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## Communication That Is Maladaptive for Middle-Class Couples Is Adaptive for Socioeconomically Disadvantaged Couples

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### Abstract

Demands for change in a relationship, particularly when met by behavioral withdrawal, foreshadow declines in relationship satisfaction. Yet demands can give partners opportunities to voice concerns, and withdrawal can serve to de-escalate conflict, stabilizing satisfaction instead (e.g., Overall, Fletcher, Simpson, & Sibley, 2009). We aim to reconcile these competing possibilities by arguing that withdrawal in response to requests for change will be *detrimental* among couples who possess the social, educational, and economic capital needed to address these requests, whereas withdrawal in response to partner demands will be *constructive* among couples with fewer resources for making the requested changes. Study 1 ( $N = 515$  couples; 18-month follow-up) replicates the harmful effects of observed demand/withdraw communication on changes in wives' satisfaction among relatively affluent couples, while documenting benefits of demand/withdraw communication among relatively disadvantaged couples. Using 4 waves of observational data, Study 2 ( $N = 431$  couples; 9-, 18- and 27-month follow-ups) shows that socioeconomic risk moderates the covariation between the demand/withdraw pattern and wives' relationship satisfaction, with higher levels of withdrawal again proving to be beneficial when socio-economic risk is high. In both studies, behavioral withdrawal by men appears to be maladaptive when couples have resources and capacities to enact desired changes, but may be adaptive when those resources and capacities are lacking. Efforts to change couple communication without appreciating the larger social and economic contexts of those behaviors may be counterproductive.

### Keywords

couples; marriage; communication; low income; socioeconomic status

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Behavioral interdependence is a defining feature of all intimate relationships (Thibaut & Kelley, 1959), and specific patterns of interaction characterize couples who are struggling and vulnerable to deterioration (e.g., Fincham, 2003). Arguably the most potent of these behavioral patterns arises when one person expresses discontent with some aspect of the

relationship, and requests changes or accommodations from the partner, only to be met by the partner's avoidance or disengagement from the topic at hand. This demand/withdraw pattern is believed to be self-perpetuating, with disengagement inviting increasingly insistent requests for change, thus evoking even greater avoidance and defensiveness from the partner (Heavey, Christensen, & Malamuth, 1995). Left unchecked, both partners come to see their actions as justified reactions to the other person's insensitivity and selfishness. Through repetition these otherwise ordinary and even benign behaviors are believed to grow into polarized positions, leaving partners frustrated and even uncertain about the viability of the relationship. Indeed, demand/withdraw interactions are stronger among unhappy couples than happy couples (meta-analytic  $r = .36$ ; Schrodt, Witt, & Shimkowski, 2014), predict declines in satisfaction beyond the effects of negative communication more generally (Caughlin & Huston, 2002), and positively correlate with biological variables (e.g., hyperaroused state during interaction) that may compromise health (Malis & Roloff, 2006). Gender plays an important role in these exchanges: Women are more likely to demand change while men are more likely to disengage and maintain the status quo (e.g., Christensen & Shenk, 1991), and this pattern negatively predicts satisfaction more strongly than husband demand/wife withdrawal patterns (e.g., Eldridge, Sevier, Jones, Atkins, & Christensen, 2007). Empirically tested models of couple therapy are designed specifically to counteract demand/withdraw exchanges, primarily through acceptance, tolerance-building, and constructive engagement, and they show some efficacy in doing so (e.g., Baucom, Atkins, Rowe, Doss, & Christensen, 2015).

The consistency of these different strands of evidence supporting the demand/withdraw pattern are especially surprising in light of theory and research suggesting that these same behaviors can be *constructive* features of couple communication. Effective relationship maintenance is likely to require active engagement of difficult topics (McNulty & Russell, 2010), for example, and disclosure of complaints in a relationship might enable partners to "clear the air" and resolve ongoing concerns (e.g., Rusbult, Zembrodt, & Gunn, 1982). Disagreements and expressions of discontent might be uncomfortable in the short-term but beneficial in the long-term, as some have argued (e.g., Overall et al., 2009), enabling couples to appreciate how their relationship can withstand, and perhaps even grow from, difficult exchanges.

Withdrawal too might prove advantageous, as diary studies demonstrate that disengagement from social interaction at the end of a workday enables more rapid recovery from stress (Repetti, 1989) while reducing the likelihood that negative affect will be reciprocated (Roberts & Levenson, 2001; also see Holley, Haase, & Levenson, 2013). And while the larger literature demonstrates that demand-withdraw interaction covaries with *lower* levels of satisfaction, higher levels of demand/withdraw behavior have been shown to predict *improvements* in relationships over time (Caughlin, 2002). Contrary to prevailing views of demand/withdraw communication, this suggests that women's requests for change may provide men with important information about women's concerns in the relationship, and that disengagement by men can reduce the intensity of disagreements and "allow cooler heads to prevail." In short, even well-characterized behaviors in couple interaction appear to be heterogeneous in their impact—detrimental under some conditions and advantageous

in others— highlighting the need to identify third variables that can isolate these different effects.

Are demanding and withdrawing behaviors destructive forces in relationships, or are they healthy and benign responses to partners' differences of opinion? We propose that considering the broader living circumstances and socioeconomic standing of the couples themselves can reconcile these two ostensibly competing perspectives. Specifically, for couples with good jobs, stable incomes, and supportive social networks, withdrawal in the face of partner demands may be less a reflection of difficult life circumstances than it is an indicator of a refusal to acknowledge the validity of the partner's concerns (and/or poor skills in communication), thus compromising relationship quality. But for couples working in low-wage jobs, who experience persistent economic stress, and who feel isolated from others, disengaging from the partner's demands for change could prove adaptive, and therefore withdrawal could be a skillful behavior used to prevent negative escalation. Here, disengagement might minimize focus on harsh external social and economic demands that cannot be readily changed, or distract attention from the male partner's inadequacy as a wage-earner, potentially reducing the intensity of conflict and maintaining relationship quality.

Consider, for example, a wife's request that her husband approach his employer for a pay increase. For a husband earning minimum wage with little job security and few better prospects for work, this is a risky proposition, and by demurring discussion of this issue he can preserve his self-esteem and lessen emphasis on the couple's vulnerable economic plight. Similar behavior by a husband with a salaried position and greater social status might signal an unreasonable rejection of the wife's perspective and an unwillingness on his part to make sacrifices for the family. The more general point is that efforts to maintain and improve upon relationships will, in many instances, be easier when economic and social capital is greater and, therefore, that withdrawing from partner demands for change may affect advantaged and disadvantaged couples in different ways.

Several findings hint at the possibility that economic deprivation, and the stress associated with socioeconomic disadvantage, are uniquely costly for relationships. For example, disagreements about money are more "pervasive, problematic, and recurrent" than other relationship conflicts, and they are more likely to go unresolved, despite the fact that couples devote considerable time and effort to addressing their financial difficulties (Papp, Cummings, & Goeke-Morey, 2009, p. 91). Lower income couples are also more likely to experience relationship distress and dissolution (Bramlett & Mosher, 2002; Rauer, Karney, Garvan, & Hou, 2008), census-derived measures of neighborhood disadvantage correlate inversely with observed warmth (Cutrona et al., 2003), and financial strain covaries with observed negativity in couple interaction even after controlling for family of origin effects, symptoms of depression, and relationship satisfaction (e.g., Conger, Rueter, & Elder, 1999; Williamson, Karney, & Bradbury, 2013). And while it is often assumed that relationship difficulties among low-income couples are attributable to differences in traditional values toward marriage and family, standards for marital satisfaction, and experiences of skills-based relationship problems, low-income couples actually hold more traditional values, have similar romantic standards, and experience similar skills-based relationship problems, while

differing only in their economic standards for marriage and relationship problems associated with economic and social issues (Trail & Karney, 2012).

Moreover, it is likely that external stressors and sources of disadvantage reduce couples' capabilities to meet one another's demands and recover from the distress associated with negative escalation. The two diary studies cited above as evidence that disengagement can be beneficial were conducted with couples in which one partner was employed in a high-stress occupation (viz., air-traffic controllers in Repetti, 1989; police officers in Roberts & Levenson, 2001), suggesting that withdrawal in the context of stress may be protective. Furthermore, although demanding based on high relationship standards may be adaptive when couples have the capabilities to meet those standards, it can be harmful when couples are not equipped to meet their own marital standards (McNulty, 2016). Taken together these findings suggest that outside stress on couples might govern the impact that demand-withdraw behaviors have on the quality and course of their partnership.

To date, studies of demand/withdraw communication focus almost exclusively on White, middle-class couples. The absence of work on socially disadvantaged couples leaves the moderating role of socioeconomic context on couple communication largely unaddressed and, more critically, raises uncertainty about whether demand/withdraw communication is indeed maladaptive across the socioeconomic spectrum. Resolving the generalizability of the demand/withdraw pattern as a reliable predictor of relationship distress is important for theoretical and practical reasons. Conceptually, classic accounts of couple communication in general (e.g., social learning theory, Jacobson & Margolin, 1979; the intimacy process model, Reis & Shaver, 1988) and demand/withdraw communication in particular (Christensen, Eldridge, Catta-Preta, Lim, & Santagata, 2006), tacitly assume that distress-generating behavioral processes are more nomothetic than idiographic. Evidence that behavioral effects on satisfaction might be moderated by couples' varying sociodemographic circumstances would challenge these views, much like emerging work showing that parental monitoring is more advantageous for children in risky neighborhoods than for those in affluent neighborhoods (Beyers, Bates, Pettit, & Dodge, 2003). Indeed, emerging models of relationship development do argue for contextual influences on couple processes and outcomes (e.g., Bradbury & Karney, 2004; Conger et al., 1999; Karney & Bradbury, 1995; Randall & Bodenmann, 2009) but to date fail to fully characterize those influences or the specific behavioral processes that they operate upon. From a practical standpoint, establishing that demand/withdraw behavior operates differently for couples at different levels of socioeconomic standing might lead to identification of factors that moderate treatment outcomes, yielding interventions that would improve outcomes for vulnerable, underresourced couples (see Cowan & Cowan, 2014).

We present two longitudinal studies that test the hypothesized moderating influence of socioeconomic risk (using a cumulative index of social and economic hardship, described in more detail below) on the association between observed demand/withdraw communication and relationship satisfaction, focusing specifically on changes in satisfaction predicted by female demand/male withdrawal (Christensen & Heavey, 1990). Emphasis on socioeconomic risk as a moderator follows directly from our view, outlined earlier, that behavioral effects on satisfaction will vary as a function of couples' levels of access to

social and financial resources. Among couples living with low levels of socioeconomic risk, we expected to replicate the detrimental effects of husband withdrawal on both couple members' satisfaction when wives' demands are more frequent and intense. Among couples living with greater adversity and less access to social and economic resources, in contrast, we expected to find that demand/withdraw behaviors predict satisfaction in a different way, such that higher levels of withdrawal may not worsen the effect of demanding behavior on satisfaction or, following Holley et al. (2013), Repetti (1989), and Roberts and Levenson (2001), that higher levels of withdrawal may actually protect against declines in satisfaction. In both studies, discriminant tests are presented to clarify whether any moderating effects of sociodemographic risk on demand/withdraw behavior extend to patterns involving both partners' demand behaviors and both partners' withdrawal behaviors (i.e., demand/demand and withdraw/withdraw patterns). Comparative data on demand/demand patterns is especially valuable in light of claims that high levels of negative behavior and high rates of negative reciprocation are uniquely potent in predicting relationship distress (e.g., Levenson, Carstensen, & Gottman, 1994); our studies will evaluate these claims by exploring the relative contributions of demand/demand and demand/withdraw behaviors to changes in satisfaction.

The two longitudinal studies presented here use data collected from large and diverse samples of couples, are virtually identical in how they assess sociodemographic risk and demanding and withdrawing behaviors, and are similar in how they assess relationship satisfaction. At the same time, the studies diverge in that Study 1 couples have been in their relationships for varying lengths of time, whereas Study 2 couples are beginning their first marriages. More critically, in Study 1 couple behaviors are assessed once, and satisfaction is assessed twice over 18 months, permitting analysis of how between-couple variability in demand and withdraw behaviors predict changes in satisfaction. In Study 2, couple behaviors and satisfaction are assessed four times at 9-month intervals over the first 27 months of marriage. These data are used to address a different question from Study 1, addressing how *within-couple* changes in behavior predict within-couple changes in satisfaction, relative to couples' own average levels. Testing within-couple change allows us to see how fluctuations in spouses' demanding and withdrawing behaviors are associated with fluctuations in spouses' relationship satisfaction. Such within-couple analyses control for stable between-person differences, or selection effects, and thereby allow for stronger inferences about the links between demand/withdraw communication and relationship satisfaction.

## Study 1

Evidence that improvements in couple communication might promote relationship functioning motivated the U.S. Administration for Children and Families to invest, as part of the Healthy Marriage Initiative, nearly one billion dollars in projects intending to teach low-income couples communication skills believed necessary for sustaining a healthy marriage (Johnson, 2012). With data drawn from the Supporting Healthy Marriages (SHM) project, the largest experimental study of couples funded under this initiative, we employ multilevel modeling controlling for dyadic inter-dependence to examine possible moderating effects of sociodemographic risk on associations between demand and withdraw behaviors

and changes in couple satisfaction. Although the SHM project revealed very few meaningful differences between intervention and control couples on behavior or satisfaction (Lundquist et al., 2014), or on the association between behavior and changes in satisfaction (Williamson et al., 2015), the analyses we present here rely exclusively on data collected from a large group of untreated control couples.

## Method

**Participants.**—Five-hundred and 15 couples provided data for Study 1, drawn from the larger sample of couples participating in the SHM study. All couples were recruited between February 2007 and December 2009 as part of the SHM project, which was sponsored by the Office of Planning, Research and Evaluation in the U.S. Administration for Children and Families, Department of Health and Human Services. Eighty-seven percent of these couples were married when they enrolled in the program, for an average marital duration of 5.9 years ( $SD = 4.0$ ). Unmarried couples had been together for an average of 5.2 years ( $SD = 4.7$ ). All couples had children or were expecting a child; couples had two children on average. Men's mean age was 33 ( $SD = 6.2$ ) and women's mean age was 31.8 ( $SD = 7.5$ ). Seventy-five percent of men and 76% of women had a high school diploma. The modal income bracket was \$35,000 to \$39,999, with 40% of couples' incomes at or below the Federal Poverty Level (FPL) and 41% of couples' incomes between 100% and 200% of the FPL. Eleven percent of couples were African American, 21% were White, 46% were Hispanic, and 22% were of another race or the spouses differed in racial backgrounds.

### Procedure.

**Recruitment and screening.** The SHM study was implemented at eight sites in seven states. Each site was responsible for recruiting and enrolling approximately 800 couples over the course of 2 years; 6,298 couples were enrolled overall. Sites were allowed to develop their own recruitment techniques, based upon the resources and needs of their programs, using four main strategies: cultivating partnerships with local social service, government, community, and faith-based organizations for outreach and referrals, including programs within the host agency; finding opportunities to talk directly with couples about the program, often through referral partners or at community events; launching targeted mass-media campaigns; and encouraging currently enrolled couples to refer family and friends.

Across sites, couples were eligible to participate if both spouses agreed to participate, couples reported an annual income below \$50,000 (or \$60,000 in some sites), both partners were 18 or older, couples were expectant parents or parents of a child under 18 who lived in their home, both partners understood the language in which SHM services were offered (English, or in some locations, Spanish), and partners gave no indication of relationship violence. Some sites also had more stringent criteria (e.g., enrolling only expectant parents; see Miller Gaubert, Gubits, Alderson, & Knox, 2012, for details). As noted, couples were randomized to the treatment condition, in which they would participate in the SHM intervention program, or to the control condition, in which couples were unable to participate in any SHM activities but could still access other services in their communities. Only couples enrolled in the control condition are included in the present analyses.

A subsample of 1,222 intervention couples and 1,227 control couples were randomly selected to participate in an observational data collection paradigm, at which time they also reported their relationship satisfaction. An equal number of couples (306) in each of the local sites were identified and invited to participate in the videotaped observations; couples with infants and with preadolescent and adolescent children were oversampled. A total of 1,511 couples (749 from the intervention group and 762 from the control group) agreed to participate in the observational data collection; 1,397 provided usable data (i.e., formally participated in the observational interaction task, and provided data with properly working audio and video). Participants reported on their relationship satisfaction in a final follow-up telephone interview, conducted separately with husbands and wives, about 18 months after couples provided observational data. Of the 1,397 couples who provided observational data, 1,034 also completed the 18-month follow-up, and of those 1,034 couples, 515 were part of the control condition; the current analyses use these 515 couples.

Among the full set of control couples who provided observational data, comparison of the 515 with 18-month follow-up satisfaction data and the 247 who failed to provide the 18-month follow-up satisfaction data yielded a few demographic differences, for age (husbands  $d = .19$ , wives  $d = .14$ ), years of marriage ( $d = .25$ ), number of children ( $d = .09$ ), and satisfaction (husbands  $d = .31$ , wives  $d = .25$ ). The subsample providing 18-month follow-up data had slightly lower scores on the risk index ( $d = .19$ ) and were less likely to be below the FPL ( $d = .22$ ), but were *more likely* to be Hispanic ( $d = .18$ ); there were no significant differences in education, or proportions of White and Black couples. Although these effects are generally small in magnitude the sample of 515 couples does appear to be older, have more children, and be together longer than the observed subsample not providing 18-month follow-up satisfaction data. Nevertheless, these variables do not correlate substantially with satisfaction or behavioral data. These 515 couples were also slightly more satisfied than the observed sample without 18-month follow-up satisfaction data (husbands' mean difference = 1.37,  $p < .001$ , wives' mean difference = 1.19,  $p < .001$ ); this does somewhat limit generalizability of findings while also yielding results that would be somewhat more conservative than those we would see with a higher proportion of less satisfied couples.

**Behavioral observation.:** Couples were visited in their homes by trained interviewers who videotaped the couples engaging in three 7-min discussions, for a total behavioral sample of 21 min. Discussions took place in a location of the couples' choosing (usually a dining room or living room) that would enable them to talk privately and without interruption. Partners were seated at a  $\sim 90^\circ$  angle to allow them to interact normally while remaining visible to the single camera positioned in front of them. The first two discussions used procedures assessing couples' behaviors while discussing one spouse's personal goal (Pasch & Bradbury, 1998). One randomly chosen spouse was asked to "talk about something you would like to change about yourself" while the partner was instructed to "be involved in the discussion and respond in whatever way you wish." Spouses were instructed to avoid selecting or discussing topics that were sources of tension or difficulty within the relationship. After a short break, a second discussion was held that was identical to the first discussion, with the roles reversed. Common topics included losing weight, making

a career change, and dealing with stress. For the third interaction, which was designed to assess problem-solving behaviors, partners were asked to identify a topic of disagreement in their relationship and to then devote 7 min working toward a mutually satisfying resolution of that topic. Common topics included management of money, chores, communication, and spending time together as a couple.

Demand/withdraw behavior, the focus of our analyses, is typically assessed using data from problem-solving discussions (e.g., Christensen & Shenk, 1991). We assess demand/withdraw interaction using data from problem-solving and social support conversations, for two main reasons. First, existing work on the reliability and validity of observational data has demonstrated that 15 min of data is sufficient to capture a sufficiently large enough sample of behavior to calculate reliable estimates of behaviors (Heyman, Lorber, Eddy, & West, 2014). Therefore, using the entire 21-min sample of behavior offered reliable and valid data with which to answer our research questions, beyond what is possible with the 7-min sample of problem-solving behavior. Second, factor analysis of the Iowa Family Interaction Rating Scales (IFIRS) applied to observational data from low-income couples demonstrated that the underlying structure of couple interaction behaviors was the same across all three interactions (Williamson, Bradbury, Trail, & Karney, 2011).

Videotapes were scored by 29 trained coders using the IFIRS (Melby et al., 1998). The IFIRS is a macrocoding system, which means that each participant is given a single score for each code at the end of the task, rather than being assigned a score for multiple, shorter time segments, or for each speaking turn, as is the case in microcoding systems. This score is determined by the coder based on the frequency and intensity with which the participant exhibits the verbal and nonverbal behavior described in the code (see Table 1 for description of IFIRS codes used for the demand and withdrawal measures). The scores range from 1 to 9, with a score of 1 indicating that the behavior did not occur. In general, a score of 3 indicates that “the behavior almost never occurs or occurs just once and is of low intensity;” a score of 5 means “the behavior sometimes occurs and is at a low or moderate level of intensity;” a score of 7 means that “the behavior occurs fairly consistently or is of elevated intensity;” and a score of 9 means “the behavior occurs frequently or with significant intensity” (Melby et al., 1998, pp. 7–8).

Coders—11 of whom were native Spanish speakers—coded only in their native language. Most of the discussions (68%) took place in English, 30% took place in Spanish, and 2% were in a combination of English and Spanish. Coders participated in 10 hr of training per week for 3 months and were required to pass written and viewing tests at an 80% accuracy level before coding tapes. The criterion scores used to judge coder accuracy were determined by expert coders at the Institute for Social and Behavioral Research at Iowa State University, where the IFIRS was developed. During the coding process, coders also participated in 2 hr of continuing training each week, which consisted of a variety of structured activities (e.g., coding a tape as a group and watching examples of specific codes) designed to minimize drift and to ensure continued fidelity to the IFIRS codes.

Coders viewed each of the interaction tasks three or four times using the Noldus Observer XT coding software, using the built-in capabilities to note behaviors of both spouses. When



they had completed viewing an interaction, coders used their recorded notations to tabulate the frequency and intensity of each type of behavior and used this information to assign a score for each spouse for each code, using criteria from the IFIRS coding manual (Melby et al., 1998).

To assess reliability, 20% of the videos were randomly assigned to be coded by two coders chosen at random from the entire pool of coders. The scores of the two coders were compared, and any scores that were discrepant by more than one point were resolved by both coders working together. Thus, the final set of scores used in analyses for the reliability tapes included scores that matched across the two coders during their initial individual coding (when codes were off by 1 point, the score from the randomly designated “primary coder” was used); discrepant scores were replaced by the scores from the second joint coding.

### **Measures.**

**Demanding and withdrawing behaviors.** Using the IFIRS, demand and withdrawal scores were calculated for each partner, aggregated across the three discussion tasks in each of the four assessments. Means and standard deviations for wives’ demanding and husbands’ withdrawing behaviors were similar across the tasks. A composite *demand* behavioral scale was created by averaging an individual’s scores on the angry coercion, hostility, and dominance codes (see Table 1 for detailed explanations). Interrater reliability for demand, as measured by the intraclass correlation coefficient (ICC) was .77 for wives and .75 for husbands. A composite *withdrawal* behavioral scale was created by averaging an individual’s scores on the avoidance code as well as the reversed communication and listener responsiveness codes (see Table 1 for detailed explanations). Interrater reliability for withdrawal, as measured by the ICC was .85 for wives and .71 for husbands.

**Relationship satisfaction.** Participants’ overall satisfaction with their relationship for the purposes of this investigation was assessed at the same time point of the observational data collection and again 18 months later with an eight-item scale. Sample items include “I can count on my spouse to be there for me” and “We enjoy doing ordinary day-to-day things together” and were coded on a 4-point scale, with 1 = *strongly disagree* and 4 = *strongly agree*. One item, “How happy are you with your marriage?,” was coded on a 7-point scale, with 1 = *completely unhappy* and 7 = *completely happy*. Items were summed to form the scale score for each participant; 35 was the maximum possible score. Coefficient alpha was .85 for husbands and .87 for wives at the observational data collection and .80 for husbands and .84 for wives at the 18-month follow-up.

**Sociodemographic risk.** Risk was assessed using a 10-item index developed by Amato (2014). Couples were given 1 point for the presence of each of the following 10 items: (a) either partner was under the age of 23, (b) husband had less than a high school education, (c) wife had less than a high school education, (d) husband was unemployed, (e) wife was unemployed, (f) couple’s income was below the poverty line, (g) husband was receiving public assistance, (h) wife was receiving public assistance, (i) husband reported no one to help in an emergency, and (j) wife reported no one to help in an emergency. On

average, couples endorsed 4.48 of the 10 items, with substantial variability ( $SD = 2.18$ ), demonstrating that efforts to solicit a sample that included risky couples were successful.

**Analytic plan.:** Analyses were conducted in SAS Version 9.4 using the proc mixed procedure. The data were fit with a two-level actor-partner interdependence model (APIM) in which individuals were nested within couples to account for the dyadic interdependence of the data. *Equation 1* represents the mixed model. Furthermore, while most research has operationalized the demand/withdraw pattern as a summed composite of wife-demand and husband-withdrawal (e.g., Heavey et al., 1995), the current investigation examined the multiplicative interaction of wife-demand and husband-withdraw to improve upon previous methods and disentangle how degrees of each behavior are associated with satisfaction at varying levels of the other behavior. Analyses controlled for baseline satisfaction, which is not shown in the equation.

**Level 1**

$$\begin{aligned}
 18mo\ Relationship\ Satisfaction_{ij} = & (female)_{ij}[\pi_{f0i} \\
 & + \pi_{f1i}(female\ demand)_{ij} + \pi_{f2i}(male\ withdrawal)_{ij} \\
 & + \pi_{f3i}(female\ demand \times male\ withdrawal)_{ij}] + (male)_{ij}[\pi_{m0i} \\
 & + \pi_{m1i}(female\ demand)_{ij} + \pi_{m2i}(male\ withdrawal)_{ij} \\
 & + \pi_{m3i}(female\ demand \times male\ withdrawal)_{ij}] + e_{ij}
 \end{aligned}$$

**Level 2**

$$\begin{aligned}
 \pi_{f0i} &= b_{f00} + b_{f01}(couple\ risk)_i + u_{f0i} \\
 \pi_{f1i} &= b_{f10} \\
 \pi_{f2i} &= b_{f20} \\
 \pi_{f3i} &= b_{f30} \\
 \pi_{m0i} &= b_{m00} + b_{m01}(couple\ risk)_i + u_{m0i} \\
 \pi_{m1i} &= b_{m10} \\
 \pi_{m2i} &= b_{m20} \\
 \pi_{m3i} &= b_{m30}
 \end{aligned}$$

**Results and Discussion**

**Descriptive statistics.**—We learn from the bivariate correlations shown in Table 2 that greater displays of demanding behavior at baseline covaried with lower levels of reported satisfaction concurrently ( $r = -.13$  for men and  $r = -.16$  for women, both  $p < .001$ ) and at the 18-month follow-up ( $r = -.13$  for men and  $r = -.16$  for women, both  $p < .001$ ). Comparable associations involving withdrawal tended to be weaker at baseline ( $r = -.15$  for men,  $p < .001$ , and  $r = -.06$  for women,  $p < .05$ ) and at 18 months ( $r = -.07$  for men and  $-.04$  for women, both  $p < .05$ ). This pattern was reversed for sociodemographic risk, which tended to correlate more strongly with withdrawal ( $r = .12$  for men and  $r = .18$  for women, respectively, both  $p < .001$ ) than with demanding behavior ( $r = .05$ , *ns*, for men and  $r = .07$  for women,  $p < .05$ ). Overall, these results lend support to the validity of the behavioral samples. Although sociodemographic risk and satisfaction were weakly associated (for men,  $r = -.04$  at baseline and  $r = -.03$  at 18 months, both *ns*; for women,  $r = -.08$  at baseline,  $p < .01$ , and  $r = -.01$  at 18 months, *ns*), these associations are consistent with our premise that risk gains predictive power to the extent that it interacts with behavioral processes.

Finally, Table 2 shows that there was substantial instability in satisfaction over the 18-month interval, with  $r = .55$  for men and  $r = .57$  for women, both  $p < .001$ .

**Risk and Demand  $\times$  Withdrawal predicting relationship satisfaction.**—To test of our primary hypothesis, we computed two APIMs. The first model tested the main effects of risk, wife demand, husband withdrawal, and the Wife Demand  $\times$  Husband Withdrawal interaction term to predict husbands' and wives' relationship satisfaction at 18 months, in order to evaluate if these well-established effects replicate in a new sample of couples historically underrepresented in the relationships literature. In all models, baseline reports of relationship satisfaction were controlled. As shown in Table 3, only one effect emerged as statistically reliable in this first model: higher levels of wives' demanding behavior predicted declines in wives' satisfaction. However, as we note next, this effect is qualified by higher-order interactions with sociodemographic risk.

The second model introduced risk as a moderator of associations between 18-month satisfaction (controlling for baseline satisfaction) and wife demand, husband withdrawal, and the Wife Demand  $\times$  Husband Withdrawal term. The aforementioned effect of wives' demand on wives' satisfaction fell to nonsignificance in this model (see Table 3). More critical to our hypotheses, however, were findings that risk moderated the association between the Wife Demand  $\times$  Husband Withdrawal pattern and changes in wives' relationship satisfaction.

The latter interaction supports our main hypothesis and is depicted in Figure 1. Simple slopes at different levels of the moderating variables for this interaction were calculated and tested versus zero for significance. Levels for the moderating variables of withdrawal and risk were estimated at their means and at one *SD* above and below their respective means. The lines in Figure 1 illustrate the six simple slopes calculated—namely, demand at low withdrawal ( $-1$  *SD*) and low risk ( $-1$  *SD*); demand at mean withdrawal and low risk ( $-1$  *SD*); demand at high withdrawal ( $+1$  *SD*) and low risk ( $-1$  *SD*); demand at low withdrawal ( $-1$  *SD*) and high risk ( $+1$  *SD*); demand at mean withdrawal and high risk ( $+1$  *SD*); demand at high withdrawal ( $+1$  *SD*) and high risk ( $+1$  *SD*). Lines with simple slopes that differ significantly from 0 are indicated with asterisks.

As shown in Figure 1, among couples with low levels of sociodemographic risk, wives became more dissatisfied over 18 months to the extent that they displayed higher levels of demanding behavior and their husbands displayed higher levels of withdrawal ( $\beta = -1.21$ ,  $p < .01$ ). Furthermore, for low-risk couples, husbands' low levels of withdrawal did not cause wives' satisfaction to significantly change, even as wives' demands increased ( $\beta = -.29$ , *ns*). A test of the difference between simple slopes of wives' demanding behavior relating to wives' relationship satisfaction for low versus high husband withdrawal revealed that low-risk wives experienced significantly greater relationship satisfaction when husbands' withdrawal was low in the face of wives' demands compared to when withdrawal was high ( $\beta = 6.12$ ,  $p < .05$ ). Taken together, the results for low-risk couples shown in Figure 1 are consistent with prior studies of demand/withdraw behavior, demonstrating that the combination of highly demanding wife behavior and highly withdrawing husband behavior is harmful for wives' relationship satisfaction, while wives' demanding behavior

in the absence of highly withdrawing husband behavior is less consequential for wives' relationship satisfaction.

The opposite pattern was obtained for relatively high-risk couples. Here, wives became more dissatisfied to the extent that they displayed higher levels of demanding behavior and their husbands displayed *lower* levels of withdrawal ( $\beta = -1.56, p < .01$ ). In contrast with the low-risk couples, when high-risk husbands were high in withdrawal, wives' satisfaction remained stable, even as their demands increased ( $\beta = .43, ns$ ). A test of the difference between simple slopes of wives' demanding behavior relating to wives' relationship satisfaction for low versus high husband withdrawal revealed that high-risk wives experienced significantly greater relationship satisfaction when husbands' withdrawal was high in the face of wives' demands compared with when withdrawal was low ( $\beta = -1.67, p < .05$ ).

**Risk, Demand  $\times$  Demand, and Withdrawal  $\times$  Withdrawal predicting relationship satisfaction.** Finally, computing alternative versions of the above models revealed that changes in husbands' and wives' satisfaction were unrelated to Husband Demand  $\times$  Wife Withdrawal, Husband Demand  $\times$  Wife Demand, and Husband Withdrawal  $\times$  Wife Withdrawal interaction terms, and that none of these interaction terms were further moderated by risk.

**Summary**—In Study 2, results from residualized change models were at odds with those obtained in Study 1. Nevertheless, analysis of within-person change in Study 2 corroborates and extends the key idea from Study 1, that the association between demand/withdraw behavior predicts wives' relationship satisfaction in different ways depending on the couples' degree of socioeconomic risk. More specifically, Study 2 shows that when couples who have access to fewer social and economic resources experience *lower levels* of withdrawal by husbands in combination with higher levels of wives' demand at a given point in time, wives' relationship quality fluctuates below their average. Thus, the classic demand/withdraw pattern known to compromise relationship quality among relatively advantaged couples appears to have distinctly different implications for couples with less access to social and economic resources. Model tests of husband demand/wife withdrawal, husband demand/wife demand, and husband withdrawal/wife withdrawal revealed no effects of these patterns on changes in satisfaction nor any moderation by risk. Whereas Study 1 demonstrates that established behavioral predictors of change in relationship satisfaction operate differently at different levels of socioeconomic risk *between* couples, Study 2 indicates that level of socioeconomic risk can change the manner in which fluctuations in demand/withdraw behavior covary with fluctuations in wives' relationship satisfaction, at the *within-couple* level of analysis.

## Study 2

Study 1 relies on between-subjects models to test whether mean levels of demand/withdraw communication, assessed just once at baseline, would differentiate couples who go on to achieve different relationship outcomes, overall and at specific levels of sociodemographic risk. Models of this sort have proven useful for studying stable phenomena and their associations with later outcomes (see Hamaker, Nesselrode, & Molenaar, 2007), yet

there is growing appreciation for longitudinal designs that collect repeated-measures data on all variables likely to change and for modeling these data to capture within-person change processes (e.g., Hamaker, 2012). While modeling within-person change cannot approximate the rigor of true experiments, estimating covariation between *changes* in two sets of variables does strengthen causal claims well beyond what is permissible with the design used in Study 1. As we outline below, collecting and analyzing multiple waves of behavioral interaction data, though rare in the couples' literature, could shed new light on how demanding and withdrawing behaviors are organized over time and how within-person and within-couple fluctuations in these behaviors covary with satisfaction.

Study 2 adopts this strategy, using four waves of couple interaction data collected from newlywed couples to examine (a) whether partners' levels of demanding and withdrawing behaviors at any given assessment, relative to their own average across all assessments, correspond with relatively high or low levels of relationship satisfaction; and (b) more critically, whether sociodemographic risk moderates these *within-person* associations between demand/withdraw behavior and satisfaction. Specifically, among couples low in sociodemographic risk, we predict that high levels of wife demand in combination with high levels of husband withdrawal will covary with lower levels of wife satisfaction, as compared with when husbands are low in withdrawal. Among couples higher in sociodemographic risk, however, we predict that high levels of wife demand combined with high levels of husband withdrawal will covary with higher levels of wife satisfaction, as compared with when husbands are low in withdrawal. As in Study 1, discriminant tests will determine whether any moderating influence of risk on demand/withdrawal behaviors extends to demand/demand or withdrawal/withdrawal behaviors.

Finally, by collecting multiple waves of interaction data, we are positioned to examine a fundamental but untested assumption of demand/withdraw interaction, that partners' positions become more polarized or extreme as time passes, as the demands made by one partner elicit more withdrawal from the mate, and vice versa. Prior work by Eldridge et al. (2007) leads us to predict that the Wife Demand  $\times$  Husband Withdrawal interaction term will increase over our four assessments and that the Husband Demand  $\times$  Wife Withdrawal interaction will not, while prior work by Holley et al. (2013) leads us to predict that withdrawing behavior will increase over time; we offer no prediction on changes in demanding behavior.

## Method

**Participants.**—The Study 2 sample comprised 431 couples, whose marriages averaged 4.8 months in duration ( $SD = 2.5$ ) and averaged 0.6 children ( $SD = 1.0$ ) at baseline. Men and women reported mean ages of 27.9 ( $SD = 5.8$ ) and 26.3 ( $SD = 5.0$ ), respectively. Wives had a mean income of \$28,672 ( $SD = \$24,549$ ) and husbands had a mean income of \$34,153 ( $SD = \$27,094$ ). Twelve percent of couples were African American, 12% were Caucasian, and 76% were Hispanic, which is comparable with the proportion of people living in poverty in Los Angeles County who come from these groups (12.9% African American, 14.7% Caucasian, and 60.5% Hispanic; U.S. Census of Population and Housing, 2002). Of the Hispanic couples, 33% spoke Spanish in their interactions and 67% spoke English, and

all African American and Caucasian couples spoke English. A few interactions were not recorded because participants declined ( $n = 10$ ) or because the equipment malfunctioned ( $n = 6$ ), leaving 414 couples available for this analysis.

### **Procedure.**

**Recruitment.:** Sampling was undertaken to yield a group of participants who were first-married newlywed couples of the same ethnicity, living in low-income neighborhoods. To accomplish this, participants were recruited from Los Angeles County, a region with a large and diverse low-income population. Recently married couples were identified through names and addresses on marriage license applications. Addresses were matched with census data to identify applicants living in low-income communities, defined as census block groups wherein the median household income was no more than 160% of the 1999 federal poverty level for a four-person family. Next, names on the licenses were weighted using data from a Bayesian Census Surname Combination (BCSC), which integrates census and surname information to produce a multinomial probability of membership in each of four racial/ethnic categories (Hispanic, African American, Asian, Caucasian/Other). Couples were selected from the population of recently married couples using probabilities proportionate to the ratio of target prevalence to the population prevalence, weighted by the couple's average estimated probability of being Hispanic, African American, or Caucasian, which are the three largest groups among people living in poverty in Los Angeles County (U.S. Census of Population and Housing, 2002). These couples were telephoned and screened to ensure that they had married, that neither partner had been previously married, and that both spouses identified as Hispanic, African American, or Caucasian.

**Assessments.:** Couples were visited in their homes by two trained interviewers who described the IRB-approved study and obtained written informed consent from each participant. At baseline (T1), couples were visited in their homes by two interviewers who took spouses to separate areas to ensure privacy and orally administered self-report measures. Interviewers returned at 9 months (T2), 18 months (T3), and 27 months after baseline (T4) and administered the same interview protocol. Couples who reported that they had divorced or separated did not complete the interview. Following each interview, couples were debriefed and paid \$75 for T1, \$100 for T2, \$125 for T3, and \$150 for T4. Data collection took place between 2009 and 2013 for T1 through T4.

**Behavioral observation.:** After completing self-report measures individually, partners were reunited for three 8-min video-taped discussions (two social support discussions and one problem-solving discussion with the same protocol used in the SHM procedure). Upon completion, couples were debriefed and paid \$75.

Consistent with Study 1 procedure, videotapes were scored by 16 trained coders using the IFIRS. Coders—five of whom were native Spanish speakers— coded only in their native language. Coders followed the same training protocol and coding procedures and were judged using the same coder accuracy criterion in Study 2 as in Study 1. The same procedure for assessing reliability was used in Study 2 as in Study 1.

## Measures.

**Demanding and withdrawing behaviors.:** Demand, withdrawal, and Demand  $\times$  Withdrawal variables were computed using the same procedure as in Study 1. As in Study 1, descriptive statistics revealed that means and standard deviations for wives' demanding and husbands' withdrawing behaviors were similar across the discussion tasks. Interrater reliability for demand, as measured by the ICC, was .71 for wives and .77 for husbands. Interrater reliability for withdrawal, as measured by the ICC, was .65 for wives and .65 for husbands.

**Relationship satisfaction.:** Relationship satisfaction was assessed by summing responses on an eight-item questionnaire. Five items asked how satisfied the respondent was with certain areas of their relationship (e.g., "satisfaction with the amount of time spent together") and were scored on a 5-point scale (1 = *very dissatisfied*, 2 = *somewhat dissatisfied*, 3 = *neutral*, 4 = *somewhat satisfied*, 5 = *very satisfied*). Three items asked to what degree the participant agreed with a statement about their relationship (e.g., "How much do you trust your partner?") and were scored on a 4-point scale (1 = *not at all*, 2 = *not that much*, 3 = *somewhat*, 4 = *completely*). Scores could range from 8 (*very dissatisfied*) to 37 (*very satisfied*). Coefficient  $\alpha$  exceeded .70 for husbands and wives across all waves of the study. Spouses were generally happy, with a mean satisfaction rating above 33 at all time points and *SD* between 3.05 and 4.05 at all time points.

**Sociodemographic risk.:** Sociodemographic risk was assessed at baseline using a 10-item index almost identical to that used in Study 1 (Amato, 2014). Couples were given 1 point for the presence of each of the following items: (a) either partner was under the age of 23, (b) husband had less than a high school education, (c) wife had less than a high school education, (d) husband was unemployed, (e) wife was unemployed, (f) couple's income was below the poverty line, (g) husband was receiving public assistance, (h) wife was receiving public assistance, (i) husband reported no one to help in an emergency, and (j) wife reported no one to help in an emergency. Actual values on the risk index ranged from 1 to 9 (out of 10 possible), with a mean of 2.33 (*SD* = 2.13).

**Analytic plan.**—Two sets of analyses were conducted in SAS Version 9.4 using the proc mixed procedure, (a) a longitudinal regressed change model and (b) a longitudinal within-couple change model. In the set of regressed change analyses, the data were fit with a two-level APIM in which individuals were nested within couples to account for the dyadic interdependence of the data. First, Demand  $\times$  Withdrawal, risk, and baseline satisfaction were used to predict 27 months changes in satisfaction, using the same modeling as in Study 1. Next, we once again examined risk as a moderator of associations between Demand  $\times$  Withdrawal and longitudinal changes (27-month changes) in relationship satisfaction, controlling for baseline satisfaction (not shown in equation). Equation 1 in Study 1, above, shows the regressed change mixed model used in Study 2.

The second set of analyses examined the covariation between within-couple changes in demand/withdraw behavior and relationship satisfaction over time. Data were analyzed using multilevel modeling. Using Raudenbush, Brennan, and Barnett's (1995) multivariate

approach, analyses were conducted as two-level models with repeated measures (Level 1, within-person) nested within individuals (Level 2, between-person). As Raudenbush et al. (1995) explain “in hierarchical models for individual change, time-varying covariates are incorporated into the Level 1 model” (p. 171) such that scores of demand, withdraw, demand/withdraw are within-person deviation scores (i.e., deviation of a person’s score at time  $t$  from that person’s mean) that therefore represent temporal fluctuations in behavior within a spouse (see also Raudenbush & Chan, 1993). These data were fit with a two-level model in which repeated measurements of satisfaction and within-person-centered repeated measures of behavior were modeled at Level 1 and average ratings of behaviors were modeled at Level 2 as predictors of initial satisfaction and change in satisfaction. Time was nested within individuals, and husbands and wives were included in the same model to account for interdependence in the dyadic data. To test for the three-way interaction involving demand, withdrawal, and risk, our model included a risk variable at Level 2 (i.e., the summed score of sociodemographic risk), thus creating a cross-level interaction:

### Level 1

$$\begin{aligned} \text{Relationship Satisfaction}_{it} = & (\text{female})_{it}[\pi_{f0i} \\ & + \pi_{f1i}(\text{time})_{it} + \pi_{f2i}(\Delta \text{ female demand})_{it} \\ & + \pi_{f3i}(\Delta \text{ male withdrawal})_{it} \\ & + \pi_{f4i}(\Delta \text{ female demand} \times \text{male withdrawal})_{it}] + (\text{male})_{it}[\pi_{m0i} \\ & + \pi_{m1i}(\text{time})_{it} + \pi_{m2i}(\Delta \text{ female demand})_{it} \\ & + \pi_{m3i}(\Delta \text{ male withdrawal})_{it} \\ & + \pi_{m4i}(\Delta \text{ female demand} \times \text{male withdrawal})_{it}] + e_{it} \end{aligned}$$

### Level 2

$$\begin{aligned} \pi_{f0i} &= \beta_{f00} + \beta_{f01}(\text{couple risk})_i + u_{f0i} \\ \pi_{f1i} &= \beta_{f10} + u_{f1i} \\ \pi_{f2i} &= \beta_{f20} + \beta_{f21}(\text{couple risk})_i \\ \pi_{f3i} &= \beta_{f30} + \beta_{f31}(\text{couple risk})_i \\ \pi_{f4i} &= \beta_{f40} + \beta_{f41}(\text{couple risk})_i \\ \pi_{m0i} &= \beta_{m00} + \beta_{m01}(\text{couple risk})_i + u_{m0i} \\ \pi_{m1i} &= \beta_{m10} + u_{m1i} \\ \pi_{m2i} &= \beta_{m20} + \beta_{m21}(\text{couple risk})_i \\ \pi_{m3i} &= \beta_{m30} + \beta_{m31}(\text{couple risk})_i \\ \pi_{m4i} &= \beta_{m40} + \beta_{m41}(\text{couple risk})_i \end{aligned}$$

## Results and Discussion

**Descriptive statistics.**—Consistent with Study 1 findings, the bivariate correlations shown in Table 4 reveal that greater displays of demanding behavior covaried with lower levels of reported satisfaction across nearly all time points ( $r = -.14$  to  $-.17$ , for men and  $r = -.05$  to  $-.19$  for women). As in Study 1, although withdrawal’s associations with relationship satisfaction were less consistently significant, they followed the same pattern as in Study 1, ( $r = -.14$  to  $-.22$  for men,  $r = -.11$  to  $-.21$  for women). Sociodemographic risk was associated with higher levels of withdrawal ( $r = .11$  to  $.20$  for men and  $r = .08$  to  $.25$  for women, respectively,  $p < .05$ ) and demanding behavior ( $r = .10$  to  $.17$ , for men and  $r = .10$  to  $.19$  for women,  $p < .05$ ). Although sociodemographic risk at baseline and satisfaction were inconsistently associated across time points, significant associations indicate that risk



was associated with lower levels of satisfaction for husbands ( $r = -.10$  to  $-.16$ ,  $p < .05$ ) and wives ( $r = -.11$  to  $-.23$ ,  $p < .05$ ). Overall, these results were consistent with those in Study 1, further supporting to the validity of the behavioral samples. Finally, Table 4 shows that there was substantial instability in satisfaction across the 9-month assessments, with  $r = .56$  to  $.69$  for men and  $r = .52$  to  $.65$  for women, both  $p < .01$ .

Discussion topic and problem severity data were available in Study 2, and analyses revealed no significant differences in either variable for couples across the socioeconomic spectrum.<sup>1</sup>

**Risk and Demand × Withdrawal predicting relationship satisfaction with regressed change models.** To directly compare Study 2 with those from Study 1, we conducted a longitudinal regressed change model predicting 27-month relationship satisfaction from risk and Demand × Withdrawal at baseline. In Study 2 risk emerged as the only significant predictor, predicting declines in wives' relationship satisfaction over time ( $\beta = -.23$ ,  $p < .05$ ). Risk did not significantly moderate associations between Demand × Withdrawal and 27-month changes in wives' relationship satisfaction ( $\beta = .07$ , *ns*), as it did in Study 1. We comment further on the residualized change analyses from Studies 1 and 2 in the General Discussion.

**Growth curve modeling of demanding and withdrawing behavior.** Next, in an effort to address the previously untested prediction that demand/withdraw communication is a self-perpetuating, polarizing dyadic process that intensifies over time (Eldridge et al., 2007), we employed growth curve modeling to examine these behaviors' trajectories. Growth curve modeling of changes in observed demand and withdrawal shows that husbands became less demanding across the first 27 months of marriage ( $\beta = -.05$ ,  $p < .001$ ) while wives' demanding behaviors did not change reliably over this same span ( $\beta = .02$ ,  $p > .05$ ). Withdrawal increased over time for husbands ( $\beta = .18$ ,  $p < .001$ ) and for wives ( $\beta = .18$ ,  $p < .001$ ), consistent with prior evidence on changes in these behaviors (Holley et al., 2013). Finally, Wife Demand × Husband Withdrawal increased over time ( $\beta = .31$ ,  $p < .01$ ), while Husband Demand × Wife Withdrawal remained stable ( $\beta = .15$ ,  $p > .05$ ). These results are the first to our knowledge to demonstrate that the interaction between wife demands and husband withdrawal increases over the first years of marriage, as predicted by social learning approaches to marital interaction.

**Covariance between Demand × Withdrawal and relationship satisfaction within couples.** To examine how within-person fluctuations in spouses' demanding and withdrawing behaviors covaried with their relationship satisfaction over time, we next conducted the first of two within-subjects APIMs (see Table 5). The first APIM tested within-person associations between demand, withdrawal, and risk with relationship

<sup>1</sup>Study 2 also provided data on couples' discussion topics (recorded by coders as the topic couples discussed) and perceived topic severity (problem-severity ratings made by spouses prior to the interaction; wives  $M = 4.30$ ,  $SD = 3.29$ , husbands  $M = 4.09$ ,  $SD = 3.15$ ), which we examined in an effort to explore either variable as a proximal psychological factor that was systematically related to the risk index. Across 12 problem topics, a series of chi-square difference tests did not yield any differences in frequency between low-risk and high-risk couples ( $\chi^2$  ranging from .13 to 2.82, *ns*). Bivariate correlation between the risk index and husbands' and wives' rated problem-severity revealed a very weak correlation that pointed in the opposite direction for wives ( $r = -.10$ ,  $p < .05$ ), such that *lower-risk* wives tended to rate their problems as more severe, and a nonsignificant correlation between risk and problem severity for husbands ( $-.09$ , *ns*).

satisfaction over time, without moderation by risk. This model revealed that fluctuations in husbands' withdrawal were significantly associated with fluctuations in wives' relationship satisfaction, such that when husbands were withdrawing more than their own average, their wives were less satisfied than their own average. Also, risk significantly predicted fluctuations in both husbands' and wives' relationship satisfaction over time, in the expected direction.

The second APIM included risk as a moderator of these within-couple associations (see Table 5). Consistent with the findings of Study 1, this model revealed that the strength of the covariance between changes in Wives' Demand  $\times$  Husband's Withdrawal and within-person changes in wives' satisfaction was significantly moderated by risk ( $p < .05$ ).

To illustrate how risk moderates the covariance between Wife Demand  $\times$  Husband Withdrawal and relationship satisfaction over time, simple slopes at different levels of risk were calculated and tested for significance in the same manner as in Study 1. As shown in Figure 2, when couples were relatively low in sociodemographic risk, wives who were above their own average in demanding behavior did not experience a decline in satisfaction, provided that their husband was also relatively low in withdrawal; indeed, under these conditions wives' satisfaction slopes were positive though not significantly so ( $\beta = .36, ns$ ). This finding aligns well with prior findings for the protective effects of low levels of withdrawal for low-risk couples. When husbands were high in withdrawal, in contrast, the slope relating wives' demanding behaviors to wives' declines in satisfaction was nonsignificant ( $\beta = -.50, ns$ ). This nonsignificant slope value runs counter to our prediction, but the absence of an effect for high levels of husband withdrawal in this sample of relatively satisfied newlyweds is consistent with the possibility that the demand/withdraw pattern will not become detrimental until low-risk couples become less satisfied with their relationship (Eldridge et al., 2007). A test of the difference between simple slopes of wives' demanding behavior relating to wives' relationship satisfaction for low versus high husband withdrawal revealed that low-risk wives did experience significantly greater relationship satisfaction when husbands' withdrawal was low in the face of wives' demands compared with when withdrawal was high ( $\beta = -.02, p < .05$ ). Thus, although the slope relating wives' demanding behaviors to wives' declines in satisfaction when husbands' withdrawal was high was nonsignificant, low-risk wives *did* experience significantly lower relationship satisfaction when this was the case, compared with when husbands' withdrawal was low.

Results for couples high in sociodemographic risk followed a different pattern. As seen in Figure 2, when high-risk wives were more demanding than average and their husbands were less disengaged than average, these wives experienced declines in satisfaction relative to their own average level of satisfaction ( $\beta = -.89, p < .05$ ). For this same group of couples, wives' satisfaction did not decline relative to their own average when their levels of demanding behavior were higher than their average and when husbands were either more disengaged than usual ( $\beta = .53, ns$ ) or average in their level of disengagement ( $\beta = -.18, ns$ ); in fact wives appeared to be relatively satisfied under these conditions. A test of the difference between simple slopes of wives' demanding behavior relating to wives' relationship satisfaction for low versus high husband withdrawal revealed that high-risk wives experienced significantly greater relationship satisfaction when husbands' withdrawal

was high in the face of wives' demands compared to when withdrawal was low ( $\beta = .44, p < .05$ ). As in Study 1, these results again indicate that there may be benefits of husbands' withdrawal in the face of high levels of wives' demand, but only when couples are relatively high in sociodemographic risk.

**Risk, Demand  $\times$  Demand, Withdrawal  $\times$  Withdrawal predicting relationship satisfaction.** Finally, recomputing the above models using either Husband Demand  $\times$  Wife Withdrawal, Husband Demand  $\times$  Wife Demand, or Husband Withdrawal  $\times$  Wife Withdrawal revealed that associations between these terms and relationship satisfaction were not moderated by sociodemographic risk.

**Summary**—Study 1 replicates prior findings by showing that among couples with low levels of sociodemographic adversity, higher levels of withdrawal by husbands, when coupled with higher levels of demand by wives, predict declines in wives' satisfaction; this is the classic demand/withdraw effect. Among couples with higher levels of sociodemographic risk, however, this same pattern serves to *stabilize* wives' satisfaction, whereas it is the opposite pattern—*lower levels* of withdrawal by husbands in combination with higher levels of wives' demands—that proves most detrimental to wives' evaluation of their marriage. Model tests involving three other sets of behavioral predictors (husband demand/wife withdrawal, husband demand/wife demand, and husband withdrawal/wife withdrawal) revealed no effects of these patterns on changes in satisfaction nor any moderation by risk. Study 1 therefore demonstrates that (a) established predictors of change in relationship satisfaction can operate quite differently for couples with varying levels of social and financial resources; and (b) that the demands and requests made by wives, in combination with withdrawal and disengagement by husbands, captures a uniquely predictive dimension of couple interaction. Although a large and heterogeneous sample, observational data, and a longitudinal design lend some confidence to these results, Study 1 fails to address whether the effects of *within-couple changes* in demand/withdrawal behavior on changes in satisfaction are moderated by sociodemographic risk; Study 2 addresses this limitation.

## General Discussion

Conceptualized as a hallmark of relationship distress and emphasized as a target in clinical interventions, demand/withdraw communication has long been considered a destructive and self-perpetuating behavioral pattern in intimate relationships. Nevertheless, competing evidence—for example, that withdrawal can promote healthy conflict de-escalation and emotional recovery from stress (Holley et al., 2013; Repetti, 1989), and that demands for change can motivate partners to resolve rather than avoid their differences (Overall et al., 2009)—raises the possibility that potent third variables moderate the manner in which demand/withdraw communication affects changes in relationship satisfaction. We drew from the large literature linking socioeconomic disadvantage to relationship distress to propose that withdrawal in the face of partner demands will prove *costly* when couples generally possess the social and economic resources needed to address those demands, while overtly identical behaviors would *protect against* relationship deterioration for those couples living with fewer resources and greater economic vulnerability.

We tested this proposal with two samples of couples varying widely in sociodemographic risk, first using a single assessment of couple interaction to examine between-couple variability in demand/withdraw behavior in relation to changes in satisfaction (Study 1) before using four assessments of couple interaction to examine between-couple variability in demand/withdraw behavior in relation to changes in satisfaction as well as within-couple covariance between demand/withdraw behavior and satisfaction (Study 2). By reporting on two similar but independent studies, by recruiting large and culturally diverse samples, and by collecting observational data, we address recent concerns that single studies that may not replicate (e.g., Finkel, Eastwick, & Reis, 2017), that employing White middle-class samples may not fully capture the phenomenon in question (e.g., Henrich, Heine, & Norenzayan, 2010), and that relying upon self-reports instead of direct assessments of social behavior inflates shared method variance (e.g., Baumeister, Vohs, & Funder, 2007). These procedural refinements lend confidence to the main conclusion of this report, that objectively identical behavioral variables are associated with wives' relationship satisfaction in markedly different ways depending on the degree of social and economic capital that characterize couples' lives.

### Key Findings and Implications

Independent of any moderating influence that they might exert, we find broad evidence that social and demographic factors warrant consideration in models of relationship functioning. Furthermore, effects of demand and withdrawal are more apparent to the extent that couples experience higher levels of socioeconomic risk (in Study 1 and in Study 2; see Tables 2 and 4, respectively), and declines in satisfaction are more evident among riskier couples, for husbands and wives in the within-couple change analyses conducted for Study 2 (see Table 5). Socioeconomic risk also predicts within-couple change in satisfaction more consistently than observed behavior predicts satisfaction; as shown in Table 5, all four coefficients relating risk to satisfaction are statistically reliable (range =  $-.16$  to  $-.27$ ) as compared with just one of eight coefficients relating observed behavior to satisfaction (range =  $-.01$  to  $-.19$ ). Thus, important behavioral and psychological experiences in committed partnerships bear notable associations with social and economic indicators, providing empirical support for efforts aimed at integrating contextual and interpersonal factors as causes of relationship outcomes.

Our central finding, however, is that the association between demand/withdraw communication and changes in wives' relationship satisfaction varies as a function of couples' degree of access to social and economic resources, a dimension that we operationalized with a series of 10 simple dichotomous questions about age, education, income, use of public assistance, and availability of practical support. Using this index, Study 1 replicated the familiar demand/withdraw effect for wives with greater levels of these resources (that is, low-risk couples), such that high levels of wife demand in conjunction with high levels of husband withdrawal predicted 18-month declines in wives' self-reports of relationship satisfaction. We find this replication worth emphasizing, because we used observational rather than self-report data to assess couple behavior, because we treated the demand/withdraw pattern as a multiplicative term that approximates the unique synergy of these two classes of behavior (rather than as an additive effect as prior studies have done),

and because we controlled for the individual main effects of demand and withdraw behavior on satisfaction (see Tables 3 and 5). In contrast, among those couples with higher levels of social and economic disadvantage, Study 1 indicated that increasing levels of wives' demanding behaviors proved *protective* for wives' judgments of relationship quality to the extent that husbands were observed as disengaging (see Figure 1). Thus, among wives from relatively vulnerable couples, husbands' disengagement may be beneficial when wives display high levels of negatively charged, conflict-promoting behavior.

We applied the between-couple residualized change model from Study 1 to Study 2 data, and while behavior-to-satisfaction effects again appeared to differ as a function of socioeconomic risk, the moderating effect fell short of statistical significance. While it is the case that Study 2 has slightly less power than Study 1, and that Study 2 couples experienced lower levels of socioeconomic risk than their counterparts in Study 1, the most plausible explanation for these discrepant results is that Study 2 couples were sampled initially at the beginning of their first marriages whereas Study 1 couples had been married for more than 5 years on average when first observed. Coupled with the fact that Study 2 couples were less likely to be parents than those in Study 1, and in view of evidence that demand/withdraw interaction is stronger among distressed than happy couples (e.g., Eldridge et al., 2007), we speculate that the between-couple analyses in Study 2 were weaker than those in Study 1 because Study 2 couples were happier with their relationships and therefore less inclined to engage in maladaptive patterns of interaction that might cause changes in their judgments of relationship quality. Relationship distress may take time to emerge (e.g., Huston, Caughlin, Houts, Smith, & George, 2001) and, at least when it comes to between-couple comparisons, we can expect that behavioral effects on satisfaction may grow stronger as couples navigate the early years of marriage.

Despite coming from a relatively satisfied newlywed sample with a somewhat low overall level of socioeconomic risk, data from Study 2 nevertheless supported our main claim that behavior-to-satisfaction effects differ as a function of couples' available social and economic resources. The analytic approach adopted in Study 2, emphasizing within-person fluctuations in behavior and satisfaction, takes advantage of repeated across-time measures and, by treating each spouse as their own control or baseline, allows us to minimize the influence of any stable factor (e.g., personality, attachment history, parental divorce) that correlates with behavior or satisfaction. With this approach we discovered that fluctuations in observed demand/withdraw interaction covaried with fluctuations in self-reports of satisfaction in differing ways, depending on couples' socioeconomic resources: When risk is low and resources are plentiful, husbands' withdrawal in the face of wife demands proved costly relative to wives' average satisfaction, but when risk was higher and resources were diminished, husbands' lack of withdrawal in the face of wife demands may actually be costly.

Though the demand/withdraw interaction pattern has long been implicated in behavioral models of relationship distress, our findings cast new light on this pattern, in at least three ways. First, the interaction between risk and wife-demand/husband-withdraw communication predicting changes in satisfaction did not extend to husband demand/wife withdraw communication or to any of the demand/demand or withdrawal/withdrawal in

either study. This set of results lends specificity to our findings and validity to the broader conception of the gender-based nature of the demand/withdraw pattern, at least when risk is considered as a moderator.

Second, collecting four waves of observational data in Study 2 allowed us to model the trajectories of demanding and withdrawing behavior over time and thereby test a key assumption of the demand/withdraw perspective, that the demands made by one partner evoke more and more withdrawal in the mate, which in turn evokes more and more demands from the partner, and so on. Indeed, wife demand/husband withdraw communication does grow in frequency and intensity, an effect apparently characterized less by increases in wives' demands and more by increases in husbands' withdrawal. This result is the first to our knowledge to support the prevailing developmental perspective on demand/withdraw communication and the notion that partners become more polarized in their stances within the demand/withdrawal pattern.

Third, we find little consistent evidence within or across studies for main effects of any behavior (or any interactive combinations of behaviors) on satisfaction as a moderator. This inconsistency is surprising in view of longstanding pantheoretical assertions about the primacy of communication in intimate relationships. Together with the main and moderating effects of sociodemographic risk observed here, we suggest instead that interpersonal behaviors gain predictive power in couples' lives primarily as a function of the contexts in which they arise. As understanding of these contexts improves, our ability to identify maladaptive communication processes is likely to improve as well. Overall, then, our studies substantiate key features of the demand/withdraw communication pattern, though it is in interaction with sociodemographic risk that the effects of demand/withdraw communication on satisfaction are most compelling.

### Limitations and Future Directions

Although use of two relatively large samples, longitudinal data, and careful operationalization of demanding and withdrawing behaviors help strengthen our conclusions, important limitations remain. First, despite some success in recruiting ethnically and culturally diverse couples, our samples did not include older couples, gay and lesbian couples, or, in Study 2, interracial couples, thus limiting generalizability. Second, while our effects are statistically reliable, we cannot make strong claims about their magnitude because traditional estimates of effect size do not apply to multilevel models (Holden, Kelley, & Agarwal, 2008).

Third, we assessed demand/withdraw behavior using a macrolevel coding system, such that ratings of demand and withdrawal behaviors reflect the frequency and intensity of these behaviors *in general* across the course of the conversation. This is in contrast to a moment-to-moment microlevel coding system, which could allow for more precise measurement of demand/withdraw as a dyadic behavioral sequence, where one partner's demand is met by the other partner's withdrawal and vice versa. Moment-to-moment measurement of demanding and withdrawing behavior might provide more information about this form of communication (for example, which spouse is more likely to initiate or end a demand/withdraw sequence, how long couple members remain in demand/withdraw sequences;

Knobloch-Fedders et al., 2014). Having this level of detail could allow future researchers to answer more fine-grained questions about how couples across the socioeconomic spectrum engage in this established pattern of communication.

Finally, and most importantly, while we are able to establish sociodemographic risk as a plausible moderator of the link between demand/withdraw behavior and wives' satisfaction, we can only speculate about why the behaviors of couples who are relatively low or high in risk come to have such different effects on their satisfaction. Evidence that sociodemographic risk isolates specific behavioral effects is important, yet it leaves unaddressed key questions about how partners at varying levels of risk regulate their behavior in light of that risk. Our view is that while social and economic resources, when readily available, provide partners with greater latitude for addressing their problems, these resources also create higher expectations that partners will make accommodations for one another's demands and needs that underlie these problems. Avoiding, minimizing, or otherwise withdrawing from those demands will be costly because the partner that does so is likely to be viewed as selfish, as withholding, or as a source of frustration. Conversely, when these resources are in short supply, partners are more constrained in how they can address their challenges, and continued engagement over relatively intractable issues might foster frustration instead of workable solutions; disengagement, therefore, might allow men to "save face," self-soothe, or effectively down-regulate their wives' demands for change. Although the index of sociodemographic risk used here does appear to capture resource availability relatively well, the gap between the perceived (un)availability of resources and the specific behavioral processes that we observed remains wide. As noted in Footnote 1, however, it does not appear that the topic of couples' conversations or the severity of their difficulties can account for the differing patterns of behavior that low- and high-risk couples display. Content analysis of couple conversations could provide a valuable starting point for understanding how underresourced couples reflect upon the resources available to them, the degree to which the partner's contributions and efforts are evaluated in light of these resources, and how men in high-risk couples can disengage without apparently inviting increased demands from their wives.

## Conclusion

Observational analyses of the behavioral interdependencies that define intimate relationships typically assume that specific behaviors will be relatively uniform in their effects on relationship satisfaction, across a wide range of couples and settings. Inconsistent findings in the literature involving demanding and withdrawing behaviors cast doubt on this assumption, however, leading us to predict that disengagement in the face of a partner's requests for change would be counterproductive for well-resourced couples but beneficial for couples who may not have the same capacity to control and resolve their problems. Two longitudinal studies corroborate the predicted influence of socioeconomic risk on the association between observed demand/withdraw behavior and changes in satisfaction, confirming the significance of demand/withdraw communication while raising new questions about how couples' life circumstances combine with dyadic processes to affect the well-being of their relationship.

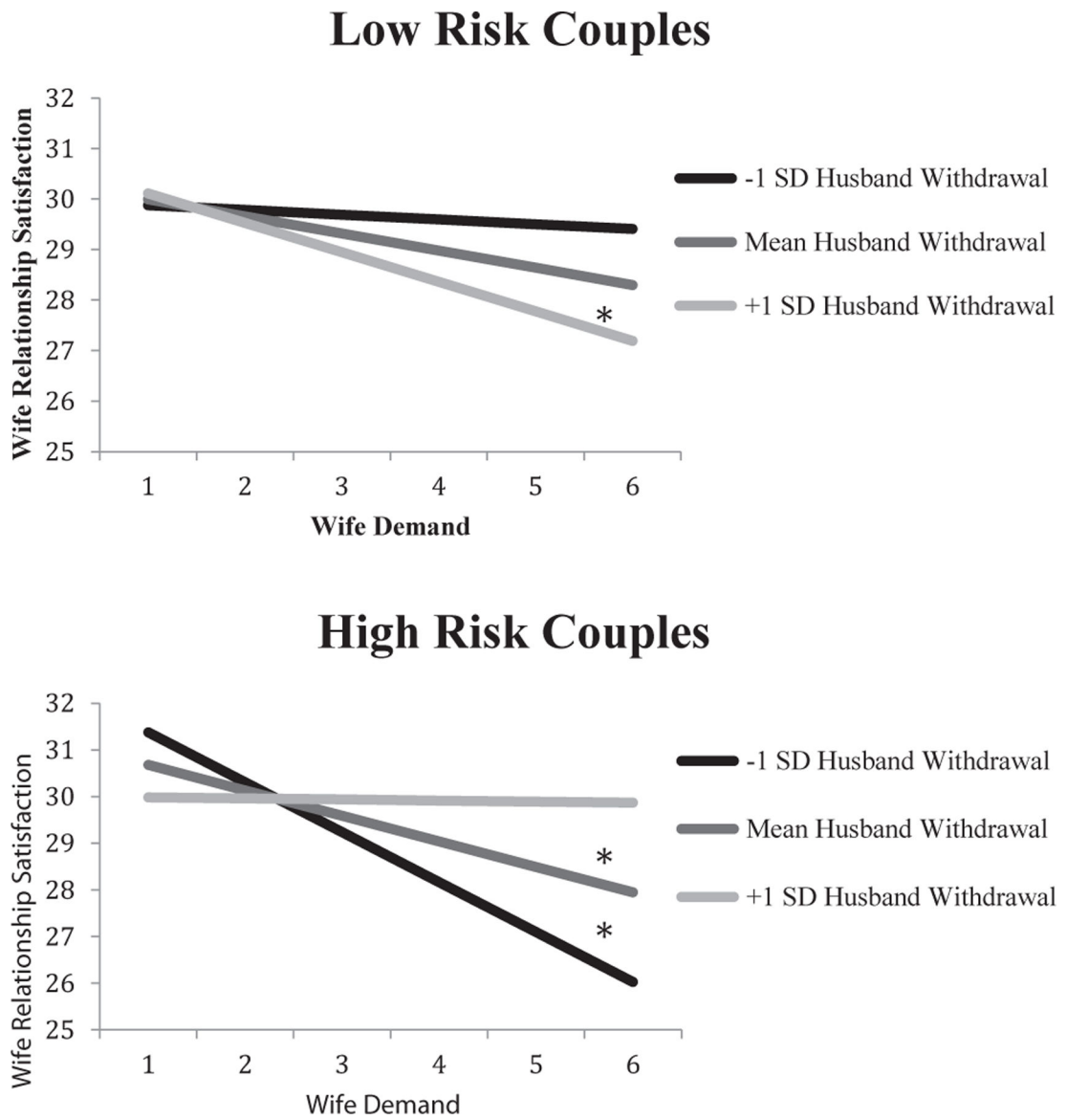
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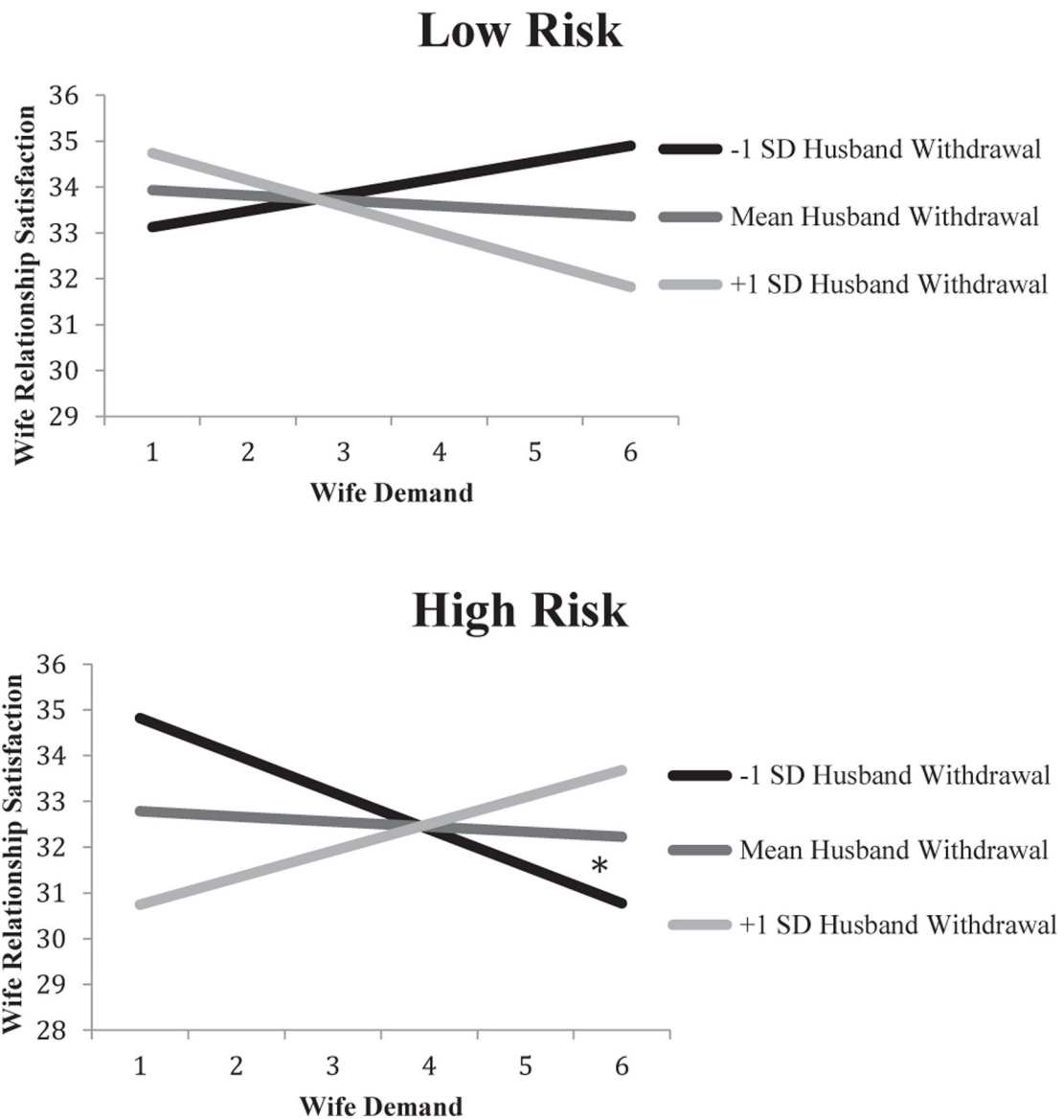


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**Figure 1.** Three-way interaction of risk, wife demand, husband withdraw on wives' relationship satisfaction (Study 1). \*  $p < .05$



**Figure 2.** Three-way interaction of within-person fluctuations in risk, wife demand, husband withdrawal on wives' relationship satisfaction (Study 2). \*  $p < .05$

**Table 1**

**Coded Behaviors Used to Form the Demand and Withdrawal Composites**

Code	Description
Demand	
Hostility	The extent to which hostile, angry, critical, disapproving, rejecting, or contemptuous behavior is directed toward another interactor's behavior (actions), appearance, or personal characteristics.
Dominance	Attempts and successful demonstrations of control or influence (either positive or negative) of another interactor and/or the situation.
Angry Coercion	Control attempts that include hostile, contemptuous, threatening, blaming.
Withdrawal	
Avoidance	Conveys rejection, withdrawal, evasion, etc., from the other person.
Communication (reverse coded)	The speaker's ability to neutrally or positively express his/her own point of view, needs, wants, etc., in a clear, appropriate, and reasonable manner, and to demonstrate consideration of the other interactor's point of view.
Listener responsiveness (reverse coded)	The focal's nonverbal and verbal responsiveness as a listener to the verbalizations of the other interactor through behaviors that validate and indicate attentiveness to the speaker.

*Note.* The source of the brief descriptions is the IFIRS coding manual (Melby et al., 1998).

**Table 2**

Correlations and Descriptive Statistics for All Variables in the Model (Study 1)

Variable	1	2	3	4	5	Mean	SD
(1) Demand	<b>.57</b> <sup>***</sup>	.25 <sup>***</sup>	.07 <sup>***</sup>	-.16 <sup>***</sup>	-.16 <sup>***</sup>	2.20	.80
(2) Withdrawal	.22 <sup>***</sup>	<b>.35</b> <sup>***</sup>	.18 <sup>***</sup>	-.06 <sup>*</sup>	-.04 <sup>*</sup>	3.79	1.35
(3) Risk	.05	.12 <sup>***</sup>	<b>1.00</b> <sup>***</sup>	-.08 <sup>**</sup>	-.01	4.34	2.15
(4) T1 Satisfaction	-.13 <sup>***</sup>	-.15 <sup>***</sup>	-.04	<b>.43</b> <sup>***</sup>	.57 <sup>***</sup>	29.19	4.43
(5) T2 Satisfaction	-.13 <sup>***</sup>	-.07 <sup>*</sup>	-.03	.55 <sup>***</sup>	<b>.50</b> <sup>***</sup>	29.34	4.64
Mean	1.99	3.98	4.34	29.75	30.09		
SD	.68	1.43	2.15	3.88	3.86		

Note. N = 515 wives and 515 husbands. Results for wives are above the diagonal, and results for husbands are below the diagonal. Correlations between husbands' and wives' scores are on the diagonal, in bold.

\*  $p < .05$ .

\*\*  $p < .01$ .

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

**Table 3**  
Fixed Effects of Risk and Demand × Withdraw on 18-month Changes in Relationship Satisfaction (Study 1)

Effect	Model 1						Model 2					
	Husband			Wife			Husband			Wife		
	<i>b</i> (SE)	<i>t</i>	95% CI lower upper	<i>b</i> (SE)	<i>t</i>	95% CI lower upper	<i>b</i> (SE)	<i>t</i>	95% CI lower upper	<i>b</i> (SE)	<i>t</i>	95% CI lower upper
Intercept	30.06 (.35) <sup>***</sup>	85.89	29.38 30.75	29.18 (.35) <sup>***</sup>	83.35	28.49 29.86	30.06 (.35) <sup>***</sup>	84.36	29.36 30.76	29.18 (.26) <sup>***</sup>	81.99	28.54 29.94
Risk	.03 (.07)	.46	-.11 .17	.07 (.07)	.93	-.07 .21	.03 (.07)	.43	-.11 .17	.06 (.05)	.69	-.09 .19
Wife demand	-.21 (.19)	-1.04	-.60 .18	-.69 (.20) <sup>**</sup>	-3.47	-1.08 -.30	-.60 (.47)	-1.29	-1.52 .32	-.23 (.32)	-1.77	-1.75 .09
Husband withdraw	.01 (.11)	.07	-.21 .22	.09 (.11)	.84	-.12 .31	-.03 (.26)	-.11	-.54 .48	-.37 (.18)	-1.12	-.80 .22
Wife Demand × Husband Withdraw	.19 (.13)	1.48	-.06 .44	.19 (.13)	1.51	-.06 .45	-.05 (.32)	-.16	-.67 .57	-.32 (.21)	-1.77	-1.17 .06
Risk × Wife Demand							.09 (.09)	.96	-.09 .27	.04 (.09)	.44	-.14 .22
Risk × Husband Withdraw							.01 (.05)	.10	-.10 .11	.07 (.05)	1.42	-.03 .18
Risk × Wife Demand × Husband Withdraw							.05 (.06)	.84	-.07 .18	.16 (.06) <sup>*</sup>	2.52	.04 .29

\*  $p < .05$ .

\*\*  $p < .01$ .

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

**Table 4**

Correlations and Descriptive Statistics for All Variables in the Model (Study 2)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	Mean	SD
(1) T1 Demand	<b>.43</b> <sup>**</sup>	.45 <sup>**</sup>	.35 <sup>**</sup>	.39 <sup>**</sup>	.15 <sup>**</sup>	.07	.08	.04	-.13 <sup>**</sup>	-.11 <sup>*</sup>	-.13 <sup>*</sup>	-.05	.10 <sup>**</sup>	2.23	.77
(2) T2 Demand	.35 <sup>**</sup>	<b>.59</b> <sup>**</sup>	.39 <sup>**</sup>	.40 <sup>**</sup>	.05	.29 <sup>**</sup>	.18 <sup>**</sup>	.19 <sup>**</sup>	-.14 <sup>**</sup>	.15 <sup>**</sup>	-.19 <sup>**</sup>	-.08	.12 <sup>**</sup>	2.10	.76
(3) T3 Demand	.42 <sup>**</sup>	.39 <sup>**</sup>	<b>.53</b> <sup>**</sup>	.38 <sup>**</sup>	.12 <sup>*</sup>	.06	.23 <sup>**</sup>	.08	-.16 <sup>**</sup>	-.18 <sup>**</sup>	-.17 <sup>**</sup>	-.12 <sup>*</sup>	.19 <sup>**</sup>	2.13	.84
(4) T4 Demand	.38 <sup>**</sup>	.38 <sup>**</sup>	.46 <sup>**</sup>	<b>.46</b> <sup>**</sup>	.05	.07	.11	.16 <sup>**</sup>	-.07	-.08	-.07	-.10	.09	2.14	.74
(5) T1 Withdrawal	.21 <sup>**</sup>	.15 <sup>**</sup>	.10	.05	<b>.33</b> <sup>**</sup>	.19 <sup>**</sup>	.21 <sup>**</sup>	.13 <sup>**</sup>	-.09	-.16 <sup>**</sup>	-.21 <sup>**</sup>	-.09	.18 <sup>**</sup>	3.69	1.29
(6) T2 Withdrawal	.11 <sup>**</sup>	.37 <sup>**</sup>	.22 <sup>**</sup>	.18 <sup>**</sup>	.25 <sup>**</sup>	<b>.38</b> <sup>**</sup>	.18 <sup>**</sup>	.20 <sup>**</sup>	-.07	-.08	-.11 <sup>*</sup>	-.03	.25 <sup>**</sup>	3.70	1.30
(7) T3 Withdrawal	.16 <sup>**</sup>	.15 <sup>**</sup>	.42 <sup>**</sup>	.19 <sup>**</sup>	.31 <sup>**</sup>	.29 <sup>**</sup>	<b>.41</b> <sup>**</sup>	.21 <sup>**</sup>	-.10	-.12 <sup>*</sup>	-.20 <sup>**</sup>	-.20	.14 <sup>*</sup>	4.01	1.25
(8) T4 Withdrawal	.18 <sup>**</sup>	.23 <sup>**</sup>	.08	.18 <sup>**</sup>	.27 <sup>**</sup>	.23 <sup>**</sup>	.19 <sup>**</sup>	<b>.37</b> <sup>**</sup>	-.11 <sup>*</sup>	-.10	-.08	-.03	.08	4.20	1.16
(9) T1 Satisfaction	-.17 <sup>**</sup>	-.17 <sup>**</sup>	-.17 <sup>**</sup>	-.15 <sup>**</sup>	.08	-.05	-.22 <sup>**</sup>	-.14 <sup>*</sup>	<b>.32</b> <sup>**</sup>	.57 <sup>**</sup>	.53 <sup>**</sup>	.52 <sup>**</sup>	-.11 <sup>*</sup>	33.15	3.39
(10) T2 Satisfaction	-.17 <sup>**</sup>	-.16 <sup>**</sup>	-.16 <sup>**</sup>	-.16 <sup>**</sup>	-.08	-.06	-.15 <sup>**</sup>	-.09	.61 <sup>**</sup>	<b>.48</b> <sup>**</sup>	.65 <sup>**</sup>	.59 <sup>**</sup>	-.10	32.83	3.69
(11) T3 Satisfaction	-.14 <sup>**</sup>	-.15 <sup>**</sup>	-.16 <sup>**</sup>	-.17 <sup>**</sup>	.04	.01	-.20 <sup>**</sup>	-.04	.60 <sup>**</sup>	.67 <sup>**</sup>	<b>.43</b> <sup>**</sup>	.63 <sup>**</sup>	-.23 <sup>**</sup>	32.38	4.08
(12) T4 Satisfaction	-.14 <sup>*</sup>	-.17 <sup>**</sup>	-.14 <sup>*</sup>	-.16 <sup>*</sup>	.02	-.01	-.14 <sup>*</sup>	-.08	.56 <sup>**</sup>	.63 <sup>**</sup>	.69 <sup>**</sup>	<b>.48</b> <sup>**</sup>	-.15 <sup>**</sup>	32.30	4.15
(13) Risk	.10 <sup>*</sup>	.07	.17 <sup>**</sup>	.10	.18 <sup>**</sup>	.16 <sup>**</sup>	.20 <sup>**</sup>	.11	-.10 <sup>*</sup>	-.09	-.16 <sup>**</sup>	-.04	<b>1.00</b> <sup>**</sup>	2.43	2.12
Mean	2.07	1.89	1.92	1.89	3.84	3.96	4.14	4.37	33.89	33.43	33.44	33.02	2.43		
SD	.73	.67	.73	.64	1.35	1.30	1.44	1.14	3.05	3.71	3.5	4.05	2.12		

Note. N = 431 wives and 431 husbands. Results for wives are above the diagonal, and results for husbands are below the diagonal. Correlation between husbands' and wives' scores are on the diagonal, in bold.

\*  $p < .05$ .

\*\*  $p < .01$ .



**Table 5**  
Fixed Effects of Risk Wife Demand and Husband Withdraw on Relationship Satisfaction (Study 2)

Effect	Model 1						Model 2					
	Husband			Wife			Husband			Wife		
	<i>b</i> ( <i>SE</i> )	<i>t</i>	95% CI lower upper	<i>b</i> ( <i>SE</i> )	<i>t</i>	95% CI lower upper	<i>b</i> ( <i>SE</i> )	<i>t</i>	95% CI lower upper	<i>b</i> ( <i>SE</i> )	<i>t</i>	95% CI lower upper
Intercept	34.20 (.22) <sup>***</sup>	156.37	33.75 34.61	33.70 (.24) <sup>***</sup>	143.1	33.23 34.16	34.20 (.22) <sup>***</sup>	155.86	33.76 34.63	33.76 (.24) <sup>***</sup>	143.11	33.3 34.22
Time	-.32 (.06) <sup>***</sup>	-5.14	-.44 -.20	-.28 (.07) <sup>***</sup>	-5.63	-.51 -.25	-.32 (.06) <sup>***</sup>	-5.16	-.44 -.20	-.38 (.07) <sup>***</sup>	-5.70	-.51 -.25
Risk	-.16 (.07) <sup>*</sup>	-2.31	-.30 -.02	-.24 (.07) <sup>**</sup>	-3.27	-.39 -.10	-.17 (.07) <sup>*</sup>	-2.37	-.30 -.03	-.27 (.07) <sup>***</sup>	-3.60	-.41 -.12
Wife demand	-.12 (.12)	-.98	-.36 .12	-.09 (.13)	-.72	-.34 .16	-.11 (.19)	-.61	-.48 .25	-.11 (.19)	-.59	-.49 .26
Husband withdraw	-.08 (.06)	-1.31	-.21 .04	-.19 (.07) <sup>**</sup>	-2.94	-.32 -.06	-.02 (.09)	-.17	-.20 .17	-.05 (.10)	-.57	-.24 .13
Wife Demand × Husband Withdraw	-.01 (.13)	-.03	-.26 .26	.10 (.13)	.78	-.16 .38	-.02 (.20)	-.10	-.42 .38	-.26 (.21)	-1.23	-.68 .15
Risk × Wife Demand							.01 (.05)	.01	-.11 .11	.01 (.06)	.01	-.11 .11
Risk × Husband Withdraw							-.03 (.03)	-.99	-.09 .03	-.06 (.03)	-1.91	-.12 .01
Risk × Wife Demand × Husband Withdraw							.01 (.06)	.17	-.10 .12	.14 (.06) <sup>*</sup>	2.26	.02 .26

\*  $p < .05$ .  
 \*\*  $p < .01$ .  
 \*\*\*  $p < .001$ .