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Accommodation beyond the dyadic bubble: How people in romantic relationships converge and diverge with their social network(s)

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Abstract

Existing literature has sought to better understand the dynamics of how couples function within broader memberships of their individual and shared social networks. Initial explorations have suggested people alter their language and behaviors when talking to their significant others about their network (members), and vice-versa. Using communication accommodation theory as a backdrop, the present investigation sought to explore statistical relationships between network-based perceptions (i.e., levels of network-based relational uncertainty and network interdependence) and accommodating behaviors. Specifically, convergence and divergence when interacting with one's partner, one's network, and one's partner's network were explored as outcome variables. Cross-sectional structural equation modeling revealed that dyad-based perceptions (i.e., relationship satisfaction and perceived intimacy) correlated with partner-focused accommodation. Alternatively, network-based perceptions correlated with network-focused accommodation. Specifically, network interdependence related to accommodating behaviors with one's own and a partner's network. Network uncertainty shared significant associations with accommodating behaviors directed toward a partner's network. Results are discussed in terms of theoretical, conceptual, and methodological developments.

Extant research has demonstrated the role that interpersonal communication plays in both fledgling and established relationships (Colins & van Duren, 2006; Vaterlaus et al., 2021; Veksler & Meyer, 2014). Moreover, pivotal theories such as expectancy violations theory (Burgoon, 1978), the theory of motivated information management (Afifi & Weiner, 2006), and relational turbulence theory (Solomon et al., 2016) all aim to highlight the dynamism of interpersonal communication in these close relationships. These complex, ever-changing bonds remain a focus of scholars who study romantic relationships (e.g., Gomez-Lopez et al., 2019; Kusonoki & Barber, 2020).

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Often lost in the shuffle of exploring the complexities of dyadic communication is the dynamism that exists across social networks and the members in them. Specifically, the interactions and communication between a couple and the network(s) that surround that couple have received empirical, but little theoretical attention. For example, although it has been documented that network members intentionally attempt to alter the trajectory of one another's close relationships (Knobloch & Donovan-Kicken, 2006; Sprecher 2011), network-dyad communication phenomena are often considered an afterthought of extant communication theory.

The incorporation of network-based variables can add to the understanding of romantic relationships by highlighting the ways in which people perceive the communication between themselves, their partners, and the network(s) surrounding their partnerships. This study sought to build on existing research (e.g., Stein, 2020; Stein & Bennett, 2021, Stein et al., 2022) by exploring the ecological and construct validity of network-based perceptions in traditional dyadic theories. This project used communication accommodation theory (CAT; Giles, 2016) as a backdrop to explore the association(s) that network uncertainty (Stein et al., 2020) and network interdependence (Stein, 2018) share with the converging and diverging communication tendencies of people in romantic relationships. The overall goal of this study was to better understand how people in romantic relationships accommodate their communication in the presence of or when referring to their social networks and the members in them. To better couch the theoretical contribution of this effort, a summary of CAT is provided below.

Communication Accommodation Theory

Originally developed as a theory of accent use in bilingual interactions (Giles, 1973), CAT has since expanded to pertain to same-language interpersonal (Buller & Aune, 1992), health (Farzadina & Giles, 2015), and cross-cultural communication (Ayoko et al., 2002). Across these contexts, CAT primarily focuses on the ways in which people alter their verbal and nonverbal utterances to meet the needs of the relationship and/or context at hand.

Briefly, CAT has four main propositions (Giles, 2016). First, CAT assumes that individual interactions are a sum of both the players within the episode as well as the context (both social and historical) in which that episode occurs. For example, healthcare workers may modify their speech rate, inflection, and word choice during interactions with people who are culturally and linguistically diverse (Jones et al., 2018). These alterations may happen because the patients and providers do not speak the same language, and/or due to misinterpretations in the meaning of messages. Rusbult and colleagues (1991) further found that increased acts of communication accommodation correlated with increased investment, commitment, and satisfaction in romantic

relationships. Thus, the context at hand (i.e., healthcare-related interactions vs. romantic relationships) dictates the amount and impact of accommodating behaviors.

Second, CAT argues that interactions do not occur within a series of episodic vacuums, but rather that social statuses and identities are exchanged and assessed via accommodating behaviors. Indeed, delicate identity negotiations, like conversations surrounding financial independence between parents and their adult children, require nuance and detail (Serido et al., 2010). Alternatively, Honeycutt and Bryan (2011) relay several unique social scripts and schema that can and should be used during the courting and dating process. Thus, the role and subsequent accommodation tactics of one individual can shift based on, for example, the rolve of "adult child" versus "romantic partner". These identities are constructed and maintained through accommodating behaviors, according to CAT.

Third, and closely connected to CAT's second tenet, is that people tend to have a series of expectations regarding the appropriate amount of accommodation (or lack thereof) in each script or environment. Too much communication alteration (i.e., overaccommodation) or too little (i.e., underaccommodation) can violate the expectations of a given episode or relationship (Giles, 2016). Moreover, reluctant accommodation and non-accommodation are also commonly investigated behaviors. Overall, the variety of accommodation options produce a series of communicative and relational outcomes at both the quantitative and qualitative level (see Soliz & Giles, 2014).

Lastly, CAT proposes that accommodation occurs through intentional behaviors known as convergence (adapting one's behavior to resemble that of the environment) and divergence (altering behavior for the purpose of distinguishing oneself; Giles, 2016). Convergence can be observed in computer mediated interactions where people tend to match the frequency and duration of verbal messages (Riordan et al., 2013) and in romantic relationships, where converging behaviors tend to correlate positively with both satisfaction and perceived similarity in married couples (Gonzaga et al., 2007). Conversely, divergence can emerge in uniquely strained relationships, such as LGBTQ couples grappling with a lack of family acceptance (Dixon & Doughrety, 2014)

As described above, CAT offers an explanation as to both how and why people alter their communication based on environmental, relational, and individual needs. In the context of romantic relationships, this can mean one or both partners changing texting patterns early in the relationship (Adams et al., 2018), and it can also mean fostering group membership through rapport building (Bernhold & Giles, 2020). It is at this intersection of group membership and relationship maintenance that the present investigation sits. A person may choose specific acts of

convergence and/or divergence based on not only the communication patterns of their partner, but also those of either social network. For example, people tend to form expectations and norms regarding sex based off the communication that they have with their network members (Lefkowitz et al., 2004). Moreover, young adults tend to change their network makeup and network-based communication as they progress through transitional stages, including the turning points during relationship formation (Barry et al., 2016).

The above examples highlight the ways that people may engage in communication accommodation within their networks and/or partner based on the needs of all involved parties. Such alterations in communication patterns are one of many ways in which social networks (and the members in them) impact relationship trajectory, perceptions, and communication. Thus, CAT is an appropriate framework to view dyad-network communication patterns from. Below is a brief review of that literature.

Social Networks and Romantic Relationships

Traditionally, members of a social network are distinguished by a general mutual affinity coupled with the expectation of continued interaction (Hill & Dunbar, 2003). Surra (1988) defined the network in terms of density, overlap, size, clustering, and reachability, explaining that social networks foster interdependent relationships that are dyadic, triadic, quadratic, and so on. Extant literature has further parsed these early definitions. For example, Redhead and Power (2022) explain that humans exist within multiple overlapping, hierarchical networks, and that the makeup of these networks is continuously shifting. Dunbar (2016) illustrated that although online networks an range from 145-192 people, only about 27% of those connections are considered "genuine" relationships. These numbers tend to be inflated for young adults (e.g., college students), who rely more on social media and larger reference groups than their adolescent and middle-aged counterparts (Bruine de Bruin et al., 2020).

The validity of Redhead and Power's (2022) network structure is best illustrated through hierarchical mapping technique. (HMT; Antoniccui, 1986; Canaway et al., 2019). This methodology allows for people to articulate who the closest through least close people in their lives are, as distinguished by relational tiers (see Appendix A). Recent use of HMT designed to explore this phenomenon found that, on average, people identify a social network of about 15 people, not including their significant others, with the most prevalent (and intimate) relationships consisting of friends, best friends, and immediate family (Stein & Moliterno, 2022). When considered from the perspective of dyad-network interaction, it is likely these close network ties influence relational

perceptions and outcomes. One way that people in close relationships might integrate with the network(s) surrounding their partnerships is through accommodating behaviors, as discussed below.

Communication Accommodation and the Network

As CAT articulates, social identities and group memberships are routinely performed over the course of a relationship's lifespan (Giles, 2016). As such it stands to reason that people alter their communication patterns depending on the network(s) that they are interacting with. For example, people tend to adjust their word selection on social media platforms like Twitter (now X) based on the communities that they believe are most likely to see and interact with their posts (Tamburrini et al., 2015). Moreover, people shift their lexicon, paralanguage, and emotional expressions in active attempts to forge ingroup relationships (e.g., convergence) and/or distance themselves from outgroup members (e.g., divergence; Palomares et al., 2016).

Not only do individuals practice communication accommodation with network members, so too do couples. For example, relational dialectics theory explains that, externally, couples make decisions about when, how, and if they should reveal versus conceal the nature of their relationship to others. These decisions are made in tandem with choices regarding how to include versus exclude their relationship with the networks surrounding them (Baxter & Scharp, 2015). Both tensions are expressed in the form of accommodating behaviors, be they convergent or divergent. In other words, couples make both individual and dyadic decisions about how to converge/diverge with their network members. These decisions are largely guided by the pre-existing network-based expectations that one or both partners bring to their relationship. Such network-based perceptions are therefore in need of clarification and explanation.

Network-Based Perceptions and Accommodation

Growing literature has sought to document and quantify the network-based perceptions that can lead to (in)direct changes in relational perceptions and relationship-focused communication. One example is network uncertainty, which can be understood as the extent to which relational partners lack confidence in their networks' acceptance and facilitation of their relationship's growth (Stein et al., 2020). Network uncertainty is operationalized as the network uncertainty measure (NUM). The NUM has been shown to function within the predictions of relational turbulence theory, even when controlling for self, partner, and relationship uncertainty (Stein, 2021). The NUM has also shown a mediating effect within the tenets of the investment model (Stein & Bennett, 2021) as well as attachment theory (Stein et al., 2022). These initial efforts require a more communication-focused approach.

Additionally, given that social networks are interdependent in similar ways to dyadic relationships (Stein, 2018; Surra, 1988), measures of network interdependence may play a role in the accommodating behaviors that people engage in, either related to their partners, or to network ties. Drawing from existing dyadic research on dyadic interdependence (see Berscheid, 1983; Solomon & Knobloch, 2004), network interdependence is quantified as the extent to which people believe their network(s) interfere with and/or facilitate their everyday goals (Stein, 2018). Stein and Davidson (2019) demonstrated that perceptions of network interference indirectly predicted subsequent negative emotional experiences, through dyadic interdependence measures. Given that there is evidence of the interplay between interdependent groups and accommodating behaviors (Ayoko, 2002), it is possible that network interdependence factors in to accommodating behaviors within and surrounding romantic relationships.

Present Study

Broadly, the goal of this study was to explore how, if at all, network-based perceptions (i.e., network uncertainty and network interdependence) relate to the ways in which people in romantic relationships converge/diverge with each other and their network(s). Existing research has shown a conceptual relationship between experiences of uncertainty and accommodating tendencies (MacIntire, 2019). As such the empirical relationships between the NUM and measures of convergence/divergence warrant unpacking. One way to do this is by considering the contexts and episodes that are most likely to feature acts of accommodation. Because people are likely to converge and diverge in the presence of close social circles (Bernhold & Giles, 2021), uncertainties related to those groups are viable starting point.

Another reason why network uncertainty is likely to relate to converging/diverging behaviors is because the conceptual overlap between the two. For example, uncertainties regarding whether a partner's network will like and/or approve of a relationship (i.e., network acceptance; Stein et al., 2020), hinge on dyad-network interaction and, presumably, accommodation. Moreover, network uncertainties related to the outcomes of those interactions (e.g., jealousy, third party threats, and splitting time between the network and partner) may be the result of unsuccessful accommodating behaviors. For this reason, it is proposed that the NUM will be significantly associated with measures of both convergence and divergence, although the directionality of these associations is unknown[1]. This association is proposed for convergence/divergence related to one's partner, one's network, and one's partner's network.

[1] The reason that the directionality of these relationships are indeterminable is because both convergence and divergence are valence-neutral. Said differently, convergence and divergence can both be negative or positive, depending on the relationship and context at hand.

H1a: levels of network uncertainty will be significantly related to convergence and divergence pertaining to one's partner
H1b: levels of network uncertainty will be significantly related to convergence and divergence pertaining to one's own network
H1c: levels of network uncertainty will be significantly related to convergence and divergence pertaining to a partner's network

A second factor that can contribute to accommodating behaviors is perceptions of interdependence. At the dyadic level, interdependence and relational uncertainty are closely related (see Knobloch & Solomon, 2004; Solomon & Knobloch, 2004). At the network level, these associations persist (Stein et al. 2020). As Giles (2016) articulates, interdependence is often a key factor in determining the extent to which people choose to converge or diverge their communication. That said, much like the relationship between uncertainty and accommodation, the specific associations between perceptions of interference/facilitation from the network and convergence/divergence patterns is indistinguishable at this time.

H2a: levels of network interference and facilitation will be significantly related to levels convergence and divergence pertaining to one's partner
H2b: levels of network interference and facilitation will be significantly related to convergence and divergence pertaining to one's own network
H2c: levels of network interference and facilitation will be significantly related to convergence and divergence pertaining to a partner's network

Method

Data consisted of N = 254 adults (160 women, 94 men) at a large Southwestern university in the United States. Qualifications for this study included being at least 18 years of age and being involved in a committed romantic and/or sexual relationship during recruitment ($M_{\text{relationshiplength}}$ = 3.81 years, *SD* = 5.99). Participants described their relationships as seriously dating (*n* = 117), married or engaged (*n* = 51), in a "friends with benefits relationship" (or something similar) (*n* = 47), casually dating (*n* = 35), and other (*n* = 4). Ethnicity was predominantly Caucasian (*n* = 168), but also included Asian (*n* = 27), Latino/Hispanic (*n* = 23), Mixed race (*n* = 15), Black/African American (*n* = 13), and "other" (*n* = 6) ethnicities. There was one Pacific Islander and one Native American in this study. Moreover, despite most participants being heterosexual (*n* = 221), bisexual (*n* = 16), homosexual, (*n* = 9), and "other" (*n* = 8) sexualities were also identified. Average age was 23.35 years (*SD* = 2.35) and ranged from 18 to 42.

Participants and Procedure

Participants answered a series of Likert-style questions as part of a larger survey on close relationships. During this survey, participants partook in hierarchical mapping technique (Rowe & Carnelley, 2005) to identify the network members who are the most influential in their lives. In this style of data collection, participants are shown a picture of a large bullseye in with the word "you" in the center circle. Participants are instructed to fill the inner, middle, and outer circles with the initials of people in their lives (absent their partner), ranging from closest companions to acquaintances. These initials were then shown back to participants, using piped text, when answering questions about their network (e.g., "please refer to BN, IK, LVR, GS when answering these questions."). Appendix A illustrates the ways in which HMT was implemented in this study.

Measures[2]

Control Variables. Several covariates were accounted for in this study. First, network overlap (the extent to which partners share a duocentered network) was gauged using a modified version of Aron and Aron's (1992) measure of self-in-other closeness (M = 4.83, SD = 1.66). Next, Rusbult et al.'s (1998) measure of relationship satisfaction (M = 5.12, SD = 1.71; α = .91) and intimacy (M = 4.71, SD = 1.55; α = .87) were controlled for as they shared significant and moderate correlations with most substantive variables (see Table 2). Finally, relationship length was controlled for. It shared small, but significant correlations with multiple substantive variables.

Network variables. Network uncertainty was measured using the NUM (Stein et al., 2020), and features 18 items from five different subscales. Three of these subscales concern uncertainties related to participants' network members, whereas the other two concern doubts about their partners' network members. During analyses, the five subscales were combined into a single, third order unidimensional variable[3] (M = 3.78, SD = 1.37), which was deemed reliable (α= .94). Stein's (2018) measure of network interdependence measured perceived interference (M = 3.34, SD = 1.47; α= .90) and facilitation (M = 4.67, SD = 1.14; α = .81) from network members. This measure concerned only perceptions of interdependence related to participants' network members.

Accommodation variables. Imamura et al.'s (2011) measures of convergence and divergence were used in this study. This Likert scale was implemented in three different ways. First, the items were applied to participants' perceptions of how they converge (M = 5.40, SD = 1.11,

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[2] All measures used in this study, except for relationship length, were gauged with Liked scales ranging from one through seven. Means and standard deviations for all substantive variables can be seen in Table 1.

[3] See Stein et al., (2020) for a rationale on why a third-order variable is used to operationalize the NUM.

α = .87) and diverge (M = 2.98, SD = 1.34, α = .91) their communication when talking with their partners. Later in the survey, participants were asked to answer the same prompts related to converging (*M* = 6.52, *SD* = 0.91, α = .93) and diverging (*M* = 2.86, *SD* = 1.28, α = .89) behaviors related to their own social networks. Finally, the same set of prompts were used for converging (*M* = 5.89, *SD* = 1.16, α = .90) and diverging (*M* = 3.38, *SD* = 1.31, α = .88) behaviors when referencing interactions with respondents' partners' networks.

Results

Bivariate correlations were run and are displayed in Table 2. Moreover, several preliminary analyses were performed prior to substantive analyses. First, measures of convergence and divergence directed toward both participants' networks as well as the networks of their partners were subjected to exploratory factor analysis (EFA) and confirmatory factor analyses (CFA). Next, measurement models were run using structural equation modeling (SEM). Finally three distinct hierarchical SEM models were run, one for each target of accommodating behaviors (i.e., the partner, the network, and the partner's network). Results are discussed in the order described above.

Preliminary Findings

Because slight modifications were made to Imamura et al.'s (2011) measure of convergence/divergence, both EFA and CFA were performed. Each subscale (i.e., convergence and divergence for one's own network as well as convergence and divergence for the partner's network) contained four items, for a total of 16. Using SPSS 28, all 16 items were subjected to EFA using a maximum likelihood extraction and an oblique (i.e., direct-oblimin) rotation. These options were chosen because we expected correlation between subscales. Four factors with an Eigenvalue of > 1.0 emerged, explaining a cumulative 70.64% of variation in answers. When evaluating factor loadings, a .50-.30 decision rule was used. All 16 items loaded on their respective factors with a value of at least .50 and loaded onto no other factors above .30[4].

Next, the same 16 items were subjected to CFA. This analysis was performed using AMOS 24, along with SPSS 28. Four distinct, intercorrelated subscales were created, each containing four items. To test fit, several indices were implemented: χ^2/df (Schumacker & Lomax, 2004; values < 5.0 indicating adequate fit and < 3.0 indicating excellent fit); confirmatory fit index (CFI; Hu & Bentler, 1999; values > .90 indicating adequate fit and >.95 indicating excellent fit); root mean square error of approximation (RMSEA; Browne & Cudek, 1993; Hu & Bentler, 1999;

[4] Full EFA results and tables are available upon request.

values < .10 indicating adequate fit and < .06 indicating excellent fit); and the standardized root mean square residual (SRMR; Hu & Bentler, 1999; values < .10 indicating adequate fit and values < .08 indicating excellent fit). Results demonstrated excellent fit: $\chi^2/df = 1.96$, CFI = .96; RMSEA = .062, and SRMR = .071[5]. As such, it was deemed appropriate to proceed with substantive analyses.

Substantive Findings

Prior to hierarchical analyses, measurement models were run. The model detailing associations between network-based variables and accommodative behaviors geared towards one's partner demonstrated good-to-excellent fit: $\chi^2/df = 1.78$, CFI = .91; RMSEA = .056, and SRMR = .062. The model detailing associations between network-based variables and accommodative behaviors aimed at one's own network demonstrated good-to-excellent fit: $\chi^2/df = 1.70$, CFI = .92; RMSEA = .053, and SRMR = .058. Lastly, the model detailing associations between network-based variables and accommodative behaviors geared towards a partner's network demonstrated good-to-excellent fit: $\chi^2/df = 1.73$, CFI = .91; RMSEA = .054, and SRMR = .068. As such it was deemed appropriate to proceed.

Next, the hierarchical models were run. The model detailing associations between network-based variables and accommodating behaviors towards participants' partners (H1a; H2a) demonstrated good-to-excellent fit: $\chi^2/df = 1.97$, CFI = .89; RMSEA = .062, and SRMR = .091. Intimacy shared a positive, significant relationship with convergence ($\beta = .23$, $p < .001$). Relationship satisfaction shared a positive relationship with convergence ($\beta = .42$, $p < .001$), and a negative relationship with divergence ($\beta = -.46$, $p < .001$). There was no significant relationship between network-based variables and either convergence or divergence with participants' partners[6]. As such, H1a and H2a did not receive support.

The second model explored associations between network variables and convergence/divergence directed at participants' networks (H1b; H2b) and displayed good-to-excellent fit: $\chi^2/df = 1.91$, CFI = .90; RMSEA = .060, and SRMR = .091. In this model, network interference shared a significant, positive relationship with divergence ($\beta = .24$, $p < .001$), and network facilitation shared a significant, positive relationship with convergence ($\beta = .28$, $p < .001$). No other significant relationships emerged (including for control variables). These results disconfirm H1b and provide partial support for H2b. Figure 1 displays these results in full.

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[5] Full CFA results and tables are available upon request.

[6] The relationship between network facilitation and convergence toward a partner approached significance ($\beta = .12$, $p = .074$).

The third model explored associations between network variables and convergence/divergence toward participants' partners' networks (H1c; H2c) and displayed good-to-excellent fit: $\chi^2/df = 1.89$, CFI = .90; RMSEA = .059, and SRMR = .087. Network uncertainty shared a significant, negative relationship with convergence ($\beta = -.14$, $p = .037$), and a significant positive relationship with divergence ($\beta = .18$, $p = .008$). Network interference shared a significant, positive relationship with divergence ($\beta = .17$, $p = .025$). Network facilitation shared a significant, positive relationship with convergence ($\beta = .21$, $p < .004$)[7]. Thus, H1c received full support and H2c received partial support. See Figure 2 for full results.

Discussion

This study explored how, if at all, perceptions related to someone's social network (i.e., network uncertainty and network interdependence) relate to self-reported accommodation behaviors toward that person's partner, network, and partner's network. These results paint an important picture about how people navigate romantic partnerships while maintaining communication with the network(s) that surround those relationships. Following is a discussion of these results in terms of their theoretical salience, their significance in the exploration of dyad-network interaction, and their operationalization.

Probing CAT

Recent summaries of CAT (e.g., Giles, 2016, Zhang, & Giles, 2018) as well as investigations into the group dynamics surrounding CAT (e.g., Bernhold & Giles, 2021; Morgan et al., 2020) have positioned the social network as an important target of accommodating behaviors. Related, extant scholarship explains that people are especially reliant on network members' perceptions when deciding whether to pursue new relationships (Bruine de Bruin et al., 2020). That said, no studies up until this one aimed to explore the empirical relationship(s) between network-based perceptions and specific accommodating behaviors (i.e., convergence and divergence). Although H1a, H1b, and H2a were disconfirmed, all other hypotheses received at least partial support. To sum it would appear as though people in romantic relationships may alter communication with their own (or their partner's) social network if a) they feel uncertain about the way(s) in which those networks impact their relationship, and/or b) they perceive that network members facilitate or interfere with their daily goals.

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[7] In this model, both network overlap ($\beta = .25$, $p < .001$) and relationship satisfaction ($\beta = .27$, $p < .001$) shared positive, significant relationships with convergence

Theoretically, these results reinforce the tenets of CAT. As Giles (2016) summarizes, identities are often exchanged, explored, and maintained through the process of accommodation. Individual interactions (e.g., conversations with one's network or a partner's network) may be, in part, altered by the perceived interdependence within that group and/or the doubts that people carry concerning that group's members. As someone juggles their identities across a variety of ingroups and outgroups, the need to converge with, or diverge from those groups is increasingly context specific. Said differently, people do not make universal choices about converging/diverging, but rather alter their accommodating behaviors based on environmental factors. The network(s) surrounding romantic relationships appear to be one such contextual element.

Communication accommodation theory has been a long-standing proponent of the role that groups, context, and environment play in shaping communication (Ayoko et al., 2002; Giles, 1973; Morgan et al., 2020). These results point to two specific groups (one's own network and the partner's network) as agents that inspire changes in converging and diverging communication. Thus, as CAT suggests, accommodating behaviors occur both at the dyadic and the inter-group level. It may be that such accommodating behaviors occur at the individual-network level as well as the dyad-network level.

Dyad-Network Implications

This study did not use dyadic data, but dyad-focused perceptions were gauged (e.g., relationship satisfaction, intimacy, partner-based accommodation). As such, these results spark several speculations about couples, their networks, and accommodation strategies. First is the locus of converging/diverging strategies. Although H1a and H2a received no support, both relationship satisfaction and intimacy correlated with converging and diverging behaviors directed toward one's partner. On the other hand, measures of network interdependence shared significant associations with accommodating behaviors toward one's own network (H2b), as well as a partner's network (H2c). Moreover, network uncertainty shared significant associations with accommodation toward a partner's network (H1c). Together, these results display a trend linking dyadic perceptions to dyadic-based accommodation, and network perceptions to network-based accommodation.

The pattern articulated above has precedent. Perceptions related to the network do not traditionally share a direct relationship with partner-focused communication (Stein, 2021; Stein & Davidson, 2019). Instead, network-based perceptions tend to influence communication with the network(s) in question (Palomores et al., 2016; Tamburrini et al., 2015). On the other hand, dyadic perceptions, such as relational uncertainty, are more closely linked to dyadic communication (see Solomon et al., 2016). This is one explanation as to why dyad-based measures (i.e., relationship

satisfaction and intimacy) related to convergence/divergence with one's partner, whereas network-based perceptions (i.e., network uncertainty and network interdependence) were significantly linked to network-based accommodation.

Similar scrutiny can be applied to the strength of associations uncovered in Figures 1 and 2. People in romantic relationships are more likely to experience heightened levels of network uncertainty pertaining to their partners' networks, as opposed to their own networks (Stein et al., 2020). Simultaneously, people tend to be more interdependent with their own networks, as opposed to their partners' networks (Bruine de Bruin et al., 2020). This existing literature helps explain why network uncertainty only correlated with with accommodating behaviors related to a partner's network. Similarly, network interdependence was more strongly related to accommodating behaviors with one's own network, compared to that of a partner's network. Different variables appear to alter converging/diverging behaviors with different interdependent parties.

Writ large, these findings can help researchers understand the conditions under which people in romantic relationships converge or diverge with different groups, and how their relational perceptions can modulate those patterns of interaction. For example, couples with a highly duocentered network (Kennedy et al., 2015) may not allow their uncertainty and/or perceived network interdependence to alter their communication as much as couples with more egocentric networks. These elements of dyad-network interaction need exploring and unpacking. Moreover, more specific, detailed measures of dyad-network accommodation are necessary.

Measuring Accommodation in the Context of Dyad-Network Interaction

The present study used an adapted version of Imamura et al.'s (2011) measure to gauge network accommodation. While these measures demonstrated acceptable reliability and validity it stands to reason that this initial operationalization could benefit from more detailed investigation. The results of this study were clear that network-based perceptions tend to share significant relationships with network-based accommodation. As such, more rigorous measures of network-based accommodation may lead to more specific accommodating behaviors than those identified by Imamura et al. Stein and colleagues (2019) used this approach when distinguishing the NUM from measures of relational uncertainty (Knobloch & Solomon, 1999).

Moreover, this study measured the extent to which individuals in romantic relationships converge/diverge with their networks. It may be that couples, as a unit, engage in distinct acts of accommodation (akin to the external dialectics posed by Baxter and Scharp, 2015). As such,

couples should be asked, together, to explain the ways in which they converge and diverge with their duocentric and/or egocentric networks. These efforts may produce novel measures of dyad-network communication.

Limitations and Conclusion

All studies come with limitations, and this exploration is no exception. First, the demographic in this study was relatively homogeneous in terms of ethnicity, age, and orientation. Although there was a fair amount of variance in relationship type, these demographic constraints limit our findings to the discussion of mostly heterosexual, mostly white couples. Similarly, these data are limited by cross-sectional design. This study was an initial probe of network-based accommodation behaviors. A call for more robust data collections is now warranted. For example, the use of dyadic data analyses (e.g., Cook & Kenny's 2005 actor-partner interdependence model) could further parse the mechanisms through which couples navigate the dyad-network accommodation process. Similarly, inviting couples into a lab and gauging their answers, as a unit, to relational and network-based prompts can provide researchers with further clarity on how couples manage network-based communication together.

Overall, the results of this study indicate that network-based perceptions are linked to network-based communication. Communication with and/or about couples' networks may, in turn, alter relational cognitions, relationship maintenance behaviors, and relational stability. These findings are encouraging but limited at the conceptual and methodological levels. This study should be used as a springboard for more advanced measures of dyad-network accommodation.

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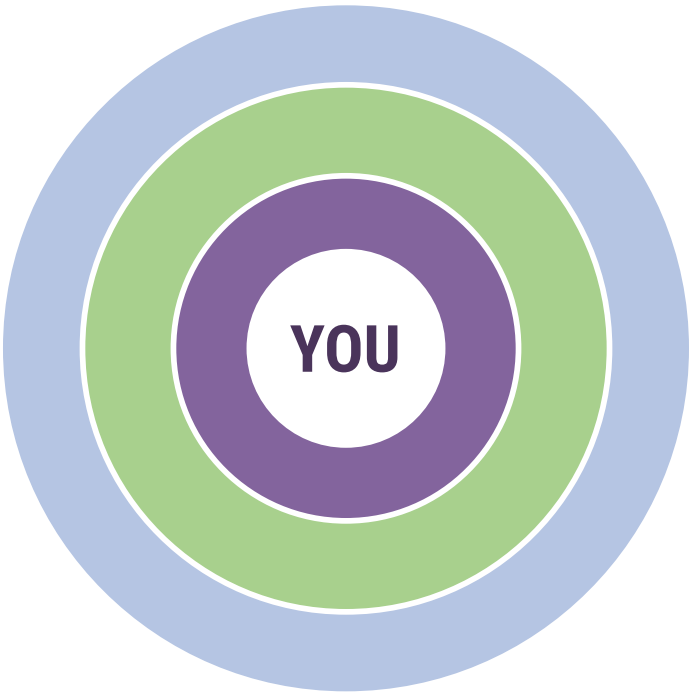
Appendix A

Visual representation of the three circles presented to participants during data collection using HMT.

Throughout the remainder of this survey, we want to ask you about your social network. NOTE: WE ARE NOT ASKING YOU ABOUT YOUR USE OF SOCIAL MEDIA (e.g., Facebook, Twitter, Instagram, etc.). Our social network members are those people with whom we genuinely enjoy spending time with and expect to see relatively frequently.

We understand that some of the people in our social networks are closer than others. In this first section we want to find out about the people who are the closest to you. Please consider the following picture:



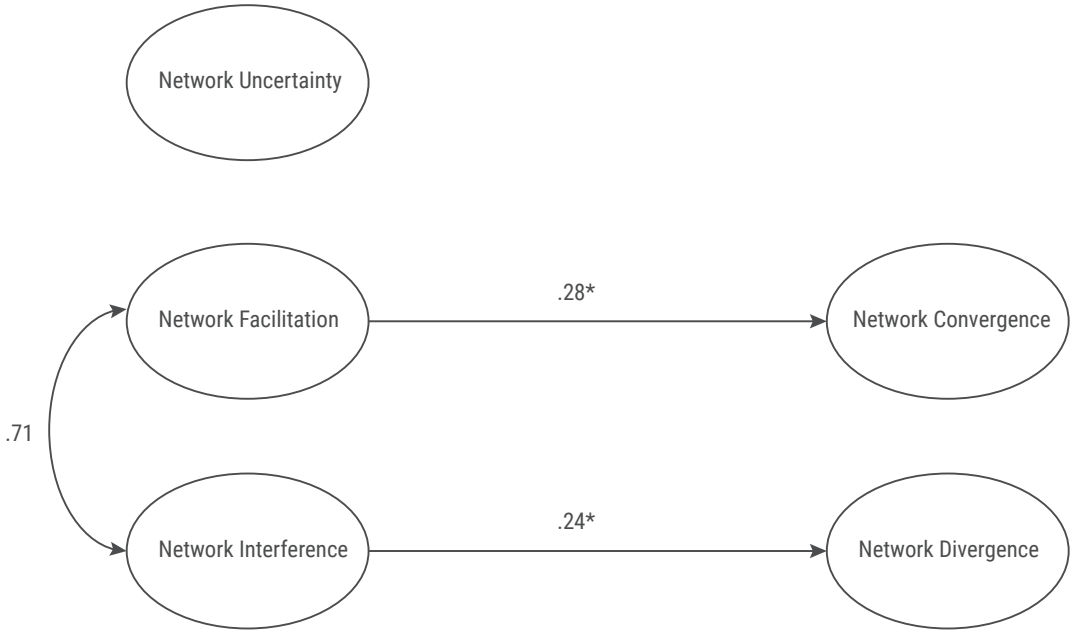
In this picture, "YOU" are in the center. Consider the purple circle. These are the people with whom you feel so close that it is hard to imagine living without them. In the space below, please make a list of all of the people who you would place in this circle by writing their initials or nicknames, separated by commas. Some folks have only a few, some have very many. It is not a contest, just list all of those who apply.

IMPORTANT: As you consider the people in these circles, do not think about [your partner][1]. Consider all people in your life except for [your partner].

[1]Note, bracketed words were replaced with piped text during data collection. Moreover, the initials that participants provided during HMT were used during subsequent questioning in lieu of terms such as "my network."

Figure 1

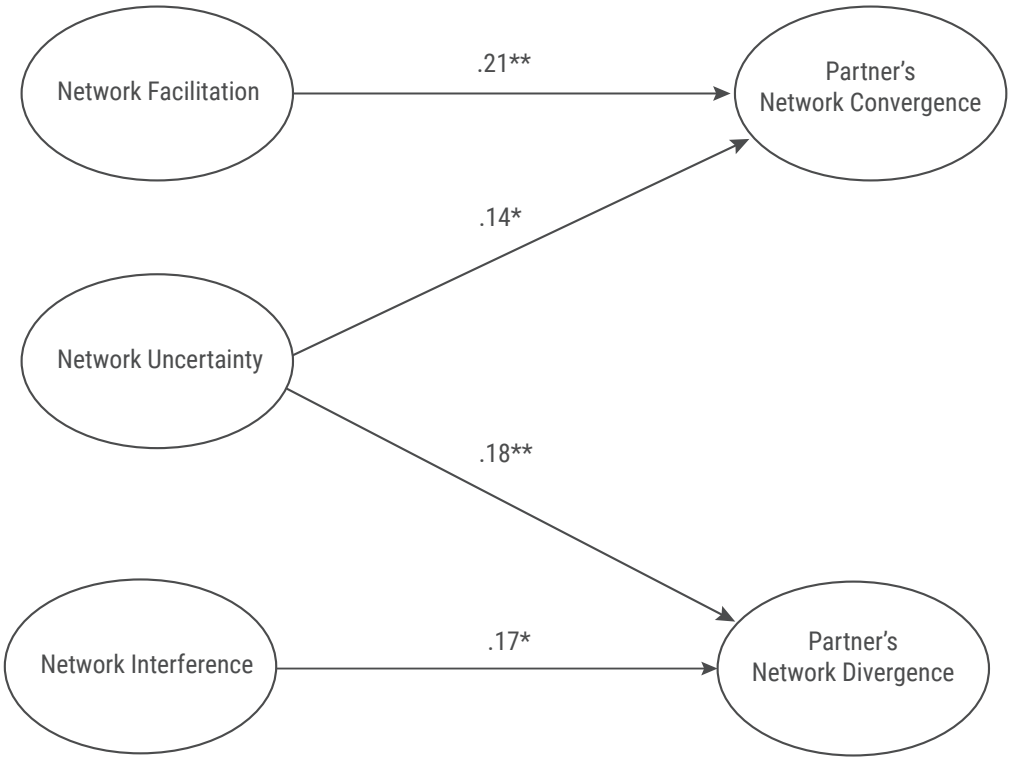
Associations between network-based variables and convergence/divergence related to one's own network



Note. *p < .001. In this figure, network uncertainty represents a single, third-order unidimensional variable. Relationship satisfaction, perceived intimacy, network overlap, and relationship length are controlled for, but not shown in this model.

Figure 2

Associations between network-based variables and convergence/divergence related to one's own partner's network



Note. *p < .05, **p < .01. In this figure, network uncertainty represents a single, third-order unidimensional variable. Relationship satisfaction, perceived intimacy, network overlap, and relationship length are controlled for, but not shown in this model.

Table 1: *Means and standard deviations for all variables used in this study*

Variable	M/SD	α
Convergence - Partner	5.40 (1.11)	.87
Divergence - Partner	2.98 (1.34)	.91
Convergence - Network	6.52 (0.91)	.93
Divergence - Network	2.86 (1.28)	.89
Convergence - Partner's Network	2.38 (1.40)	.89
Divergence- Partner's Network	4.83 (0.69)	.88
Network Uncertainty	3.78 (1.37)	.94
Network Interference	3.34 (1.47)	.90
Network Facilitation	4.67 (1.14)	.81
Network Overlap	4.83 (1.66)	N/A
Intimacy	4.71 (1.55)	.94
Relationship Satisfaction	5.12 (1.71)	.93

Note. Network Uncertainty, as displayed here, is a composite variable of all 18 measured items, whereas in substantive analyses, network uncertainty is represented by a latent, third-order, unidimensional variable. Network overlap was gagged using a single, seven point Likert-style scale.

Table 2: *Bivariate Correlations for all Measured variables in this study.*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Conv. Partner	---											
2. Div. Partner	-.71**	---										
3. Conv. Network	.16*	-.05	---									
4. Div. Network	-.12	.22**	-.50**	---								
5. Conv. Partner Network	29**	-.09	.20**	-.05	---							
6. Div. Partner Network	-.16	.24**	-.09	.31**	-.06**	---						
7. Network Uncertainty	.41**	.13*	-.13*	.16*	-.21**	.33**	---					
8. Network Interference	.21**	-0.5	-.02	.23**	.03	.16**	.37**	---				
9. Network Facilitation	.09	-.06	.28**	.18**	-.06	.13*	.01	-1.4*	---			
10. Network Overlap	.15*	-.01	.10	-.05	.32**	-.14	-.18**	-.05	.02	---		
11. Intimacy	.30**	-.19**	.02	-.07	.19**	-.06	-.20**	-.14*	.01	.32**	---	
12. Rel Satisfaction	44**	.38**	.12	-.09	.35**	-.18**	-.33**	-.08	.03	.28**	.51**	---

Note. *p > .05, **p > .01,