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# The Good and Bad of Relationships: How Social Hindrance and Social Support Affect Relationship Feelings in Daily Life

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*The authors examined the effects of social hindrance and support on negative and positive relationship-specific feelings in three daily diary studies. Study 1 showed that hindrance and support independently predicted positive relationship feelings, but only hindrance predicted negative feelings. Study 2 used new measures of hindrance and support and showed that hindrance and support independently predicted same-day relationship feelings but that the effects of hindrance were stronger in magnitude. Study 3 yielded similar findings using the new measures of hindrance and support and controlling for morning feeling. These asymmetrical crossover effects suggest that bad is only stronger than good when it comes to bad outcomes; they also support the distinction between aversive and appetitive relational processes.*

**Keywords:** *social hindrance; social support; daily process designs; relationship feelings*

Social relationships are the source of both positive and negative, good and bad (Gable & Reis, 2001). A long line of empirical and theoretical work on “negativity effects” reveals that bad is stronger than good in various domains—that is, that negative stimuli exert stronger

effects on a wide range of outcomes compared to positive stimuli (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Taylor, 1991). This article asks whether the same holds true within close relationships. Specifically, it explores how negative and positive relationship transactions affect the feelings of committed partners toward each other and the relationship.

This work is guided by motivational theories of close relationships (e.g., Berscheid & Ammazalorso, 2001; Gable, 2006; Laurenceau, Troy, & Carver, 2005), which suggest that individuals’ feelings toward their partners result from the extent to which they see themselves as

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moving toward desired (approach) goals and away from undesirable (avoidance) outcomes. These models recognize the potential co-existence of approach and avoidance relational goals. Consequently, they also recognize the potential co-existence of positive and negative goal-related processes (such as reassuring conversations vs. unwelcome critiques; cf. Gable & Reis, 2001) and of goal-related outcomes (such as the feelings of contentment vs. disappointment or anger; cf. Fincham & Beach, 1999).

By invoking relational goals and progress toward them, these theories suggest an origin for emotions and, in particular, for emotions experienced within the relationship. Positive and negative transactions as well as outcomes can be understood as the inputs and outputs of two underlying motivational systems of sensitivity to rewards and to punishments, identified by Gray (1987) and others as the behavioral activation (or appetition) and the behavioral inhibition (or aversion) systems. Much is already known about these systems. For example, they tend to be orthogonal in their activity, to vary with different personality traits, and to be associated with activation of different cortical areas (Carver, 2001). Abundant evidence exists for the classification of emotional outputs into these two systems (e.g., Rafaeli & Reville, 2006; Tellegen, Watson, & Clark, 1999). In general, responses to rewards (excitement, passion) and nonpunishments (contentment) are associated with appetition, while responses to punishments (anxiety, anger) and frustrative nonrewards (dejection) are associated with aversion.

Less is known about which *input* processes qualify as positive, appetitive ones and which as negative, aversive ones. Some processes (conflict and coercive violence on one hand, intimacy and enthusiastic capitalization on the other) seem straightforward enough: Individuals will seek to avoid the former and to approach the latter. Other (quite common) processes like support are less clear to categorize; though usually perceived as beneficial, support has some well-documented drawbacks (e.g., Bolger, Zuckerman, & Kessler, 2000). Thus, the aims of the present research are to help clarify the nature of daily support and hindrance, their association with each other, and their additive and interactive effects on positive and negative relationship feelings; and through that, we hope to further clarify the distinction between aversive and appetitive processes in relationships.

### Social Support and Social Hindrance as Input Processes

Social support—particularly the perception of support's availability—has well-documented positive effects on physical and psychological health (Cohen,

2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Models of social support have explained its benefits as a function of direct positive effects (Cobb, 1976; Weiss, 1974), interactive stress buffering (Cohen & Wills, 1985), and more recently of a mediated process that involves perceived partner responsiveness (Reis, Clark, & Holmes, 2004) and trust (Cutrona, Russell, & Gardner, 2005). But as noted above, actual supportive acts often fail to have any positive benefit, whether because they are miscarried or because they are unskilled (cf. Rafaeli & Gleason, in press). This is particularly true for putative stress-reducing effects of support (e.g., Bolger et al., 2000).

In recent years, social psychologists have broadened the focus to examine the significance of negative aspects of social relationships (Finch, 1998; Rook, 1998; Ruehlman & Wolchik, 1988) and to clarify the distinction between positive and negative aspects (Gable & Reis, 2001). Social conflict, negativity, and strain in the context of close relationships have been found to be separable from social support and positivity and to predict negative physical and psychological health outcomes (e.g., Bolger, DeLongis, Kessler, & Schilling, 1989; cf. Fincham, 2003; Kiecolt-Glaser & Newton, 2001). Several terms have been used to describe the negative aspects of social relationships (see Finch, Okun, Pool, & Ruehlman, 1999). In this article, we use the term *social hindrance* (Ruehlman & Wolchik, 1988) to refer to behaviors that are perceived by either the actor or the target person as (a) intentional or unintentional interference with goal-directed activity, or (b) direct or indirect expressions of anger or other negative emotions, or (c) direct or indirect negative evaluations of the target person's character or behavior. Conceptually, social hindrance is similar to, but more general than, the constructs of interpersonal conflict (Canary, Cupach, & Messman, 1995) and social undermining (Finch, 1998; Vinokur & van Ryn, 1993). We use this term and definition because unlike their close alternatives, they denote behaviors that (a) may not be intentional, (b) may occur in the absence of overt conflict, and therefore outside of one partner's awareness, and (c) can be emotional or practical. These factors increase the parallelism between social hindrance and support—making the direct comparison of the two more compelling—and more feasible. Like hindrance, support can be intentional or unintentional, involves assistance toward achieving a valued goal, and can incorporate direct or indirect expressions of positive emotions or evaluations of the target person's character or behavior. Thus, the first goal of this research is to obtain accurate estimates of the rates of hindrance and support and to examine their association as a test of the assumption that these two input processes are indeed separate.

The past 20 years have seen the development of a literature comparing the effects of social hindrance and support (Cranford, 2004; Rook, 1984; cf. Finch et al., 1999). In an early study, Rook (1984) surveyed a sample of elderly widowed women, finding negative aspects of participants' social networks to have stronger associations with psychological well-being than did positive aspects. This general finding has been replicated in some subsequent studies (e.g., Manne, Taylor, Dougherty, & Kemeny, 1997) and has been referred to as the *negativity effect* (Rook, 1998). Negativity effects are consistent with a broader range of findings showing the greater power of negative compared to positive stimuli, bad versus good (Baumeister et al., 2001; Rozin & Royzman, 2001; Taylor, 1991). Yet some studies have failed to replicate the negativity effect, and a meta-analytic review concluded that the main effects of social support and hindrance on individuals' distress were comparable in magnitude (Finch et al., 1999).

Most comparisons of hindrance and support focus on some form of psychological distress as an outcome measure (Rook, 1998; Vinokur, Price, & Caplan, 1996). There are two lacunae in this focus. First, it overlooks relational outcomes such as the feelings of the partners toward each other or the relationship. Second, it tends to define distress (or well-being) as unitary constructs, not multidimensional ones—this despite the fact that the relative importance of social hindrance and support is likely to vary depending on the valence of the criterion variable.

Prominent recent theories of dyadic relationships highlight the role of perceived responsiveness in the development of intimacy (Reis et al., 2004) or in the enhancement of relationships (Cutrona et al., 2005). Central to both is the significance of a sense of trust: a belief that our partner will be there to support us, and that she will refrain from hindering us. When trust is present, positive relational outcomes should ensue. Emerging evidence exists in support of these models, but few studies have examined them with regards to outcomes other than intimacy or trust. One set of outcomes that seems most interesting is the momentary feelings of individuals within the relationship (Berscheid, Snyder, & Omoto, 1989; Thompson & Bolger, 1999). After all, feelings such as these are presumed to result from progress or lack of progress toward relational goals (Berscheid & Ammazalorso, 2001; Laurenceau et al., 2005).

Several researchers hold that social hindrance and support correlate exclusively with negative and positive outcomes, respectively (Finch, 1998; Manne et al., 1997). Others report an asymmetry between support and hindrance. Gable and Reis (2001) hypothesized one kind of asymmetry; namely, that while support involves

the appetitive system (i.e., the presence of positive outcomes), both support and hindrance are related to the aversion system and would have an effect on that system's outputs (i.e., the presence or absence of negative outcomes). In contrast, Rook (2001) advanced a different asymmetrical crossover effects model, which hypothesizes that social hindrance predicts negative and positive outcomes, whereas support predicts positive feelings only. In a diary study (Rook, 2001), hindrance and support independently predicted same-day positive feeling, but only hindrance predicted same-day negative mood.

We expect supportive acts recognized by the acts' recipient to affect that individual's perception of partner responsiveness and, through it, to increase appetitive outcomes such as feelings of contentment and passion. We also expect a similar effect (though opposite in valence) for hindering acts. This prediction is consistent with Reis et al. (2004), who note that both supportiveness and invalidation (including rejection or criticism—two major forms of hindrance) will affect the perceived responsiveness of a partner.

In contrast, we expect aversive outcomes such as anxiety and sadness to respond more to the presence or absence of hindrance (or its close relative—conflict) than to the presence or absence of support (Bolger & Amarel, 2007). Consistent with Cutrona et al. (2005), we believe that support's effects are slower acting, more cumulative, and have to do more with a sense of trust (and perceived responsiveness) than with the reduction of distress. On the other hand, the aversive system is geared to respond strongly and quickly to the presence of negative input (e.g., the negativity bias phenomenon; Cacioppo, Gardner, & Berntson, 1997); within relationships, this implies a stronger association between hindrance and aversive outcomes. Thus, our second goal is to test our expectation of an asymmetrical crossover pattern similar to that found by Rook (2001), in which support and hindrance both affect positive outcomes, but hindrance, more than support, affects negative ones.

In addition to possible main effects of support or hindrance, we may expect them to exert an influence interactively. The rationale for examining this interaction is provided by the stress-buffering hypothesis (Cohen & Wills, 1985), which holds that the adverse effects of stressors are reduced among those with high levels of support; if a partner's hindrance is stressful, support may buffer that stress. Yet, research on the interactive effects of hindrance and support has also produced mixed findings. Some studies have reported evidence consistent with this stress-buffering hypothesis (Lepore, 1992; Okun & Keith, 1998). Other studies have found no such evidence (Cranford, 2004; Manne et al., 1997; Rook, 1984). The third and final goal of the present

work is to test our prediction of a stress-buffering interaction in which support ameliorates some of hindrance's pernicious effects.

The nature of hindrance and support, as well as the strength of their main and interactive effects in predicting feelings within the relationship, can be clarified by (a) using daily diary methods to capture these processes as they unfold over time and (b) considering several positively and negatively valenced relationship-specific feeling measures. Recent studies have begun to apply daily diary designs (Bolger, Davis, & Rafaeli, 2003) to the study of relational processes, including negative and positive social interactions (e.g., DeLongis, Capreol, Holtzman, O'Brien, & Campbell, 2004; Gable, Reis, & Downey, 2003; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Rook, 2001; for an earlier influential study, see Wills, Weiss, & Patterson, 1974). At a minimum, these designs provide valuable descriptive information. For example, though studies of hindrance and support have shown that negative interactions occur less frequently than positive interactions (Rook, 1998), diary studies can estimate more precisely the frequencies with which they occur (e.g., Mohr et al., 2001) as well as how these frequencies change over time (Reis et al., 2000). As important is the possibility to adjust for lagged outcomes, reducing concern about reverse causation.

Few diary studies have explicitly compared the effects of support and hindrance. Rook (2001) assessed daily hindrance, support, and mood in a sample of older adults, finding evidence for an asymmetrical crossover effects model. Similarly, Gable et al. (2003) showed that negative behaviors, though less frequent than positive and supportive behaviors, had stronger effects on negative and positive moods and relationship well-being. Reis et al. (2000) found that positive interactions (in which one felt understood) predicted positive affect, while negative interactions (e.g., arguments or conflict) predicted increased negative affect, reduced positive affect, and greater physical symptoms in a sample of college students. These results are consistent with Rook's asymmetrical crossover model, though Reis et al. used social interaction measures that emphasized enjoyable or conflictual social interactions rather than the receipt/experience of support/hindrance.

We are aware of only one diary study testing the interaction between hindrance and support. In a study of blended couples, DeLongis et al. (2004) found hindrance and support to independently predict same-day negative affect, with the effect of hindrance stronger in magnitude than that of support. No interaction effect was observed. In contrast, support but not hindrance predicted next-day negative affect. Further, the interaction effect was significant and indicated that support predicted lower levels of next-day negative affect among

those reporting low hindrance. Thus, while studies have begun to compare the effects of hindrance and support using diary methods, few have done so specifically within committed relationships, and the available evidence does not yet allow firm conclusions regarding the associations between hindrance, support, and moods.

Additionally, most studies have focused on the effects of social hindrance and support on a single outcome variable, typically negative mood or depression. Rarely have relationship outcomes been considered. The emphasis on psychological distress as an outcome is an understandable result of the way social support is typically viewed—namely, as a potential buffer against stressful events. But this focus has led to the neglect of other theoretically relevant outcomes, including positive moods. By now, many authors (Fincham & Beach, 1999; Gable & Reis, 2001; Rook, 1998) have argued for the adoption of a broader range of outcome variables. This argument makes an appeal to influential two-factor models of mood or well-being (e.g., Tellegen et al., 1999), models that emphasize the importance and relative independence of positive and negative affect. Recent research on affective structure suggests that affect dimensions are arranged hierarchically (Russell, 2003; Tellegen et al., 1999). Though controversy persists on the identity of the core dimensions, most researchers agree that core affect subsumes several distinct moods that can be further differentiated (Rafaeli et al., 2007). For the present discussion, we are interested in the different predictions that pertain to positively versus negatively valenced affect as well as in beginning to examine distinct emotions within the general categories of negative and positive affect (e.g., anxiety, sadness, and anger as negative moods). There is evidence that hindrance and support have distinct effects on negative versus positive moods (as on behavior; e.g., Mohr et al., 2001). Thus, we included measures of both negative and positive mood, focusing explicitly on relationship-specific feelings (Thompson & Bolger, 1999).

## Overview and Hypotheses

We conducted three daily diary studies to obtain descriptive data on hindrance and support over time and to test alternative models of their differential associations with relationship feelings. In Study 1, we examined the association of hindrance and support with negative and positive relationship feelings within the same day. Study 2 looked at the same association using newly developed measures of hindrance and support. In Study 3, we used electronic diaries and collected feeling reports in the mornings and evenings to conduct more rigorous tests of the lagged effects of hindrance and support. Based on previous theoretical and empirical work (Cutrona et al.,

2005; Mohr et al., 2001; Reis et al., 2004; Rook, 2001), we tested the following hypotheses:

*Hypothesis 1:* Daily support will occur more frequently than hindrance, and the two will be unrelated.

*Hypothesis 2:* Daily hindrance and support will have asymmetrical crossover effects on relationship feelings: Hindrance will be associated with negative and positive relationship feelings, while support will be associated with positive relationship feelings only.

*Hypothesis 3:* When hindrance and support are both reported, we predict a classic stress-buffering effect. Specifically, we predict that the effects of hindrance on feelings will be weaker on days when participants also report receiving support from their partners.

## STUDY 1

### Overview

Partners in 85 committed couples completed paper diaries asking about daily hindrance, support, and relationship feelings each day for 28 days. These data were collected as part of a larger study of the effects of parental aggression on adult relationships (Kennedy, Bolger, & Shrout, 2002), and data from this study were also analyzed in Gleason, Iida, Bolger, and Shrout (2003).<sup>1</sup>

### Method

#### *Participants and Recruitment*

Fliers advertising the study were posted on bulletin boards and placed in the mailboxes of graduate students from various departments in several urban universities. Interested individuals contacted the researchers by phone or e-mail for more information. Snowball sampling was used to recruit additional friends and colleagues of those individuals who expressed interest in participating. There were 114 inquiries about the study, and 104 couples agreed to participate. Participants ranged in age from 20 to 66 years ( $M = 29.0$ ,  $SD = 6.3$ ). The sample identified as 68.4% European/European American, 6.3% Latino/Latino American, 7.0% Asian/Asian American, and 5.7% African/African American. Couples had been romantically involved an average of 6.3 years ( $SD = 4.2$ ). Fifty-four percent of the couples were married, and length of marriage ranged from 0.2 to 17.6 years ( $M = 3.6$ ,  $SD = 4.0$ ).

Couples were compensated \$100 for participation and were given the chance to win a one-time \$1,000 raffle. Upon agreeing to participate in the study, couples received an initial payment of \$10 and separate consent forms, background questionnaires, and return envelopes. No later than 2 weeks prior to the diary period start date, each partner was mailed a packet containing four

weekly batches of daily diary questionnaires and four return envelopes. The weekly batches contained seven identical questionnaires. Each daily questionnaire consisted of two sections; a morning diary (irrelevant to this analysis) and an evening diary. The evening diary form included questions regarding relationship feelings, daily troubles or difficulties, relationship conflicts, and support transactions. Participants were instructed to complete all materials separately from their partners and asked not to share or discuss their answers. Each week of diaries was to be mailed upon completion.

Ninety-three couples returned both background questionnaires (186 participants; 91% of the original), 87 of them returned at least 1 week of diaries (172 participants; in two couples, only one member completed the diaries), and 138 participants (80% of individuals who completed at least 1 week of diaries) returned all 4 weeks of diaries. Two same-sex couples were excluded from the analyses because we could not assume similar processes for these couples and there were too few to examine sexual orientation as a potential moderator variable. Thus, 85 couples remained.

#### *Measures*

*Daily hindrance.* Each evening, participants indicated whether they had any tensions, disagreements, or arguments during the past 24 hours with a list of individuals including their partner. In this study, the *tensions with partner* checkbox was used as a proxy for the experience of hindrance from one's partner. Hindrance was scored 0 (*no hindrance received*) or 1 (*hindrance received*).

*Daily support.* Participants were asked to recall if they had received any emotional or practical help from their partner during the course of that day for a worry, problem, or difficulty. Examples of emotional and practical support were provided, but the question was intentionally left to each individual's own interpretation. Emotional support was scored 0 (*no support received*) or 1 (*support received*), and practical support was scored 0 (*no support received*) or 1 (*support received*). We created an overall support measure that indicated whether an individual had received either emotional or practical support on that day, also coded 0 or 1.

*Daily relationship feelings.* This measure was adapted from the Emotional Tone Index (ETI; Berscheid et al., 1989), a 27-item scale on which individuals report the extent to which they typically experience different emotions in their relationships. The adapted version (first used by Thompson & Bolger, 1999) shortens the list to 20 items and asks participants to rate the extent to which they were experiencing those feelings within their relationship with their partner *at the moment*. Relationship

**TABLE 1:** Frequencies of Receiving Daily Hindrance and Support (Study 1)

Received Hindrance	Received Support					
	No		Yes		Total	
	n	%	n	%	n	%
No	1,613	40.69	1,733	43.72	3,346	84.41
Yes	244	6.16	374	9.43	618	15.59
Total	1,857	46.85	2,107	53.15	3,964	100.00

feelings were measured on a 5-point scale ranging from 1 (*not at all*) to 5 (*extremely*). Seven relationship feeling scales were formed from 15 of these items: Contentment (content, satisfied, and happy), Passion (excited and passionate), Joy (elated and joyful), Anxiety (fearful and worried), Sadness (sad and depressed), Anger (angry and irritated), and Hostility (disgusted and hostile). Scale scores were rescaled to a 0-10 range.<sup>2</sup>

## Results

### *Descriptive and Correlational Analyses*

We first conducted descriptive analyses of daily hindrance and support; their frequencies and co-occurrence are presented in Table 1. Consistent with our prediction and with previous diary studies (e.g., DeLongis et al., 2004; Gable et al., 2003; Rook, 2001), the experience of daily support was approximately 3 times more frequent than the experience of daily hindrance, supporting our first hypothesis. This preponderance of support was widespread: Only 8% reported hindrance more frequently than support, and the median within-person ratio of support/hindrance was 3.67. Within-person means, standard deviations, and correlations among all study variables are shown in Table 2. These correlation estimates were obtained by standardizing each person's repeatedly measured variables (using their own mean and standard deviation). The standardized variables were then entered into multilevel models. In the first (within-person) level, the row variable was entered as a predictor of the column variable. The second (between-persons) level of the model modeled the slopes as outcomes and obtained a mean slope (level-2 intercept) and a standard error for this estimate. Results indicated that hindrance and support were not significantly related over days within relationships. Hindrance was significantly correlated with all feelings, whereas support correlated with positive feelings only, providing preliminary support for Hypothesis 2.

### *Multilevel Models*

We used multilevel regression analysis to extend the tests of Hypotheses 2 and 3. This analytic strategy

allowed us to account for two types of dependence in diary data from couples: (a) within-person and (b) within-couple dependencies (Kennedy et al., 2002). For each model, we used that previous day's feeling, same-day hindrance, same-day support, and their interaction to predict that evening's feeling. We adjusted for prior day's feeling in order to rule out the possibility that any observed same-day effects of hindrance and support on that evening's feeling were due to yesterday's feeling. All of the predictors were person centered; the interaction term was created by multiplying the person-centered hindrance and support terms. Separate models were estimated for each relationship feeling. Following Gleason et al. (2003), the within-person, within-couple equation for each feeling was

$$E_{ijk} = b_{0ij} + b_{1ij}E_{ij(k-1)} + b_{2ij}H_{ijk} + b_{3ij}S_{ijk} + b_{4ij}H_{ijk} \times S_{ijk} + e_{ijk} \quad (1)$$

where  $E_{ijk}$  is evening relationship feeling for individual  $i$  in couple  $j$  on day  $k$ ,  $E_{ij(k-1)}$  is that person's relationship feeling on the previous day,  $H_{ijk}$  is that person's report of received hindrance that day,  $S_{ijk}$  is that person's report of received support that day, and  $H_{ijk} \times S_{ijk}$  is a product term for the interaction between hindrance and support for that person on that day. We estimated separate models for each relationship feeling. All models were tested using the MIXED procedures in SAS (SAS Institute, 1996). Residuals within couples were allowed to correlate, and a first-order autoregressive structure was imposed on the covariance matrix for the within-person residuals (see Gleason et al., 2003).

Results from these multilevel regression analyses are presented in Table 3. As seen there, when previous day's feeling was controlled, daily hindrance and daily support independently predicted positive relationship feelings in the evening, and the effects of hindrance were generally stronger in magnitude than those for support. For example, on days in which respondents reported being supported, they felt more content ( $\beta = .23, p < .05$ ); on days in which they reported being hindered, they felt less content ( $\beta = -1.23, p < .05$ ). Further, only hindrance was predictive of negative relationship feelings. These results support the asymmetrical crossover effects hypothesis. Hindrance and support did not interact to predict any of the same-day feelings. These results do not support Hypothesis 3.<sup>3,4</sup>

## STUDY 2

### Overview

Findings from Study 1 were obtained using a measure of support that was relatively specific, whereas our measure of hindrance encompassed tensions, disagreements,

**TABLE 2:** Within-Person Correlation Matrix for All Study Variables in Study 1

	<i>Hindrance</i>	<i>Support</i>	<i>Contentment</i>	<i>Passion</i>	<i>Joy</i>	<i>Anxiety</i>	<i>Depressed</i>	<i>Anger</i>	<i>Hostility</i>	M	SD
Hindrance	.47*									0.17	0.31
Support	.02	.09*								0.53	0.39
Contentment	-.29*	.06*	.30*							5.89	1.71
Passion	-.09*	.12*	.51*	.41*						3.91	2.03
Joy	-.19*	.07*	.64*	.60*	.26*					3.99	1.91
Anxiety	.26*	.04	-.32*	-.10*	-.21*	.22*				0.76	1.03
Depressed	.34*	.02	-.41*	-.21*	-.31*	.47*	.21*			0.76	1.15
Anger	.58*	-.00	-.40*	-.16*	-.26*	.36*	.47*	.33*		0.97	1.42
Hostility	.44*	-.02	-.35*	-.12*	-.23*	.33*	.44*	.65*	.26*	0.49	0.86

NOTE: The diagonal values are within-couple, across-partner coefficients based on multilevel models. \**p* < .05.

**TABLE 3:** Study 1: Effects of Daily Hindrance and Support on This Evening's Positive and Negative Relationship Feelings Controlling for Yesterday's Relationship Feelings

<i>Daily Predictor</i>	<i>Evening Outcome</i>						
	<i>Contentment</i>	<i>Passion</i>	<i>Joy</i>	<i>Anxiety</i>	<i>Sadness</i>	<i>Anger</i>	<i>Hostility</i>
Intercept	5.94* (0.19)	3.94* (0.18)	3.99* (0.21)	0.70* (0.08)	0.71* (0.07)	0.89* (0.06)	0.43* (0.05)
Yesterday feeling	-0.26* (0.02)	-0.29* (0.02)	-0.30* (0.02)	-0.23* (0.02)	-0.18* (0.02)	-0.12* (0.02)	-0.11* (0.03)
Hindrance	-1.23* (0.12)	-0.43* (0.11)	-0.92* (0.10)	0.58* (0.10)	1.07* (0.12)	2.36* (0.17)	1.02* (0.12)
Support	0.23* (0.07)	0.42* (0.09)	0.24* (0.09)	0.05 (0.05)	-0.04 (0.05)	0.01 (0.06)	0.02 (0.04)
Interaction	0.13 (0.19)	-0.22 (0.21)	-0.08 (0.21)	-0.12 (0.18)	-0.19 (0.24)	-0.25 (0.26)	-0.39 (0.22)

NOTE: All coefficients are unstandardized multilevel regression coefficients. Standard errors are in parentheses. \**p* < .05.

and/or arguments with the partner. In Study 2, we attempted to address this limitation by developing a measure of hindrance that more closely paralleled our daily support measure. In this study, individuals in committed, cohabiting relationships completed paper-and-pencil diaries asking about daily hindrance, daily support, and relationship feelings each day for 14 days.

**Method**

*Participants and Recruitment*

Fliers advertising the study were posted in various locations throughout a large, urban university. As part of a larger study designed to investigate the use of electronic devices in diary research, the study entailed 4 weeks of data collection, 2 on paper and 2 on electronic devices. However, due to malfunctions in the diary program, the results reported here are based solely on the participants' paper diary reports. Twenty-five couples expressed interest in participation, and 22 of those couples completed the entire study. Packets containing the daily diaries were handed out in an initial laboratory session.

Participants ranged in age from 20 to 35 years (*M* = 26.0, *SD* = 3.6). The sample was diverse, with 56%

identifying as White, 20% as East Asian or Pacific Islander, 10% as other Asian, 5% as African American, 7% as multiethnic, and 2% choosing the "other" category. Of the 21 couples with demographic data, 4 were married and 17 were not. Data from all 22 couples were included in the analyses. Couples were romantically involved from 1 to 9.4 years (*M* = 3.95, *SD* = 2.61). Couples were compensated \$75 for completing the entire 4-week data collection period, and all completed the entire period.

*Measures*

*Daily hindrance.* The checkbox item inquiring about "tensions with partner" was used as in Study 1. To go beyond the use of tensions as a proxy, we developed a hindrance measure that paralleled the daily social support measure more closely. Using a conceptual definition proposed by Vinokur and van Ryn (1993), we distinguished between practical and emotional hindrance, paralleling the distinction in the support items. Participants were given the following explanation and instruction set:

At times people do things that hinder our actions, or express anger, criticism, or other negative emotions or evaluations towards us. This is sometimes referred to as

**TABLE 4:** Within-Person Correlation Matrix for All Study Variables in Study 2

	<i>Hindrance</i>	<i>Support</i>	<i>Contentment</i>	<i>Passion</i>	<i>Loved</i>	<i>Anxiety</i>	<i>Sadness</i>	<i>Anger</i>	<i>Conflict</i>	M	SD
Hindrance	.19									0.19	0.22
Support	-.12	.16								0.48	0.37
Contentment	-.34*	.20*	.18*							6.40	1.24
Passion	-.28*	.22*	.50*	.30*						4.32	1.54
Loved	-.41*	.31*	.55*	.42*	.19*					7.08	1.23
Anxiety	.16	-.00	-.28*	-.15	-.05	.16				0.70	0.71
Sadness	.18	-.06	-.40*	-.17	-.19*	.58*	.13			0.50	0.63
Anger	.36*	-.24*	-.47*	-.38*	-.47*	.27*	.42*	.09		0.54	0.75
Conflict	.60*	-.08	-.37*	-.26*	-.34*	.39*	.38*	.51*	.25*	0.12	0.19

NOTE: The diagonal values are within-couple, across-partner coefficients based on multilevel models.

a.  $p = .052$ .

\* $p < .05$ .

hindrance. Hindrance can be practical (e.g., creating more work for you, preventing you from working on your goals) or emotional (e.g., insensitivity, criticism, insults).

Participants were asked to indicate any hindrance they experienced from their partner in the past 24 hours. Each day, participants indicated whether they had experienced practical or emotional hindrance (0 = *no hindrance received*, 1 = *hindrance received*). We created an overall hindrance index that indicated whether participants experienced either emotional or practical hindrance on that day, also coded 0 or 1.

*Daily support.* As in Study 1, participants were asked to recall if they had received any emotional or practical help from their partner during the course of that day for a worry, problem, or difficulty. Emotional support was scored 0 (*no support received*) or 1 (*support received*), and practical support was scored 0 (*no support received*) or 1 (*support received*). As before, we created an overall support index that indicated whether an individual received either emotional or practical support on that day.

*Relationship feelings.* With the goal of shortening the diary to reduce participant burden, 8 of the original 20 items in the relationship feelings measure were dropped based on item analysis conducted on data from Study 1. The wording and scoring remained the same, but for Study 2 only six scales were created. Four of these scales were identical to those used in Study 1: Passion (excited and passionate), Anger (angry and irritated), Anxiety (fearful and worried), and Sadness (sad and depressed). The Contentment scale in this study consisted of only 2 items (content and satisfied), the Joy and Hostility scales were dropped, and a new Loved scale was formed consisting of 2 items (supported and loved).

## Results

### *Descriptive and Correlational Analyses*

First, we examined the association between our new index of hindrance and the conflict index (identical to the one used in Study 1 as a proxy). As expected, the two were strongly associated ( $r = .60$ ) but were differentiated in their associations with the relationship feeling outcomes, notably anxiety and sadness (see Table 4).

Following the strategy from Study 1, we calculated frequencies for daily hindrance and support and assessed their co-occurrence. Results were very similar to those in Study 1: The experience of daily support was approximately 3 times more frequent (occurring on 46.6% of days) than the experience of daily hindrance (17.1% of days). This preponderance of support was widespread: Only 14% reported hindrance to be more frequent than support, and the median within-person ratio of support/hindrance was 4.00. Within-person correlations for the Study 2 variables were computed as in Study 1, and the results partially replicated the earlier ones in showing a weak association between hindrance and support (see Table 4). In contrast to findings from Study 1, hindrance showed no significant relationship with two negative feelings (anxiety and sadness), and support was significantly associated with anger.

### *Multilevel Models*

We again used multilevel analysis to test Hypotheses 2 and 3. The estimated models and the error covariance structures were identical to those in Study 1. All of the predictors were person centered; the interaction term was created by multiplying the person-centered hindrance and support terms. Models were estimated for the six relationship feelings. Results from these multilevel regression analyses are presented in Table 5. In agreement with the results from Study 1, the pattern of



**TABLE 5:** Study 2: Effects of Daily Hindrance and Support on This Evening's Positive and Negative Relationship Feelings Controlling for Yesterday's Feeling

Daily Predictor	Evening Outcome					
	Contentment	Passion	Loved	Anxiety	Sadness	Anger
Intercept	6.39* (0.45)	4.23* (0.48)	7.04* (0.36)	0.54* (0.16)	0.35* (0.12)	0.56* (0.18)
Yesterday feeling	-0.31* (0.05)	-0.30* (0.04)	-0.26* (0.06)	-0.21* (0.07)	-0.27* (0.08)	-0.24* (0.06)
Hindrance	-1.06* (0.26)	-1.29* (0.29)	-1.27* (0.33)	0.46* (0.21)	0.23 (0.15)	0.95* (0.30)
Support	0.51* (0.16)	0.52* (0.17)	0.89* (0.19)	-0.08 (0.15)	-0.06 (0.19)	-0.27* (0.13)
Interaction	1.80* (0.48)	1.29* (0.53)	1.28* (0.51)	-0.72 (0.65)	-1.15 (0.84)	-2.06* (1.02)

NOTE: All coefficients are unstandardized multilevel regression coefficients. Standard errors are in parentheses.

\* $p < .05$ .

findings was generally consistent with the asymmetrical-crossover hypothesis. Also consistent with Study 1, the effects of hindrance on positive feelings were generally stronger than those of support. In contrast to the results from Study 1, there were two exceptions to this pattern of asymmetrical-crossover effects. Daily support was predictive of one negative feeling (anger), and hindrance did not predict daily sadness.

Perhaps the most striking difference between the results of Study 2 and those of Study 1 is the consistent finding of interactions between hindrance and support. These interaction effects, which were observed in four of the six analyses, showed that the negative effects of daily hindrance on daily positive feelings were significantly reduced in magnitude on days when support too was received from the partner. Similarly, the direct positive effect of hindrance on daily anger was buffered on support days. In fact, a simple slopes analysis<sup>5</sup> revealed that for all daily positive feelings, hindrance only had a significant negative effect on days when no support occurred. On support days, hindrance was not significant. Thus, it appears that the use of a new, focused measure of hindrance did not alter the pattern of main effects observed in Study 1 but did allow for the detection of stress-buffering effects of daily support.

### STUDY 3

*Overview.* Study 2 improved upon Study 1 by using a new and focused measure of social hindrance. In Study 3, we retained this new measure and further improved our design by using a community sample, assessing relationship feelings twice daily, and using electronic devices to collect the daily diary data.

#### Method

##### *Participants and Recruitment*

Fliers advertising the study were posted in various locations throughout the city of New York. Forty-five couples responded to the advertisements, and the final

sample consisted of 37 couples and 5 individuals, for a total of 39 men and 40 women. The participants ranged in age from 19 to 51, ( $M = 28.0$ ,  $SD = 7.1$ ). Of those reporting their ethnicity, 9% identified as Latino, 15% as East Asian/Pacific Islander nationality, 4% as other Asian, 5% as African American, and 66% as White. Couples were romantically involved anywhere from 11 to 162 months ( $M = 39.5$ ,  $SD = 33.0$ ).

Couples were compensated \$10 for completing training and a background questionnaire, \$20 for each week of completed diaries, and \$20 for returning the equipment and completing the follow-up questionnaire. The initial \$10 was given to each couple at the conclusion of the training session, and the remaining \$80 was mailed to them at the end of the study. In addition, each couple was entered in a raffle to win \$200.

##### *Measures*

The study incorporated four components: a background questionnaire, a daily morning diary, a daily evening diary, and a follow-up questionnaire. The variables of interest in this study were obtained in the daily (morning and evening) diaries, which were administered on Zire Palm Pilots. Each participant received his or her own device, equipped with the Intel Experience Sampling Program (iESP, an adaptation of an earlier program, ESP, developed by Barrett & Feldman-Barrett, 2000).

*Daily hindrance and support.* These measures were identical to the daily hindrance and support measures described in Study 2 and were included in the evening diary.

*Relationship feelings.* This measure was identical to that used in Study 2 and was incorporated in both the morning and evening diaries.

##### *Procedure*

Couples came to a training session in the lab and completed a background questionnaire. Upon completion of the questionnaire, the couples were trained in

**TABLE 6:** Within-Person Correlation Matrix for All Study Variables in Study 3

	<i>Hindrance</i>	<i>Support</i>	<i>Contentment</i>	<i>Passion</i>	<i>Loved</i>	<i>Anxiety</i>	<i>Sadness</i>	<i>Anger</i>	<i>Conflict</i>	M	SD
Hindrance	.10*									.22	.31
Support	-.00	.12*								.60	.39
Contentment	-.26**	.21**	.28**							6.92	1.49
Passion	-.23**	.17**	.59**	.34**						5.14	1.69
Loved	-.27**	.21**	.64**	.52**	.26**					7.60	1.30
Anxiety	.18**	-.06	-.38**	-.27**	-.33**	.10				.50	.63
Sadness	.23**	-.13**	-.47**	-.38**	-.44**	.53**	.49*			.61	.71
Anger	.37**	-.17**	-.52**	-.40**	-.52**	.42**	.63**	.26**		.82	.91
Conflict	.46**	-.06	-.37**	-.32**	-.37**	.24**	.38**	.49**	-.04	.04	.12

\* $p < .05$ . \*\* $p < .001$ .

**TABLE 7:** Study 3: Effects of Daily Hindrance and Support on This Evening's Positive and Negative Relationship Feelings Controlling for This Morning's Feeling

<i>Daily Predictor</i>	<i>Evening Outcome</i>					
	<i>Contentment</i>	<i>Passion</i>	<i>Loved</i>	<i>Anxiety</i>	<i>Sadness</i>	<i>Anger</i>
Intercept	7.00* (0.31)	5.32* (0.32)	7.69* (0.30)	0.58* (0.15)	0.71* (0.24)	0.85* (0.26)
Morning feeling	0.18* (0.05)	0.12* (0.04)	0.20* (0.05)	0.11 (0.06)	-0.02 (0.04)	0.05 (0.05)
Hindrance	-0.73* (0.12)	-0.83* (0.15)	-0.74* (0.12)	0.32* (0.09)	0.36* (0.10)	0.75* (0.11)
Support	0.60* (0.11)	0.48* (0.16)	0.55* (0.10)	-0.04 (0.05)	-0.15* (0.05)	-0.41* (0.09)
Interaction	0.52 (0.34)	0.26 (0.31)	0.41 (0.33)	-0.27 (0.17)	-0.28 (0.18)	-0.64* (0.27)

NOTE: All coefficients are unstandardized multilevel regression coefficients. Standard errors are in parentheses.

\* $p < .05$ .

using the electronic diary on a training device on which a practice diary was installed. The logistics of the study, including start date, completion, and how often to complete the diary, were then explained. Participants completed the two daily questionnaires every day for 3 weeks. The morning diary was to be completed within 1 hour of waking and the evening diary was to be completed within 1 hour of going to bed. The couples were contacted by the study staff several times throughout the course of the study to ensure compliance and to allow participants to ask any questions.

## Results

### *Descriptive and Correlational Analyses*

Again, we found hindrance and conflict to be positively associated and to differ in their patterns of correlations with the relationship feelings, with hindrance having consistently weaker associations with all feelings. Frequencies for daily hindrance, support, and their co-occurrence were similar to those in Studies 1 and 2, although participants in Study 3 reported receiving support on a higher percentage of days (60.9%) than participants in Study 1 (53.2%) and Study 2 (46.6%). Interestingly, they also reported experiencing hindrance on a higher percentage of days (20.7%) than in the previous studies (15.6% and 17.1%, respectively). In other words, support and hindrance

continued to show a ratio of approximately 3:1. This preponderance of support was widespread: Only 10% reported hindrance to be more frequent than support, and the median within-person ratio of support/hindrance was 3.71. As seen in Table 6, the zero-order within-person correlations again showed hindrance and support to be unrelated. As in Study 1, hindrance was associated with all positive and negative feelings. In contrast to Studies 1 and 2, support was significantly associated with all feelings except anxiety.

### *Multilevel Models*

We again used multilevel analysis to test Hypotheses 2 and 3. All of the predictors were person centered; the interaction term was created by multiplying the person-centered hindrance and support terms. The estimated models and the error covariance structures were identical to those in Studies 1 and 2, except where noted. Since the relationship feeling measures were completed twice daily, we used morning relationship feeling as a predictor in all models, along with same-day hindrance, support, and their interaction. Separate models were estimated for the six relationship feelings.

Results from these multilevel regression analyses are in Table 7. Similar to the findings from Studies 1 and 2, results from Study 3 were consistent with an asymmetrical crossover hypothesis, if one focuses on magnitude

of the effects rather than on significance tests. Daily hindrance and daily support independently predicted same-day positive relationship feelings as expected. Although daily support was significantly related to two of the three negative relationship feelings, the effect sizes were half the size of those for hindrance, a finding that is consistent with the asymmetrical crossover hypothesis. Finally, in contrast to Study 2, there was no evidence for interaction effects in any of the models we tested, with anger as the exception.

## GENERAL DISCUSSION

We conducted this investigation to answer the following questions: What is the association between hindrance and support within committed relationships? How common is each? What is their relative importance? And how does one (namely, support) affect the experience of the other (hindrance)? Our studies offer clear answers to some of these questions and provide a basis for future studies that will answer the others. Results showed that (a) consistent with Hypothesis 1, daily support is largely unrelated to daily hindrance; (b) daily support is more frequent than daily hindrance; (c) consistent with Hypothesis 2, hindrance and support independently predict positive feelings in the evening when yesterday's feeling (Studies 1 and 2) or that morning's feeling (Study 3) are controlled, and hindrance is a strong predictor of negative feelings, while the effects of support are weak and inconsistent. Results were less clear regarding the buffering effect of support on hindrance (Hypothesis 3): Study 1 found no buffering, Study 2 found it for the positive outcomes (the feelings of contentment, of passion, and of being loved) and for one negative outcome (anger), and Study 3 found it only for anger.

### Frequency and Association of Hindrance and Support

Previous diary studies have shown that supportive behaviors occur more frequently than hindrance in couples' daily lives (DeLongis et al., 2004; Gable et al., 2003; Neff & Karney, 2005; Rook, 2001). In support of Hypothesis 1, our findings lead to a similar conclusion and help provide accurate estimates of these frequencies. In all three studies, a ratio of roughly 3:1 existed between daily support and hindrance over the entire sample, with a median of within-person ratios hovering around 3.85:1.00. Interestingly, this ratio falls somewhat short of the 5:1 ratio found by Gottman (1994) to characterize the behavioral interactions of satisfied couples during a problem-solving marital interaction task. It may be that the 3:1 ratio of support to hindrance is a more accurate reflection of the balance between positive

and negative behaviors in couples' everyday lives, as compared to the same balance during conflict-related interactions. As such, our results can be seen as complementing those of Gottman. Only time will tell whether this lower ratio has the same diagnostic utility when derived from measures of daily hindrance and support, and whether those with lower ratios are at risk of divorce. Interestingly, the ratios found did fall close to a more recent estimate (of 2.9:1.0) reported by Fredrickson and Losada (2005) as distinguishing between individuals who are or are not flourishing.

Significantly, all three studies revealed a null relationship between daily support and hindrance, suggesting that these are indeed separate and unrelated processes. Additional evidence for this distinction comes from the differential effects reviewed below.

### Main Effects of Hindrance and Support

Results from Study 1 were consistent with the asymmetrical crossover effects hypothesis (Hypothesis 2) in that hindrance and support both predicted positive relationship feelings, whereas hindrance alone predicted negative feelings. Findings from Studies 2 and 3 (which used a focused measure of hindrance) were somewhat mixed, but on the whole also consistent with an asymmetry of effects. Hindrance and support both predicted positive relationship feelings, but hindrance was a stronger (and in the case of relationship anxiety, the only) predictor of negative relationship feelings. Below are some implications of this central hypothesis.

### Bad Has a Wider Effect Than Good

First, our data speak to the question of whether bad is indeed stronger than good across the board (cf. Baumeister et al., 2001; Rozin & Royzman, 2001). Our results suggest a slight variation on that: Within close relationships, bad is stronger than good for negative outcomes, but that difference is less pronounced for positive outcomes. Perhaps a more apt way of stating the results is "bad has a wider effect than good."

Some previous work looking at close relationships (e.g., Newsom, Nishishiba, Morgan, & Rook, 2003) has supported a more unqualified version of the "bad is stronger" argument—that bad would be stronger than good at a pervasive and general level (Baumeister et al., 2001). It is possible that our results differed from those of other researchers because we focused on feelings within the relationship, rather than broader mood states. These relationship-specific feelings could be more proximal outcomes and may therefore be more sensitive to subtle effects. Thus, even if support from one's partner is not powerful enough to change one's overall mood, it might exert effects on one's feelings for

the partner. Other analyses (Gleason et al., 2003) revealed that even when support was ineffective in reducing negative moods or increasing positive ones, it tended to increase feelings of a relational outcome: intimacy. It is notable, however, that other research focused on general mood states (e.g., David, Green, Martin, & Suls, 1997) has reported asymmetrical effects like ours; other explanations, beyond that of the proximity of the outcome, may need to be tested.

Why is bad stronger, or broader, than good? Existing evolutionary, motivational, neurological, and cognitive explanations address this at different levels (see Taylor, 1991). Some (e.g., Baumeister et al., 2001) highlighted the adaptive evolutionary value of attending to negative factors more than to positive ones. Positive events often have a nourishing, broadening, or building potential (Fredrickson, 1998) but are rarely irreversible. In contrast, negative events can leave longer lasting damage, require quicker responses, and could potentially be fatal. Thus, the processing of negative events should be more systematic and thorough, as they require regulatory action to change the aversive situation (e.g., Pratto & John, 1991).

As noted earlier, motivational/neurological evidence suggests the presence of two systems—one devoted to processing positive and rewarding stimuli (the Behavioral Activation System, or BAS; Gray, 1987), the other to processing negative and aversive stimuli (the Behavioral Inhibition System, or BIS; Gray, 1987). BIS activity and output increase in intensity very rapidly, despite being lower than BAS activity at baseline (the phenomena labeled as negatively bias and positivity offset by Cacioppo and colleagues; e.g., Cacioppo et al., 1997).

At the cognitive level, several authors (Rook & Pietromonaco, 1987; Taylor, 1991) have discussed the role of expectations. Positive events are more common and therefore more expected; negative events are less common and more salient. Because of this salience, negative events are more diagnostic (Skowronski & Carlston, 1989) and processed more systematically. Specifically, they trigger more detailed attribution processes in an attempt to understand and regulate them quickly and effectively.

### **Appetitive Versus Aversive, Support Versus Hindrance**

Our results also speak to the question of the association between the two motivational or affective systems and are consistent with the assertion that we should consider the good and bad of relationships as functionally independent dimensions of social interaction. As Gable and Reis (2001) note, an activated appetitive system (i.e., one responding to positive events) does not imply a non-activated aversive system (a system designed to respond to negative events). The null association between support and hindrance in all three of our studies is consistent with

this independence view. Our results are consistent with the call for distinguishing the functional dimensions of appetition and aversion in relationships. First, hindrance and support were mostly unrelated to each other. Second, supportive and hindering acts had differential effects that were not mirror images of each other.

The processes that promote fulfilling relationships are not the same ones that serve to manage conflict and distress. To help clarify this distinction, Gable and Reis (2001) called on researchers to develop an accurate catalog or roster of relationship processes that are aversive or appetitive. A clear example of the former is conflict. A clear example of the latter is the behavior of capitalization (Gable, Reis, Impett, & Asher, 2004). But what about support and hindrance? Are they aversive or appetitive processes? Gable and Reis (2001) note that although support is clearly intended to be beneficial, it is best understood as a mechanism for reducing distress and therefore “may involve aversive processes as much as it involves appetition” (p. 179). In contrast, conflict, criticism, and other negative aspects of relationships are thought to involve primarily aversive and not appetitive processes.

Our findings diverge from Gable and Reis’s (2001) analysis on this point. Specifically, we found support to affect predominantly positive outcomes and therefore believe it should be categorized as an appetitive process. Support increases feelings of contentment, of passion, and of being loved and does little to affect anxiety or sadness (though it was found to reduce anger in two of the three studies<sup>6</sup>). Indeed, if there is any confusion about cataloguing one of the two, it is with hindrance—which exerted effects on both appetitive and aversive outcomes.

As we see it, positive relational outcomes are indicators of perceived partner responsiveness (Reis et al., 2004) and of trust (Cutrona et al., 2005)—both of which are components of the appetitive system within relationships. Our findings—that they are positively affected by support and negatively affected by hindrance—are consistent with models that highlight the slow and cumulative effects of both good and bad relationship acts on the appetitive system, and specifically on trust and perceived responsiveness.

Negative relational outcomes, which are mostly unaffected by support but are affected by hindrance, are indicators of the aversive system. As noted earlier, this system (whose function is to respond to the presence of aversive cues) tends to be a quicker one (Cacioppo et al., 1997) and to engender biased cognitive processing of negative cues (Pratto & John, 1991). Thus, hindrance is of relevance to this system, while support—at least as an independent effect—is not.

### **Interactive Effects of Hindrance and Support**

Where support may be relevant to the aversive system is as a buffer of hindrance, though such buffering

can occur on appetitive system outcomes as well. The results of Study 2 seem to support this view, though the inconsistent finding of such buffering in Studies 1 and 3 suggest that it occurs only under some circumstances or only for couples in earlier stages of relationships.

To our knowledge, ours is only the second study (after DeLongis et al., 2004) to formally test the interactive effects of hindrance and support on daily feelings. Recall that DeLongis et al. (2004) found no interaction effect for hindrance and support when predicting same-day negative affect, though hindrance and support did interact to predict next-day negative affect. Our findings partially replicated those of DeLongis et al.: Hindrance and support did not interact in predicting any relationship feeling in Study 1. However, we found that hindrance and support interacted to predict (greater) positive relationship feelings and (lesser) anger in Study 2, as well as lesser anger in Study 3. Though failing to reach significance, the other interaction terms in Study 3 were also consistent with buffering effects, though not significantly so. Why were the results of Study 1 different? Recall that in contrast to Study 1, Studies 2 and 3 used more focused measures of support and hindrance, which may provide a more sensitive assessment of their relative effects. But why weren't the effects found in Study 2 fully replicated in Study 3? One possibility is that the nature of the samples played some part here. Participants in Study 2 were predominantly student couples who were cohabitating, whereas those in Study 3 were predominantly community couples who were married. The fact that support buffered the effects of hindrance on positive feelings in Study 2 but that weaker evidence for such buffering was found in Study 3 suggests that hindrance may have different meanings for the couples in these two samples. Specifically, the findings from Study 2 suggest that negative effects of hindrance on positive feelings are neutralized on days when these student couples also experienced support; this does not appear to be the case for the community couples in Study 3. These results are consistent with past work showing that the interaction between hindrance and support is sample specific (cf. Okun & Keith, 1998); when they do appear, these buffering effects can be understood using the broaden-and-build model (Fredrickson, 1998), which suggests that positive events (which lead to positive moods) can have an undoing effect on negative events.

#### Limitations, Future Directions, and Conclusions

The results of our three studies differed somewhat and should be seen as generative of additional research rather than as ultimately conclusive. The use of multiple outcome variables might be seen as capitalizing on

chance (though the organized pattern of results replicating across multiple feelings and studies should allay that concern). Nonetheless, there are several limitations to the studies reported here. First, the samples for all three studies were self-selecting, which might limit the findings' generalizability. Though the samples included a diverse mix of urban couples, the relevance of these results to other populations (e.g., older adults, rural communities) remains to be established. Further, we used dichotomous measures of hindrance and support. These measures may have limited our ability to detect buffering effects: A simple dichotomous index may fail to distinguish days characterized by differing levels of hindrance; the absence of some buffering effects may be due to days with strong hindrance compared to relatively weak support. Additionally, we did not assess the order of hindrance and support within a given day, so it may well be that supportive interactions preceding hindering ones are less effective in reducing stress than those occurring later in the day. More frequent assessments, as well as continuous measures of these constructs, may have detected more subtle effects. Further research would benefit from examining other adaptational outcomes in addition to feelings, as well as individual and couple-level predictors of hindrance and support (e.g., see Murray, Bellavia, Rose, & Griffin, 2003). In such studies, it will be important to examine the reports of support and hindrance from both viewpoints (Bolger et al., 2000; Gable et al., 2003). Finally, the three studies differed in the diary methods employed: Studies 1 and 2 utilized paper-and-pencil diaries, while Study 3 used electronic diaries. Yet, the patterns of results in the three studies were similar, so any mode effects were minimal; additionally, our recent work suggests that electronic and paper data collection modes yield comparable results (Green, Rafaeli, Bolger, Shrout, & Reis, 2006).

There are several strengths to this series of studies. The use of diary methods reduces our reliance on retrospection and global ratings (Bolger et al., 2003; Robinson & Clore, 2002) and opens up the ability to examine process (by allowing us to adjust for earlier feeling, thus reducing the likelihood of reverse causation). Another strength is the use of multiple feelings, positively and negatively valenced, rather than of a single outcome (e.g., distress).

In summary, results from three daily diary studies provided strong support for the asymmetry of the effects of negative and positive social interaction on relationship feeling. Our findings also lend support to other researchers (cf. Fincham & Linfield, 1997; Gable & Reis, 2001) who argue for the need to consider both positive and negative (or appetitive and aversive) processes within relationships. As these authors have noted, this need

extends to both the inputs and the outputs of daily relationship processes.

Our results pose practical questions to relationship researchers and practitioners—can the relative ineffectiveness of support be reversed? Can its effects on negative, as well as positive, outcomes be strengthened? The current results point out the relatively limited impact of support compared to hindrance. Other work, reviewed recently by Rafaeli and Gleason (in press), suggests that this ineffectiveness stems from both limited benefits and considerable costs. These can be the target of intervention (cf. Cutrona et al., 2005; Rafaeli & Gleason, in press; Revenson, Kayser, & Bodenmann, 2005). We believe that couples can be taught effective support skills—just as they can be taught effective dispute resolution and problem-solving skills. Recent reports about social support intervention programs (Kuijer, Buunk, de Jong, Ybema, & Sanderman, 2004; Widmer, Cina, Charvoz, Shantinath, & Bodenmann, 2005) have shown this to be the case, and we hope our current results serve as additional impetus for such programs.

## NOTES

1. There is no overlap between the results reported here and those reported in these papers.

2. We selected these 15 items based on results from a confirmatory factor analysis (CFA) of these data by Thompson and Bolger (1999), who used 9 of these items to develop measures of Contentment, Passion, Anxiety, and Depressed Feeling. We used the same 9 items from the Bolger and Thompson CFA to form these scales and also included 6 additional items to construct scales for Joy, Anger, and Hostility. We calculated the between- and within-person reliabilities for each measure using procedures outlined in Cranford et al. (2006). For a given measure, the between-subjects reliability coefficient ( $R_{1E}$  in Cranford et al., 2006) is the expected between-subjects reliability estimate for 1 fixed day. The within-subject reliability coefficient ( $R_C$  in Cranford et al., 2006) is the expected within-subject reliability of change of persons over days. The between- and within-person reliabilities for Study 1 measures were as follows: Contentment (.88, .82), Passion (.78, .71), Joy (.85, .75), Anxiety (.65, .75), Anger (.48, .80), Sadness (.46, .71), and Hostility (.31, .60). The same reliabilities for Study 2 measures were Contentment (.87, .74), Passion (.85, .64), Loved (.88, .80), Anxiety (.66, .65), Anger (.49, .83), and Sadness (.74, .93); for Study 3 they were Contentment (.86, .83), Passion (.85, .76), Loved (.84, .76), Anxiety (.54, .64), Anger (.40, .77), and Sadness (.59, .86).

3. We reran all of the multilevel models omitting the lagged mood covariate; the results were identical for all three studies, with one exception: In Study 1, the interaction between support and hindrance was a significant (negative) predictor of hostility.

4. We ran all of the analyses again, including hindrance from others (a count of tensions, disagreements, or arguments with people other than one's partner) as a covariate. The results for partner hindrance and support remained unchanged; hindrance from other was unrelated to the negative relationship feelings of anxiety, sadness, or hostility. It was related to all positive relationship feelings as well as to anger.

5. Our primary analysis of daily support and hindrance effects uses the person-centered approach recommended by Enders and Tofighi (2007) and Raudenbush and Bryk (2002) to reduce bias in the random effect estimates. However, person centering of dummy variables

makes it difficult to show the average interaction in terms of presence/absence of support/hindrance. To check the interpretation of the significant interactions, we computed separate analyses of the daily feelings using dummy-coded variables for hindrance and support. These analyses produced consistent (though not identical) results as those in Table 5 and supported the conclusion that the hindrance effect was only significant (or was considerably stronger) when support was not present. A table showing these alternate analyses is available by request.

6. Interestingly, recent research has revealed that anger may be strongly tied to the behavioral activation (appetitive) system at both a trait and a state level (e.g., Harmon-Jones, 2003). Because anger is also related to the behavioral inhibition system, we might have expected some *increase* in it in response to support, or at least a canceling out of the appetitive and aversive effects. Instead, anger decreased on days when support was provided. It is possible that the anger we examine (i.e., anger within the relationship) differs from a more general, less stimulus-bound form of anger studied by Harmon-Jones.

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