012) surveyed military personnel and at-home partners about the questions they experience during reintegration and identified seven issues of relational uncertainty, including questions about commitment, ability to reintegrate, handling household
stress, personality changes, sex and infidelity, the service member’s health, and communication. This research suggests that relational uncertainty arises during the postdeployment transition.

According to the relational turbulence model, relational uncertainty promotes a variety of extreme communication behaviors (Solomon & Knobloch, 2004). On one hand, relational uncertainty coincides with decreased openness. For example, relational uncertainty predicts less relationship talk (Knobloch & Theiss, 2011b), more indirect relationship talk (Baxter & Wilmot, 1985), and increased privacy about issues that may threaten the partner or the relationship (Afifi & Guerrero, 2000; Vangelisti, Caughlin, & Timmerman, 2001). In addition, relational uncertainty corresponds with increased topic avoidance (e.g., Knobloch & Carpenter-Theune, 2004; Knobloch & Theiss, 2011b), as well as indirect communication about irritations (Theiss & Solomon, 2006b), jealousy (Theiss & Solomon, 2006a), and sexual intimacy (Theiss, 2011). On the other hand, relational uncertainty is also associated with communication marked by assertiveness and negativity. Self uncertainty, in particular, is associated with more direct confrontations about irritating partner behavior (Theiss & Solomon, 2006b) and less constructive conflict management (Theiss & Knobloch, in press). In addition, partner uncertainty predicts increased criticism and demandingness during conflict interaction (Nagy & Theiss, 2012). Taken together, this evidence suggests that returning service members experiencing relational uncertainty will report that their own and their partner’s communication is less open and more aggressive. Thus, we hypothesize that the relational uncertainty of military personnel is negatively associated with openness (H1) and positively associated with aggressiveness (H2) for the self and the partner.

Interference from partners as a predictor of openness and aggressiveness. The second mechanism proposed by the relational turbulence model is interference from partners,
which refers to the extent to which partners impede one another’s goals. Interference from partners occurs when one person’s routine is interrupted by the other (Berscheid, 1983) and may emerge during times of transition when well-established roles and routines are in flux (Solomon et al., 2010). Indeed, a change to relationship circumstances can disrupt the coordinated routines that couples previously enjoyed. Although attempts to re-establish functional patterns in the relationship may be disruptive initially, eventually couples who survive relational transitions learn to coordinate their actions so that they facilitate rather than hinder one another’s goals.

Returning service members are likely to encounter interference from partners during reintegration. A main challenge for military couples upon reunion is renegotiating their roles and their daily routines (Bowling & Sherman, 2008). Returning service members may struggle to fit in with their family following a prolonged absence and could be overwhelmed by the number of household tasks they are expected to perform upon their return (Bowling & Sherman, 2008; Sayers, Farrow, Ross, & Oslin, 2009; Wood et al., 1995). At-home partners may be reluctant to relinquish their autonomy and to share control of the household with returning service members (Bowling & Sherman, 2008; Gambardella, 2008). In addition, service members may struggle to find the right balance between autonomy and connection with their spouse as they attempt to renegotiate their interdependence (Sahlstein et al., 2009). Knobloch and Theiss (2012) identified eight sources of interference among military couples during reintegration, including hindrance in daily routines, household chores, surrendering control, feeling smothered, parenting, partner differences, social lives, and together time. Thus, interference from partners may surface during the postdeployment transition.

The relational turbulence model argues that interference from partners generates extreme communication behaviors (Solomon & Knobloch, 2004). For example, some studies suggest that
interference from partners may correspond with less openness. Among recently reunited military 
couples, interference from partners is associated with fewer efforts to maintain the relationship 
through assurances (Theiss & Knobloch, in press). Interference from partners also corresponds 
with increased topic avoidance, indirectness, and withdrawal during conflict among civilian 
couples (Nagy & Theiss, 2012). In contrast, other studies highlight a tendency for more assertive 
and aggressive communication under conditions of partner interference. Among civilian couples, 
interference from partners predicts more disaffiliative messages (Knobloch, 2008) and is 
associated with increased criticism during conflict interaction (Nagy & Theiss, 2012). Recently 
reunited military couples are unlikely to enact constructive conflict tactics when experiencing 
interference from partners (Theiss & Knobloch, in press). These results imply that interference 
from partners coincides with less openness and more aggressiveness in the communication 
behaviors of both the self and the partner. Thus, we predict that interference from partners 
experienced by military personnel is negatively associated with openness (H3) and positively 
associated with aggressiveness (H4) in communication for both the self and the partner.

Relational Communication Features as Predictors of Affiliation and Dominance Judgments

Up to this point, we have focused on the ways in which relational uncertainty and 
interference from partners predict communicative markers of relational turbulence during 
reintegration. In this section, we consider how relational communication, in turn, may shape the 
inferences that people make about their relationship. Although a variety of constructs 
characterize people’s relational communication (Burgoon & Hale, 1984), most relational 
judgments can be organized under two broad dimensions: affiliation/disaffiliation and 
dominance/submission (Dillard et al., 1996). Affiliation/Disaffiliation refers to the regard in 
which one person is held by another and reflects liking and attraction. Dominance/Submission
reflects the extent to which partners attempt to regulate or control one another. We attend to affiliation and dominance as dimensions of relational inferences that may arise from the openness and aggressiveness of people’s communication.

First, openness in relational communication is likely to promote relational inferences of affiliation. Disclosure and openness are hallmarks of close, intimate relationships (Altman & Taylor, 1973). Indeed, research suggests that messages imbued with disclosure and inclusion tend to increase perceptions of affiliation (Solomon, Dillard, & Anderson, 2002). For military couples, in particular, becoming comfortable sharing information with a romantic partner after deployment is a first step in re-establishing a relationship that is appraised in terms of intimacy, affiliation, and liking (Bowling & Sherman, 2008). A partner’s openness should facilitate appraisals of affiliation based on the assumption that individuals share information with people they regard positively; therefore, a partner’s openness should make individuals feel liked and admired. Similarly, one’s own openness is likely to contribute to perceptions of affiliation because it reflects a degree of comfort with one’s partner. Thus, we expect that one’s own openness and perceptions of a partner’s openness predict perceptions of affiliation for returning service members. Accordingly, we hypothesize that self openness and partner openness are positively associated with the perceived affiliativeness in a relationship (H5).

Second, relational communication characterized by aggressiveness is likely to correspond with appraisals of dominance in the relationship. Research indicates that some service members may be prone to irritability and angry outbursts following deployment (Bowling & Sherman, 2008). At the extreme, service members who are overwhelmed by anger may attempt to assert control in intimate relationships, sometimes resulting in domestic abuse (Clark & Messer, 2006). Irritability, anger, and control are aggressive communication behaviors that may be perceived as
dominating (Dillard et al., 1996). Given that romantic partners are interdependent and tend to mirror one another’s communication behaviors, aggressiveness on the part of the service member and the partner are likely to contribute to a climate of perceived dominance. In other words, aggressive communication from both partners is likely to reflect an underlying struggle for power that governs appraisals of dominance. Accordingly, we predict that self aggressiveness and partner aggressiveness are positively associated with the perceived dominance in the relationship ($H6$).

One final issue is whether relational uncertainty and interference from partners predict appraisals of affiliation and dominance directly, or if their associations with these relational inferences are mediated by features of relational communication. Prior research has shown that the mechanisms in the turbulence model are directly associated with perceptions of affiliation and dominance (McLaren, Solomon, & Priem, 2012). In addition, relational uncertainty and partner interference have direct effects on various other cognitive appraisals, such as perceptions of turmoil (Knobloch & Theiss, 2010), appraisals of hurtful messages (Theiss, Knobloch, Checton, & Magsamen-Conrad, 2009), and judgments of the severity of irritations (Theiss & Knobloch, 2009), which are similar to the relational inferences of affiliation and dominance. Alternatively, the mechanisms of relational turbulence may only be associated with appraisals of affiliation and dominance through the effects they have on relational communication. In general, relational inferences are grounded in the tone and content of relational messages (Dillard et al., 1996). Moreover, a recent study documented that indirect communication mediates the associations between the mechanisms of relational turbulence and appraisals of sexual satisfaction (Theiss, 2011). Thus, there are theoretical and empirical precedents for anticipating mediation. Accordingly, we advance a research question to query whether relational uncertainty
and partner interference are indirectly linked with perceptions of affiliation and dominance via their association with openness and aggressiveness. In other words, do self and partner openness and aggressiveness mediate the associations that relational uncertainty and interference from partners share with appraisals of affiliation and dominance (RQ1)? Our hypotheses and research question are summarized in Figure 1.

**Method**

To evaluate our logic, we surveyed United States service members who were in a romantic relationship and returned home from deployment within the past 6 months. Participants were recruited by (a) contacting family readiness officers and chaplains who agreed to announce the study to military personnel across the country, (b) distributing flyers at reintegration workshops, and (c) advertising in online forums for military families. Data were collected through an online survey from March to July 2010.

The sample consisted of 220 service members (185 males, 35 females) residing in 27 states. Service members were affiliated with the U.S. National Guard (64%), the Army (28%), the Air Force (3%), the Navy (3%), and the Marines (2%). The majority of the sample was active duty military personnel (54%), with others in the reserves (38%), inactive ready reserves (2%), discharged (2%), retired (1%), or other (3%). Service members were deployed for an average of 11.08 months (range = 1 month to 24 months, SD = 2.88 months) and had been home for an average of 3.04 months (range = less than 1 week to 6 months, SD = 1.83 months). The majority of the sample (57%) had completed multiple deployments.

The average age of participants was 32.69 years (SD = 8.45 years; range = 18 to 57 years). The majority of participants were Caucasian (80%), with others being African American (6%), Hispanic (5%), Asian (3%), Native American (3%), and other (3%). Most participants
were married (83%), but others were casually dating (3%), seriously dating (11%), or engaged to be married (3%). The average length of romantic relationships was 8.06 years ($SD = 6.38$ years).

Most participants were cohabiting with their romantic partner (89%) and were parents (59%). Individuals from dual-career military couples in which both partners returned home from deployment during the past 6 months comprised 7% of the sample.

Participants completed an online questionnaire in which they reported on demographic information, military status, relational uncertainty, interference from partners, their own and their partner’s openness and aggressiveness, and perceptions of affiliation and dominance. Upon finishing the questionnaire, respondents were invited to e-mail a survey completion code and their residential mailing address to the researchers to receive a $15 gift card from a national retailer.

**Measures.** The variables in this study were operationalized using closed-ended items. All multi-item scales were subjected to confirmatory factor analysis to ensure that they met the statistical criteria of internal consistency and parallelism (Hunter & Gerbing, 1982). The criteria for a good fitting factor structure were $\chi^2/df < 3.0$, $CFI > .90$, and $RMSEA < .10$ (Kline, 2010). Then, composite scores were constructed by averaging the responses to the individual items.

**Relational uncertainty.** The three sources of relational uncertainty were measured using brief versions of Knobloch and Solomon’s (1999) scale. Participants responded to items prefaced by the stem “How certain are you about . . . ?” (1 = *completely or almost completely uncertain*, 6 = *completely or almost completely certain*). Items were reverse-coded so that higher scores reflected more relational uncertainty. Four items measured *self uncertainty* (e.g., how you feel about your relationship; how important your relationship is to you; $M = 1.88$, $SD = 1.25$, $\alpha = .96$). Four items assessed *partner uncertainty* (e.g., how your partner feels about your
relationship; how important your relationship is to your partner; \( M = 1.91, SD = 1.26, \alpha = .96 \).

Four items measured relationship uncertainty (e.g., the current status of your relationship; how you can or cannot behave around your partner; \( M = 2.00, SD = 1.28, \alpha = .95 \)).

**Interference from partners.** We used items from Solomon and Knobloch (2001) to assess interference from partners. Participants indicated their level of agreement (1 = strongly disagree, 6 = strongly agree) with six items (e.g., my partner interferes with the plans I make; my partner causes me to waste time; \( M = 1.81, SD = 1.02, \alpha = .92 \)).

**Self and partner openness and aggressiveness.** We wrote items to measure openness and aggressiveness in communication behaviors for self and partner. Participants indicated their agreement (1 = strongly disagree, 7 = strongly agree) with statements preceded by the stem, “During our normal conversations in the past week, I have [my partner has]…” followed by randomly ordered items to measure openness and aggressiveness. Participants rated their own behavior first, and then they rated their partner’s behavior. Four items measured openness for both self and partner: (a) talked with my partner [me] about important feelings I [he/she] had, (b) told my partner [me] private or personal things about me [him/her], (c) been very open with my partner [me], and (d) freely disclosed my [his/her] opinions to my partner [me] (Self: \( M = 5.05, SD = 1.61, \alpha = .89 \); Partner: \( M = 5.30, SD = 1.54, \alpha = .90 \)). Four items measured aggressiveness for self and partner: (a) been aggressive in my [his/her] communication; (b) been disagreeable with my partner [me], (c) tried to dominate my partner [me], and (d) been argumentative with my partner [me] (Self: \( M = 3.05, SD = 1.60, \alpha = .85 \); Partner: \( M = 2.91, SD = 1.66, \alpha = .87 \)).

**Affiliation and dominance.** Scales developed by Dillard et al. (1996) were used to evaluate perceptions of affiliation and dominance in relational messages. Participants indicated their agreement (1 = strongly disagree, 7 = strongly agree) with items following the stem
“During normal conversations in the past week, my partner…” Four items measured affiliation: (a) displayed attraction to me, (b) displayed liking for me, (c) was affectionate towards me, and (d) showed positive regard for me ($M = 5.67, SD = 1.51, \alpha = .93$). Two items measured dominance: (a) was controlling, and (b) was dominating ($M = 2.44, SD = 1.67, \alpha = .94$).

Results

Preliminary analyses. As a starting point, we conducted independent samples $t$-tests to compare means on all of our variables for males vs. females, married vs. unmarried partners, cohabitating vs. noncohabitating individuals, and parents vs. nonparents. Results indicated significant differences between males and females on self uncertainty ($t(218) = 2.69, p = .010$), such that women ($M = 2.52, SD = 1.60$) reported more self uncertainty than men ($M = 1.76, SD = 1.13$). In addition, mean differences were found between married and unmarried partners on self uncertainty ($t(218) = -4.60, p = .001$), partner uncertainty ($t(218) = -3.06, p = .002$), relationship uncertainty ($t(218) = -2.86, p = .005$), and partner’s openness ($t(218) = 2.37, p = .019$), such that married service members experienced less relational uncertainty and perceived more openness from their partner ($M_{su} = 1.71, SD_{su} = 1.09; M_{pu} = 1.79, SD_{pu} = 1.17; M_{ru} = 1.88, SD_{ru} = 1.20; M_{po} = 5.41, SD_{po} = 1.51$) than did unmarried service members ($M_{su} = 2.68, SD_{su} = 1.68; M_{pu} = 2.47, SD_{pu} = 1.53; M_{ru} = 2.53, SD_{ru} = 1.53; M_{po} = 4.76, SD_{po} = 1.63$). Mean differences were also apparent between cohabiting and noncohabitating service members on self uncertainty ($t(218) = 4.40, p = .001$), partner uncertainty ($t(218) = 3.15, p = .002$), relationship uncertainty ($t(218) = 3.01, p = .003$), partner openness ($t(218) = -2.03, p = .04$), and affiliativeness ($t(218) = -2.08, p = .04$), such that service members who were not cohabitating reported more relational uncertainty and less affiliation ($M_{su} = 2.90, SD_{su} = 1.75; M_{pu} = 2.65, SD_{pu} = 1.74; M_{ru} = 2.73, SD_{ru} = 1.72; M_{aff} = 5.07, SD_{aff} = 2.00; M_{po} = 4.70, SD_{po} = 1.71$) than cohabiting service members.
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(Msu = 1.76, SDsu = 1.11; Mp = 1.81, SDpu = 1.16; Mr = 1.91, SDru = 1.19; Maff = 5.75, SDaff = 1.43; Mpo = 5.37, SDpo = 1.51). Finally, parents (M = 1.72, SD = 1.11) experienced less self uncertainty than nonparents (M = 2.11, SD = 1.39), t (218) = -2.28, p = .024.

We also conducted independent sample t-tests to compare means by features of deployment. Results revealed that participants with an at home partner experienced less interference from partners (M = 1.77, SD = 0.98) and more openness in their partner (M = 5.37, SD = 1.49) than participants from a dual-deployment couple (Mint = 2.33, SDint = 1.38; Mopen = 4.39, SDopen = 1.92), int (218) = -2.19, p = .03; topen (218) = 2.49, p = .013. We found no mean difference in any of our variables for (a) military branch, (b) military status, (c) completion of one versus multiple deployments, or (d) participation in a postdeployment program for couples.

As a final step in our preliminary analyses, we evaluated the bivariate correlations among all of our variables (see Table). Results indicated that the three sources of relational uncertainty and interference from partners were negatively associated with affiliation and openness for both self and partner, and positively associated with dominance and aggressiveness for both self and partner. Dominance was negatively associated with openness and positively associated with aggressiveness for both self and partner. In contrast, affiliation was positively associated with openness and negatively associated with aggressiveness for both self and partner.4

Substantive analyses. We used structural equation modeling (SEM; AMOS version 7.0) to evaluate our hypothesized model. Following procedures for a total aggregation model, we used parcels as single-item indicators of the latent variables. The error variance of each parcel was set to (1-α)(σ) to account for measurement error in our scales (Bollen, 1989).

Because mean differences emerged in many of our variables in the preliminary analyses, we controlled for the effects of respondent sex, marital status, cohabitation vs. noncohabitation,
parents vs. nonparents, and dual-deployment vs. single-deployment couples. To control for these variables in the SEM, we began by regressing them as a set onto each of the substantive variables and saving the residuals, which partials out the effects of the control variables on each of the substantive variables. Then, we used the residual variables to construct the SEM. Thus, the resulting path coefficients for the model represent the association between two variables after partialling out the effects of the control variables.

Results indicated that the predicted model did not fit the data ($\chi^2/df = 5.45$, $CFI = .92$, $RMSEA = .14$). To obtain a good fitting model, we added two theoretically reasonable paths based on modification indices. First, we added a path linking relationship uncertainty and interference from partners, which is consistent with the relational turbulence model’s logic that the mechanisms co-occur during transitions. Second, we added a path linking affiliation and dominance, which is consistent with the relational framing theory’s assumption that appraisals of affiliation and dominance are correlated (see Figure 2). Adding these paths resulted in a good fitting model ($\chi^2/df = 2.59$, $CFI = .97$, $RMSEA = .09$). With regard to our hypotheses, relational uncertainty and interference from partners were both negatively associated with openness ($H1$, $H3$) and positively associated with aggressiveness ($H2$, $H4$) for both the self and the partner. In addition, self openness and partner openness were both positively associated with affiliation ($H5$). As predicted, self aggressiveness and partner aggressiveness were both positively associated with dominance ($H6$). Thus, all of our hypotheses were supported.

**Test of mediation.** As a final step, we evaluated openness and aggressiveness as mediators of the associations between the mechanisms of relational turbulence and appraisals of affiliation and dominance ($RQ1$). Bootstrapping procedures were used to evaluate the indirect effects (Kline, 2010). The analyses employed 2,000 bootstrap samples with 95% bias corrected
percentile method confidence intervals. Results revealed indirect effects for relationship uncertainty on affiliation ($\beta = -0.56, p = 0.001, SE = 0.17, CI = -0.65$ to $-0.45$), relationship uncertainty on dominance ($\beta = 0.43, p = 0.001, SE = 0.15, CI = 0.34$ to $0.53$), interference from partners on affiliation ($\beta = -0.18, p = 0.05, SE = 0.10, CI = -0.35$ to $-0.02$), and interference from partners on dominance ($\beta = 0.45, p = 0.001, SE = 0.20, CI = 0.32$ to $0.58$). Thus, the associations between the mechanisms of relational turbulence and perceptions of affiliation and dominance were fully mediated by openness and aggressiveness.

**Discussion**

Relational communication provides a number of cues to help romantic partners make inferences about the status of their relationship (Baxter, 2004). This study drew on the logic of the relational turbulence model (Solomon & Knobloch, 2004) to identify relationship characteristics that may predict features of relational communication, which in turn, may shape service members’ perceptions of affiliation and dominance. Our results imply that relational uncertainty and interference from partners may make it more difficult for service members to produce positive relational messages and draw constructive inferences. In this section, we discuss the theoretical and practical implications of our findings, highlight the strengths and limitations of this investigation, and make recommendations for future research.

**Theoretical implications.** This study documents openness and aggressiveness as two features of relational communication that are predicted by the mechanisms of relational turbulence. The model has had success predicting emotional (Knobloch & Theiss, 2010; Theiss et al., 2009; Theiss & Solomon, 2006a) and cognitive (Knobloch & Theiss, 2010; Theiss & Solomon, 2006b) manifestations of turbulence, but communicative manifestations of turbulence have been more elusive. Several studies have linked relational uncertainty with avoidance and
indirectness (Knobloch & Carpenter-Theune, 2004; Knobloch & Theiss, 2011b; Theiss & Solomon, 2006a, 2006b), but relatively fewer studies have documented communicative outcomes of interference from partners (but see Knobloch, 2008). Our study demonstrates that openness and aggressiveness are sensitive to the mechanisms of relational turbulence. Thus, this study breaks new ground by extending the communicative scope of the model.

Our results also advance the relational turbulence model by illuminating the intricacies between communication behavior and cognitive appraisals. Prior tests of the relational turbulence have focused on a variety of distinct communicative and cognitive markers of relational turbulence (Knobloch & Theiss, 2011b; Theiss & Knobloch, 2009; Theiss et al., 2009; Theiss & Solomon, 2006a, 2006b), but this study implies a more intricate relationship between communication behaviors and cognitions. Specifically, this study explored the possibility that features of relational communication are markers of relational turbulence that mediate the associations between the mechanisms of relational turbulence and appraisals of relational meaning. Our findings situate relational communication at the center of people’s experiences of relational turbulence and suggest that communication behavior may be a conduit through which the mechanisms of relational turbulence influence outcomes in the relationship. Although work is left to be done to fully integrate communication processes into the model’s logic, our data suggest utility in positioning communication behavior as a mediating pathway.

An unexpected aspect of our findings involves the salience of relational uncertainty and interference from partners during reunion following deployment. Although the relational turbulence model argues that relational uncertainty and interference from partners are relevant to times of transition (e.g., Solomon & Knobloch, 2004; Solomon & Theiss, 2008; Solomon et al., 2010), the means for both mechanisms were below the midpoint of their scales. On the surface, it
would seem that relational uncertainty and interference from partners are not especially prominent upon homecoming following deployment, but we suspect the means may be an artifact of our convenience sampling strategy. Notably, prior tests of the model have documented similar means in studies of both dating relationships (e.g., Knobloch & Theiss, 2010; Solomon & Knobloch, 2004; Theiss & Solomon, 2006a, 2006b) and long-term partnerships (Steuber & Solomon, 2012; Theiss, 2011) during diverse types of transitions (Solomon et al., 2010; Steuber & Solomon, 2012; Theiss et al., in press). Although the magnitude of relational uncertainty and interference may be modest in our study, research indicates that even small fluctuations in these variables have negative repercussions within romantic relationships (e.g., Theiss et al., in press; Theiss & Solomon, 2008). Future research should consider whether changes in the mechanisms over time are more meaningful predictors of relational turbulence than cross-sectional snapshots.

**Implications for military personnel during reintegration.** Our findings have practical implications for helping returning service members bolster their romantic relationships following deployment. At a broad level, our study highlights the importance of everyday talk and routine conversations for promoting positive relational inferences. Along these lines, one study found that military partners rate everyday talk as more important for their relationship than do civilian partners (Frisby et al., 2011). Perhaps civilian partners who have not experienced the stressors of deployment take their mundane conversations for granted, whereas military couples embrace these interactions as a return to normalcy upon reunion (Doyle & Peterson, 2005; Frisby et al., 2011). Our results also imply that the impact of everyday talk within military relationships may depend on the tenor of the conversation. Although routine talk is central to relational maintenance (Merolla, 2010), conversations marked by a lack of openness or an abundance of aggressiveness are unlikely to produce a constructive dyadic climate. Moreover, the dynamics of
the postdeployment transition are ripe for increased topic avoidance (Joseph & Afifi, 2010) and aggression (Clark & Messer, 2006), which are likely to encourage more negative appraisals of the relationship. Thus, educational programs designed to help returning service members reconnect with their romantic partner should encourage military couples to be cognizant of the tone those interactions take. Simply encouraging more everyday talk without considering the content of those conversations may have negative consequences for military couples.

Our results also point to the negotiation of openness as a feature of relational communication that may require attention during reintegration. During deployment, withholding information and limiting self-disclosure can be protective measures that keep service members focused on their mission and prevent unnecessary worry for their loved ones back at home (Joseph & Afifi, 2010; Sahlstein et al., 2009). Thus, determining the appropriate amount of openness upon reunion can be a daunting task for military couples (Bowling & Sherman, 2008; Sahlstein et al., 2009), and one that is further complicated by the relational uncertainty and interference from partners that may accompany reintegration (Knobloch & Theiss, 2012). Service members may engage in emotional numbness or constriction as a way of coping with deployment, but releasing that constriction is an important step for re-establishing emotional attachment, trust, and intimacy with a romantic partner upon reunion (Pincus, House, Christenson, & Adler, 2001; Stafford & Grady, 2003). Service members who withdraw as a coping mechanism following deployment are likely to experience difficulty communicating openly with romantic partners and family members (Sherman, Zanotti, & Jones, 2005). Thus, service members may benefit from reintegration programs that help them shift from the avoidance strategies that were constructive during deployment into more transparent communication behavior suitable for reconnecting with a partner.
Another implication is that some service members may need to temper aggressive communication patterns to facilitate a smooth transition from deployment to reintegration. Although anger and hostility are adaptive emotions in combat that help service members complete their mission, learning how to turn off aggression and experience the spectrum of emotions that were suppressed during deployment can be a challenge during reintegration (Bowling & Sherman, 2008; Clark & Messer, 2006). Our results show that aggressive communication is associated with perceptions of dominance in romantic relationships, which is unlikely to facilitate connection between partners. Accordingly, at-home partners should be prepared for the possibility that the service member may return from deployment with a shorter temper and more explosive reactions to conflict (Clark & Messer, 2006). Similarly, reintegration programs should emphasize coping strategies to help service members mitigate aggression.

One caveat for using the results of this study to help service members during reintegration, however, is that we did not assess long-term outcomes. Additional research is needed to understand how openness, aggressiveness, affiliation, and dominance may coalesce to shape the satisfaction, commitment, and interdependence of military couples. Research shows that increased openness and decreased aggressiveness are ingredients for more satisfying relationships (e.g., Caughlin & Afifi, 2004; Caughlin & Golish, 2002; Sabourin et al., 1993), but future studies should verify these links in military couples. Understanding how relational communication contributes to long-term dyadic outcomes would be useful for educating service members about the dynamics that foster dyadic growth and decline during homecoming.

**Strengths, limitations, and directions for future research.** This study has two notable strengths. First, the investigation was theory driven. Much of the existing research on how military couples manage deployment and reintegration is exploratory and descriptive (e.g.,
McNulty, 2005; Wiens & Boss, 2006; Wood et al., 1995). We nominate the relational turbulence model as one perspective that has utility for identifying the relationship characteristics, communication behaviors, and relational judgments that may complicate the postdeployment transition. Second, whereas most research on military couples has focused on civilian spouses (Sahlstein et al., 2009; Wiens & Boss, 2006; Wood et al., 1995), we recruited military personnel to offer a window into their experiences during reintegration.

Our investigation also has limitations. Most notable are the limitations related to sampling. First, given that participation was voluntary, we did not attract individuals who were in especially troubled relationships (i.e., the means for relational uncertainty and interference from partners were below the midpoint of their scales). Future research should (a) attempt to sample more distressed couples, or (b) employ a longitudinal design to document how the mechanisms of relational turbulence fluctuate throughout the deployment cycle. Second, the sample was relatively homogenous in terms of sex (84% male), race (80% Caucasian), and military branch (64% National Guard and 28% Army), which may have skewed the results. Third, we only surveyed returning service members and did not consider the experiences of at-home partners. Thus, we were unable to document interdependence within military couples. Fourth, although the sample was predominantly married individuals, several respondents reported on more casual dating relationships. We controlled for relationship status in our model, but future research should theorize about relationship status explicitly.

Some limitations stem from our measurement and design. First, our measures of openness and aggressiveness asked respondents to reflect on typical conversations in the previous week. Our intent was for participants to reflect on their routine interactions to assess relational communication in everyday talk, but some individuals may have overlooked interactions that
were unique but typical of their daily interaction patterns. In addition, participants may have focused on primarily positive interactions if they believe that positive communication between romantic partners is normative, even if negative interactions are more typical in their own relationship. Unfortunately, we did not assess whether interactions during the previous week were indeed typical for the couple. Another limitation is the cross-sectional design, which forfeits our ability to track changes as the transition from deployment to reintegration unfolds. Longitudinal studies are required to evaluate how military couples respond to relationship circumstances over time.

Future research can improve upon this study in three ways. First, we encourage work that extends the application of the relational turbulence model to the context of military deployments and reunions. Future applications of the model in this context should recruit couples grappling with more extensive relational uncertainty and interference from partners. Second, we look forward to dyadic investigations that are capable of documenting interdependence among returning service members and at-home partners. Understanding the ways both partners view relational communication can reveal gaps in their perceptions that need to be addressed (Solomon et al., 2002). Third, longitudinal data are vital for documenting how romantic partners communicate across the deployment cycle. Homecoming is certainly not the only time that couples may experience relational turbulence; thus, future research should consider the array of transitions that military couples navigate as they prepare for deployment, separate during deployment, and reunite following deployment (Pincus et al., 2001).
References


Notes

1 These data contributed to another study (Knobloch & Theiss, 2011a), but relational uncertainty and interference from partners are the only variables common to the manuscripts.

2 The three sources of relational uncertainty have conceptual overlap but are distinct constructs (Knobloch & Solomon, 1999). Despite sizable correlations among self, partner, and relationship uncertainty, the individual items did not form a unidimensional factor in a subsidiary factor analysis. Thus, we retained self, partner, and relationship uncertainty as separate variables.

3 The means for relational uncertainty and interference from partners were relatively low, but they are comparable to the means obtained in previous tests of the relational turbulence model. In fact, the means for the mechanisms of relational turbulence are consistently below the midpoint of the scale in studies of both committed romantic relationships (e.g., Steuber & Solomon, 2012; Theiss et al., in press; Theiss & Nagy, 2010) and developing dating relationships (e.g., Knobloch & Theiss, 2010, 2011; Solomon & Theiss, 2008; Theiss & Knobloch, 2009; Theiss et al., 2009; Theiss & Solomon, 2006a, 2006b). Taken together, these studies suggest that high levels of relational uncertainty and interference from partners are relatively uncommon among convenience samples. Nevertheless, tests of the model have shown that even limited amounts of relational uncertainty and interference from partners have negative consequences for romantic relationships (Theiss et al., in press; Theiss & Solomon, 2008).

4 Although aggressiveness and dominance as well as openness and affiliation share strong positive correlations, subsidiary factor analyses showed that the individual items did not form a unidimensional factor in either case. Thus, the features of relational communication and dimensions of relational inferences are empirically distinct.
Table

*Bivariate Correlations*

<table>
<thead>
<tr>
<th></th>
<th>V1</th>
<th>V2</th>
<th>V3</th>
<th>V4</th>
<th>V5</th>
<th>V6</th>
<th>V7</th>
<th>V8</th>
<th>V9</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1. Self Uncertainty</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>V2. Partner Uncertainty</td>
<td>.82 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3. Relationship Uncertainty</td>
<td>.91 ***</td>
<td>.88 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>V4. Partner Interference</td>
<td>.49 ***</td>
<td>.41 ***</td>
<td>.54 ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>V5. Affiliation</td>
<td>-.51 ***</td>
<td>-.62 ***</td>
<td>-.58 ***</td>
<td>.85 ***</td>
<td></td>
<td></td>
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<tr>
<td>V6. Dominance</td>
<td>.34 ***</td>
<td>.30 ***</td>
<td>.38 ***</td>
<td>-.19 **</td>
<td>-.20 **</td>
<td></td>
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</tr>
<tr>
<td>V7. Self Openness</td>
<td>-.53 ***</td>
<td>-.48 ***</td>
<td>-.56 ***</td>
<td>.54 ***</td>
<td>.47 ***</td>
<td>-.22 ***</td>
<td></td>
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<tr>
<td>V8. Self Aggressiveness</td>
<td>.31 ***</td>
<td>.32 ***</td>
<td>.41 ***</td>
<td>-.23 ***</td>
<td>-.23 ***</td>
<td>.48 ***</td>
<td>-.25 ***</td>
<td></td>
<td></td>
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<tr>
<td>V9. Partner Openness</td>
<td>-.45 ***</td>
<td>-.53 ***</td>
<td>-.51 ***</td>
<td>.76 ***</td>
<td>.67 ***</td>
<td>-.12</td>
<td>.61 ***</td>
<td>-.20 **</td>
<td></td>
</tr>
<tr>
<td>V10. Partner Aggressiveness</td>
<td>.33 ***</td>
<td>.32 ***</td>
<td>.41 ***</td>
<td>-.28 ***</td>
<td>-.28 ***</td>
<td>.71 ***</td>
<td>-.23 ***</td>
<td>.69 ***</td>
<td>-.18 **</td>
</tr>
</tbody>
</table>

** p < .01. *** p < .001
Figure 1

*Predicted Model*

- **Self Uncertainty**
  - + to Relationship Uncertainty
- **Partner Uncertainty**
  - + to Relationship Uncertainty
- **Relationship Uncertainty**
  - + to Self Openness
  - H1a to Self Openness
  - H1b to Partner Openness
- **Interference from Partners**
  - H2a to Relationship Uncertainty
  - H2b to Partner Openness
- **Self Openness**
  - + to Partner Openness
  - H3a to Relationship Uncertainty
  - H3b to Interference from Partners
- **Partner Openness**
  - H5a to Affiliation
  - H5b to Self Openness
- **Affiliation**
  - H6a to Dominance
  - H6b to Partner Aggressiveness
- **Dominance**
  - + to Partner Aggressiveness
  - H4a to Self Aggressiveness
  - H4b to Interference from Partners
- **Self Aggressiveness**
  - + to Partner Aggressiveness
- **Partner Aggressiveness**
  - + to Self Aggressiveness
Figure 2

*Final Model*

```
Self Uncertainty → .65***
―
Partner Uncertainty → .38***
―
Relationship Uncertainty → .56***
―
Interference from Partners → .29***
―
Affiliation → .26***
―
Dominance → .37***
―
Self Openness → .28***
―
Partner Openness → .50***
―
Affiliation → .70***
―
Self Aggressiveness → .36***
―
Partner Aggressiveness → .54***
―
Self Aggressiveness → .44***
―
Partner Aggressiveness → .50***
―
Affiliation → .31***
―
Dominance → .89***
```

*Note:*** indicates statistical significance levels.*