

SARAH R. HOLLEY *San Francisco State University*CLAUDIA M. HAASE AND ROBERT W. LEVENSON *University of California, Berkeley**

Age-Related Changes in Demand-Withdraw Communication Behaviors

Demand-withdraw communication is a set of conflict-related behaviors in which one partner blames or pressures while the other partner withdraws or avoids. The present study examined age-related changes in these behaviors longitudinally over the course of later life stages. One hundred twenty-seven middle-aged and older long-term married couples were observed at 3 time points across 13 years as they engaged in a conversation about an area of relationship conflict. Husbands' and wives' demand-withdraw behaviors (i.e., blame, pressure, withdrawal, avoidance) were objectively rated by trained coders at each time point. Data were analyzed using dyad-level latent growth curve models in a structural equation modeling framework. For both husbands and wives, the results showed a longitudinal pattern of increasing avoidance behavior over time and stability in all other demand and withdraw behaviors. This study supports the notion that there is an important developmental shift in the way that conflict is handled in later life.

Managing conflict is one of the central tasks of maintaining a marriage. In the face of disagreement, some couples are able to engage in constructive dialogue that facilitates conflict resolution, whereas others display more maladaptive behaviors that can take a serious toll on the relationship (Fincham, 2003; Weiss & Heyman, 1997). Whereas a great deal of research has focused on examining the causes and consequences of communication behaviors during conflict (Bradbury, Fincham, & Beach, 2000; Gottman & Notarius, 2002), comparatively little is known about how such behaviors *change* over time as couples move into later life stages. This was the starting point for the present study, which examined longitudinal changes in demand-withdraw behaviors among middle-aged and older long-term married couples.

DEMAND-WITHDRAW COMMUNICATION

One specific set of behaviors thought to be particularly disruptive for relationships has been termed the *demand-withdraw communication pattern* (e.g., Eldridge & Christensen, 2002). Demand-withdraw is characterized by a set of behaviors in which one partner tries to discuss problems, criticizes or blames his or her partner for problems, or pressures the partner to change. Conversely, the other partner tries to avoid discussion of the problem or passively withdraws from the interaction (e.g., Christensen, 1988; Eldridge & Christensen, 2002). Demand-withdraw is common during

Department of Psychology, San Francisco State University, 1600 Holloway Avenue, EP 301, San Francisco, CA 94132 (sholley@sfsu.edu).

*Department of Psychology, University of California, Berkeley, 3210 Tolman Hall, Berkeley, CA 94720-1650.

Key Words: aging, communications, couples, life span development, marital relations

relationship conflicts and has been described as one of the central, most intractable, and destructive patterns of marital interaction (Heavey, Layne, & Christensen, 1993).

Reports of demand-withdraw-type patterns (i.e., the nagging wife and the emotionally withdrawn husband) have been present in the marital literature for decades (e.g., Fogarty, 1976; Napier, 1978; Terman, Buttenwieser, Ferguson, Johnson, & Wilson, 1938). Empirical research in this area benefited from an influential series of studies conducted by Christensen and colleagues in the 1980s and 1990s (e.g., Christensen, 1988; Christensen & Heavey, 1990). Early on, research showed an association between the frequency of reported demand-withdraw behavior and marital dissatisfaction, as well as a tendency toward gender differentiation in demand-withdraw roles (i.e., wives demanding and husbands withdrawing; Christensen & Shenk, 1991). Subsequent studies supported these findings and expanded on this original work in important ways. For example, observational measures of demand and withdraw behaviors (e.g., Caughlin & Vangelisti, 2000; Christensen & Heavey, 1993; Vogel & Karney, 2002) began to appear, an advance that contributed depth, richness, and theoretical clarity to this area of research (Gottman & Notarius, 2002). In addition, new findings emerged showing the relationship of demand-withdraw to marital violence (e.g., Berns, Jacobson, & Gottman, 1999; Holtzworth-Munroe, Smutzler, & Stuart, 1998), the presence of demand-withdraw across cultures (e.g., Christensen, Eldridge, Catta-Preta, Lim, & Santagata, 2006; Rehman & Holtzworth-Munroe, 2006), and the factors that contribute to gender differentiation in demand-withdraw behaviors (e.g., Eldridge, Sevier, Jones, Atkins, & Christensen, 2007; Holley, Sturm, & Levenson, 2010).

Despite the numerous studies that have investigated demand-withdraw behaviors, important gaps in the literature remain, including most notably (a) a lack of research on demand-withdraw behaviors in middle-aged and older couples (including those in long-term marriages) and (b) the lack of longitudinal research on how demand-withdraw behaviors change as couples age. In a review of marital research in the 20th century, Gottman and Notarius (2002) noted that the existing observational research on marital interactions has been overwhelmingly conducted with relatively young couples. Life span developmental research clearly shows

that individuals and relationships continue to change across the life span (Carstensen, Mayr, Pasupathi, & Nesselrode, 2000; Mares & Fitzpatrick, 1995). For example, relationships in general and marital relationships in particular assume increasing importance at later stages of life (Carstensen, Isaacowitz, & Charles, 1999) and strongly affect social, emotional, and physical well-being (Bookwala, 2005; Walker & Luszcz, 2009). Thus, research on demand-withdraw behaviors may benefit from a life span developmental perspective (e.g., Eldridge & Baucom, 2012).

CHANGES IN DEMAND-WITHDRAW BEHAVIORS IN MIDLIFE AND LATE LIFE

As couples age, the challenges and tasks they face become quite different from those faced by their younger counterparts (Erikson, 1950, 1982). By midlife (defined here as age 40–50), spouses are often dealing with life tasks involving raising families and assuming increasing responsibilities in the workplace, and they are coping with greater role strain than at any other life stage (Burr, 1972; Lachman, 2004). In later life stages (defined here as age 60 or over), many of these responsibilities have subsided as children have left the home and individuals have retired from work (e.g., Moen, Kim, & Hofmeister, 2001; Orbuch, House, Mero, & Webster, 1996). New difficulties can arise in late life, however, due to changes in living arrangements, reductions in income, declining health and vitality, and shrinking social networks (e.g., Barnes & Parry, 2004; Burman & Margolin, 1992; Wrzus, Hanel, Wagner, & Neyer, 2013). As couples move through these developmental periods, emotional and relational changes occur that may profoundly influence the ways that spouses handle relationship conflict (Pruchno & Rosenbaum, 2003). In this regard, life span developmental perspectives offer suggestions as to the type of age-related changes that may occur in demand-withdraw behaviors as couples move through later life stages.

One perspective stems from the *socioemotional selectivity theory* (SST; Carstensen, 1991; Carstensen et al., 2000). With regard to normative aging populations, this theory posits that the motivation to seek emotionally meaningful experience and to regulate emotion increases with age, driven in part by a sense of time

in life becoming more limited. SST does not imply that disagreements do not exist in late life; instead, it suggests that in later phases of life disagreements may not result in relationship conflict because heated arguments may be viewed as relatively unimportant or as serving little purpose (Carstensen, Graff, Levenson, & Gottman, 1996). SST has received broad support in many different domains (Carstensen, 2006). This includes marital research, which has shown fewer areas of disagreement in older compared to middle-aged couples (Levenson, Carstensen, & Gottman, 1993) and an age-related decline in affectively negative interactions (Carstensen, Gottman, & Levenson, 1995; Gilford & Bengtson, 1979). Given these shifts toward a greater orientation toward meaningful experiences, fewer areas of disagreement, and less negative interactions, the SST perspective suggests that conflict-related demand-withdraw behaviors would decrease in later life.

Although studies on aging and interpersonal interactions have rarely examined married couples, research in this tradition suggests there may actually be a more differentiated pattern of change in demand behaviors and withdraw behaviors. For example, studies by Birditt and Fingerman (2005) and Blanchard-Fields (2007) have indicated that older adults report more use of avoidance and denial strategies during interpersonal problems as compared to younger adults, particularly in situations when such strategies may benefit the relationship. To the extent that withdrawing may serve the socioemotional goals of reducing conflict and maintaining the relationship, a refined reading of SST suggests that demand behaviors may decrease over time, whereas withdraw behaviors may increase over time.

Support for a pattern of age-related increase in withdraw behaviors also comes from life span developmental models of motivation and regulation (Brandtstadter & Rothermund, 2002; Haase, Heckhausen, & Wrosch, 2013; Heckhausen, Wrosch, & Schulz, 2010). These theories propose that, as individuals grow older, they become more prone to disengage from offending situations and unattainable goals, such as things that they may not be able to change. Numerous studies in this area support (a) an increase in goal disengagement with age and (b) the vast benefits of goal disengagement in late life for subjective well-being and even physical health (e.g., Brassens, Gamer, Peters,

Gluth, & Buchel, 2012; Heckhausen et al., 2010; Wrosch, 2011). If this perspective is applied to disagreements in long-term married couples, it may be that spouses increase over time in withdraw behaviors (i.e., passive nonverbal withdrawal, active avoidance) that serve the function of disengagement from unattainable goals (e.g., the resolution of a long-standing area of conflict). Therefore, for couples in later life, withdrawing from conflict may occur more frequently and be helpful for both the individual spouses and the relationship.

Few studies have directly examined demand-withdraw behaviors across the life span. Studies that have examined behaviors conceptually similar to demand-withdraw have used either cross-sectional designs (Henry, Berg, Smith, & Florsheim, 2007) or short-term longitudinal designs with younger couples (Kurdek, 1995; Noller, Feeney, Bonnell, & Callan, 1994). Thus, the question of how demand-withdraw behaviors change in later life has remained unanswered.

THE PRESENT STUDY

The present study examined how demand-withdraw behaviors change in later life, a question of great importance to both marital and life span developmental research. In a sample of middle-aged and older couples in long-term first marriages, demand and withdraw behaviors were examined at three time points, spanning a 13-year period. The study used a correlational research design, as we sought to study naturally occurring changes in demand-withdraw behaviors over time. This study advanced the literature by (a) examining longitudinal changes in demand and withdraw behaviors (thereby overcoming the limitations of cross-sectional designs, which confound age and cohort effects), (b) examining a middle-aged and an older cohort (to determine whether patterns of change generalized across age groups), (c) using objective behavioral coding of demand-withdraw behaviors obtained at each time point (rather than relying on self-report data), and (d) assessing changes in demand-withdraw behaviors for husbands and wives using dyadic latent growth curve modeling (Olsen & Kenny, 2006).

Finally, demand and withdraw behaviors were examined separately. Prior research has often considered these behaviors in tandem (e.g., measuring total demand-withdraw behaviors or

characterizing a particular gendered pattern, such as wife-demand/husband-withdraw). These approaches may mask important differences in how demand and withdraw behaviors change during later life stages. As Sevier, Simpson, and Christensen (2004) noted, "Individual measures have advantages over couple level measures as they do not carry any implication of a contingency based on partner's behavior and avoid the problem of obscuring different patterns within similar couple level scores" (p. 166).

The hypotheses were based on the life span developmental theories reviewed above. For withdraw behaviors (passive nonverbal withdrawal and active avoidance of conflict discussions), we predicted an increase over time for both spouses. For demand behaviors (blaming the partner and pressuring for change), we predicted a decrease over time for both spouses.

METHOD

Participants

The sample consisted of middle-aged and older couples who participated in a longitudinal study of long-term marriages. Participants were originally recruited through advertisements in San Francisco Bay Area newspapers and other media sources. To participate, couples had to meet the following six criteria: (a) spouses were either between the ages of 40 and 50 and married at least 15 years or between 60 and 70 and married at least 35 years, (b) age difference between spouses was less than 5 years, (c) spouses' marital satisfaction scores were within 20 points of each other, (d) the primary wage earner was not retired, (e) English was the primary spoken language, and (f) a score of 7 or below on the Michigan Alcoholism Screening Test (Selzer, 1971).

Recruitment procedures were designed so that the final sample was representative of the demographics of the Bay Area in terms of religion, ethnicity, and socioeconomic status and represented a range of marital satisfaction levels. Comparable numbers of relatively satisfied and dissatisfied couples were recruited for the middle-aged and older subsamples. The limitations in differences between spouses in age and marital satisfaction were included so that the sample would be representative of the modal long-term marriage (i.e., spouses relatively close in age and satisfaction). Similarly, the

sampling strategy confounded age with marital duration because the goal of the study was to examine long-term first marriages, wherein age and marital duration are typically associated. Several prior publications have used data from this study (e.g., Levenson et al., 1993; Levenson, Carstensen, & Gottman, 1994; Shiota & Levenson, 2007). No prior publication, however, has reported the demand-withdraw behavior coding, which was not part of the original study but was added after the third wave of data collection was completed.

Sample Characteristics Across Time

Initial sample at Time 1 (1989). The total sample consisted of 156 couples (82 middle-age couples, 74 older couples); see Table 1 for a summary of sample demographic characteristics. The ethnic distribution of the couples was 86% Caucasian, 4% Black, 3% Hispanic, 3% Asian, and 4% other. Most participants were Protestant or Catholic (62%) and had a relatively high socioeconomic status. The majority of couples (149) had children.

Time 2 (1995). One hundred twenty-five (80.1%) of the original 156 couples participated in the laboratory assessment. Of the rest, five couples had divorced, one or both spouses were deceased in 10 couples, and nine couples either chose not to participate or could not be contacted.

Time 3 (2001). Ninety (57.7%) of the original 156 couples participated in the laboratory assessment. At the time of assessment, eight couples had divorced, one or both spouses were deceased in 26 couples, and 21 couples either chose not to participate or could not be contacted.

Final sample. The final sample consisted of 127 couples (63 middle-aged, 64 older) who participated in at least two of the three laboratory assessments; this represented 81.4% of the original sample. To determine the equivalence of the final sample with those who were excluded, we conducted *t* tests to compare these groups on the variables of age, length of relationship, marital satisfaction, and demand-withdraw behaviors at Time 1; chi-square tests were conducted for ethnicity and religion. The results revealed no differences on any of these variables between the final sample and those not

Table 1. Demographic Characteristics of Initial Sample and Final Sample of Couples at Time 1

Characteristic	Initial Sample		Final Sample	
	Middle-Aged (<i>n</i> = 82)	Older (<i>n</i> = 74)	Middle-Aged (<i>n</i> = 63)	Older (<i>n</i> = 64)
Mean age, husbands (<i>SD</i>)	44.9 (2.9)	64.3 (3.1)	44.6 (2.8)	64.0 (3.0)
Mean age, wives (<i>SD</i>)	43.8 (2.9)	62.8 (3.3)	43.7 (2.9)	62.5 (3.0)
Mean marital duration (<i>SD</i>)	21.3 (3.5)	40.5 (3.7)	21.1 (3.5)	40.2 (3.4)
Mean number of children (<i>SD</i>)	2.2 (1.0)	3.2 (1.4)	2.1 (1.0)	3.3 (1.4)
Percentage with children at home	78.0	14.9	77.8	14.0
Percentage of husbands working full or part time	98.8	91.9	98.4	93.8
Percentage of wives working full or part time	85.4	66.2	85.7	64.1
Percentage European American	80.5	91.9	80.2	95.2
Mean Time 1 marital satisfaction (<i>SD</i>)	108.7 (16.0)	114.1 (16.0)	110.4 (15.7)	114.3 (16.3)

Note: Marital satisfaction was calculated by averaging scores on two well-established self-report measures: (a) the Marital Adjustment Test (Locke & Wallace, 1959) and (b) the Marital Relationship Inventory (Burgess, Locke, & Thomes, 1971). For the final study sample, there were no differences between middle-aged and older couples with regard to marital satisfaction.

included ($ps > .05$). Thus, inclusion in the final sample was nonselective.

Procedure

Questionnaires. At each of the three waves of data collection, each spouse individually completed questionnaires prior to the laboratory visit. The measures assessed a number of domains, including demographic information, health, and marital satisfaction. The primary analyses for the current study used data only from the demographic questionnaire.

Laboratory assessment. The procedures for laboratory visits were derived from those originally developed by Levenson and Gottman (1983). At each of the three time points, spouses came to the laboratory and had recording devices attached for obtaining physiological measures (not part of the present study). Couples then engaged in three conversations: (a) events of the day—a general discussion of what had happened in the past day; (b) conflict—a mutually selected area of continuing disagreement in their relationship; and (c) positive—a mutually selected pleasant topic. The specific topics of the respective conversations were free to vary across time points. Each conversation lasted 15 minutes and was preceded by a 5-minute silent period. A video recording was made of the interactions using partially hidden cameras. Spouses then attended a second laboratory session in which they watched the video recordings and provided

ratings of how they were feeling during the interactions using a rating dial (also not part of the present study). Because demand-withdraw behaviors are most commonly manifest during times of disagreement, we used data only from the conflict conversations.

Measures

Demand-withdraw behaviors. Demand-withdraw behaviors during the conflict interactions were coded from the video recordings by research assistants trained in the Couples Interaction Rating System (CIRS; Heavey, Gill, & Christensen, 1996), which includes four dimensions used to measure demand-withdraw. Demand behaviors consisted of *blame* (blames, accuses, or criticizes the partner and uses critical sarcasm or character assassinations) and *pressure for change* (requests, demands, nags, or otherwise pressures for change in the partner). Withdraw behaviors consisted of *withdrawal* (withdraws, becomes silent, refuses to discuss topic, or disengages from discussion) and *avoidance* (avoids discussing the problem by hesitating, changing topics, diverting attention, or delaying the discussion).

Coders watched the entire conflict interaction and provided ratings of the four behaviors using a 9-point Likert scale ranging from *not at all* (1) to *a lot* (9). Coders were instructed to consider the relative intensity and frequency of the behavior when generating ratings rather than using a simple counting or tallying method.

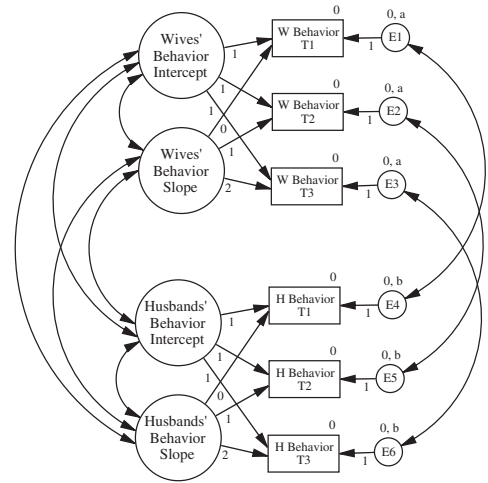
Behavioral coding took place over a 2-year period using two teams of coders. Coders were trained using videos from a separate study of marital interaction. Reliability between the two teams was high (overall interrater $\alpha = .98$ for the final week of training). Videos (from all time points) were coded in a randomized order. Each conflict interaction was coded independently by four to six coders, with two to three coders randomly assigned to either the husband or the wife. Coders met to discuss ratings on a weekly basis so as to maintain reliability over time. Interrater reliability was computed within each team. Coders demonstrated high reliability (average $\alpha = .90$ for blame, $.92$ for pressure, $.80$ for withdrawal, and $.83$ for avoidance). The mean of the coders' scores for each of the four demand and withdraw behaviors (*blame*, *pressure*, *withdrawal*, and *avoidance*) were used in the final analyses.

Analytical Strategy

Data were analyzed using latent growth curve modeling (LGM) for dyads (to account for interdependence between husbands and wives) within a structural equation modeling framework following recommended procedures (Olsen & Kenny, 2006). For the analyses, we used the SPSS AMOS module (version 20.0; Arbuckle, 2011). AMOS uses a full information maximum likelihood algorithm to estimate missing values. The present LGMs (one for each demand and withdraw behavior) were based on Olsen and Kenny's (2006) actor-partner interdependence LGMs for interchangeable dyads; they were adapted to account for husbands and wives being distinguishable by removing equality constraints between spouses. In LGM, two latent variables are modeled: the intercept and the slope. The intercept mean indicated the average latent mean of the respective construct at Time 1 (i.e., the initial level of the behavior). The slope mean indicated the average age-related latent change in the respective construct across Times 1, 2, and 3 (i.e., the rate of change the behavior). To test our primary hypotheses, we examined the slope mean for each of the respective demand and withdraw behaviors for husbands and wives.

We identified the appropriate LGM (e.g., linear or nonlinear) for each behavior using the following recommended procedures (e.g., Coffman & Millsap, 2006). We started with a linear LGM with intercept loadings set to [1;1;1]

FIGURE 1. THE DYADIC LATENT GROWTH CURVE MODEL.



Note: This conceptual dyadic LGM is based on Olsen and Kenny (2006) and adapted for distinguishable dyads. The figure shows two linear LGMs modeling changes in husbands' (H) and wives' (W) behavior simultaneously with residual variances set equal across time and autocorrelated residuals. T1 = Time 1; T2 = Time 2; T3 = Time 3; E = measurement error.

and slope loadings set to [0;1;2]. Figure 1 shows the dyad-level LGM with which we started. In instances where this model did not show good fit, we moved on to a nonlinear LGM with slope loadings set to [0;free;2]. Residual variances initially were constrained to be equal across waves of data collection and were relaxed to improve model fit if appropriate. Note that, for most LGMs, slope variances were not significant and sometimes negatively estimated and were therefore set to zero (without loss in model fit) as per the example of de Frias, Lövdén, Lindenberg, and Nilsson (2007); accordingly, we did not include slope covariances in these cases. As an indicator of model fit, we inspected chi-square, which is a measure of absolute fit and has been recommended for samples with 75 to 200 cases (Kenny, 2012). Nonsignificant chi-square values, $ps > .05$, indicated that the LGMs showed good fit. In addition, we inspected the comparative fit index (CFI) and the root-mean-square error of approximation (RMSEA). CFI values above .90 indicate reasonable fit, and CFI values above .95 indicate good fit (Hu & Bentler, 1999). RMSEA values below .06 indicate good fit (Hu & Bentler).

In a set of post hoc analyses, we examined, using multigroup modeling, whether age-related changes in demand-withdraw behaviors differed across middle-aged and older cohorts. Following established procedures (e.g., Duncan & Duncan, 2004), we tested whether slope means in the dyadic LGM differed across the age groups by comparing (a) an unconstrained model and (b) a model where the slope means were constrained to be equal.

RESULTS

Preliminary Analyses

The within-spouse and between-spouse correlations between husbands' and wives' scores for each of the four demand-withdraw behaviors at Time 1 are presented in Table 2. Overall, the within-spouse intercorrelations for demand behaviors (i.e., blame and pressure) were strong (but not perfect) for both husbands and wives, and the within-spouse intercorrelations for withdraw behaviors (i.e., withdrawal and avoidance) were moderate for both spouses. These results support the notion that the specific demand-withdraw behaviors are related but distinct constructs. Table 2 also shows the mean scores for husbands' and wives' demand and withdraw behaviors at Time 1. In line with what is typically seen in opposite-sex couples who choose one conflict topic to discuss (e.g., Eldridge & Baucom, 2012; Eldridge & Christensen, 2002), paired *t* tests indicated that wives demonstrated higher levels of blame, $t(126) = 3.54, p < .001$, and pressure, $t(126) = 3.21, p < .01$, than their husbands, whereas husbands demonstrated higher levels of withdrawal $t(126) = 3.80, p < .001$, than their wives. There

were no differences between husbands and wives in avoidance, $t(126) = 1.58, p = .19$.

Figure 2 is included for descriptive purposes; it shows the mean levels for each of the demand-withdraw behaviors for middle-aged and older spouses across each of the three time points. Although the primary focus of this article is longitudinal change, we conducted a preliminary analysis to assess whether there were age group differences in the Time 1 (baseline) demand and withdraw scores. Independent-measures *t* tests showed no age group differences for any of the demand-withdraw behaviors at baseline for wives (all *ps* > .05). There were no age group differences for blame or withdrawal behaviors at baseline for husbands. Middle-aged husbands, however, showed higher levels of pressure, $t(125) = 2.93, p < .01$, and lower levels of avoidance, $t(125) = 2.07, p < .05$, as compared to older husbands.

Longitudinal Changes in Demand-Withdraw Behaviors: Dyadic LGMs

We examined how husbands' and wives' demand-withdraw behaviors changed over time in a series of dyadic LGMs (see Figure 1 for the model). The dyadic LGMs for blame, pressure, and withdrawal behaviors all showed satisfactory fit according to chi-squares, all *ps* > .05 (see Table 3), as well as the additional fit indexes (blame: CFI = 1.00, RMSEA = .000; pressure: CFI = .92, RMSEA = .039; withdrawal: CFI = .96, RMSEA = .050). For both husbands and wives, the results showed no significant changes in blame, pressure, and withdrawal behaviors over time, as indicated by nonsignificant slope means (see Table 3).

Table 2. *Husbands' (H) and Wives' (W) Demand and Withdraw Behaviors: Descriptive Statistics and Intercorrelations at Time 1 (N = 127)*

Variable	<i>M (SD)</i>	1	2	3	4	5	6	7	8
1. H blame	2.66 (1.8)	—							
2. H pressure	2.64 (1.7)	.63***	—						
3. H withdrawal	2.25 (1.4)	.07	-.05	—					
4. H avoidance	2.06 (1.5)	-.08	-.07	.28**	—				
5. W blame	3.37 (2.3)	.40***	.21*	.14	-.18*	—			
6. W pressure	3.36 (2.1)	.17	.14	.28**	-.17	.61***	—		
7. W withdrawal	1.73 (1.0)	-.01	.09	.25**	.30**	.01	-.12	—	
8. W avoidance	1.89 (1.3)	.06	.10	.15	.67***	-.17	-.18*	.39***	—

p* < .05. *p* < .01. ****p* < .001

FIGURE 2. DEMAND AND WITHDRAW BEHAVIORS BY SPOUSE AND COHORT AT TIMES 1, 2, AND 3.

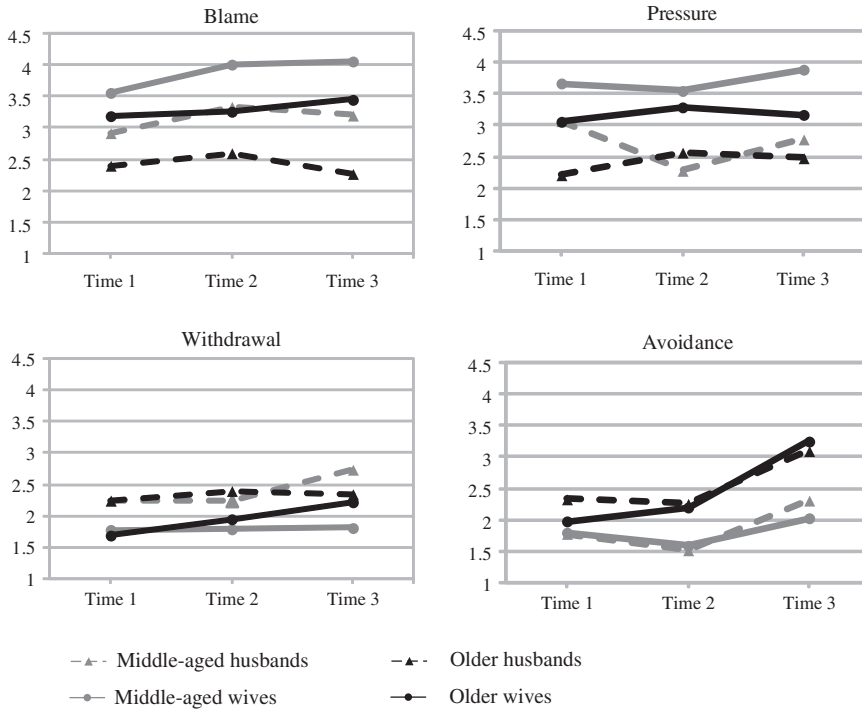


Table 3. Husbands' and Wives' Demand-Withdraw Behaviors Over Time: Dyadic Latent Growth Curve Models (N = 127)

Variable	Model Fit χ^2 (df), <i>p</i>	Husbands				Wives				
		Intercept		Slope		Intercept		Slope		
		<i>M</i>	σ^2	<i>M</i>	σ^2	<i>M</i>	σ^2	<i>M</i>	σ^2	
Blame ^{a,b,c}	13.27 (15), <i>p</i> = .58	2.73***	1.25***	0.08		3.40***	2.20***	0.20		
Pressure ^{a,b,c,d}	21.37 (18), <i>p</i> = .26	2.66***	0.69***	-0.02		3.37***	1.44***	0.05		
Withdrawal ^{a,c,e}	17.14 (13), <i>p</i> = .19	2.24***	0.75***	0.10		1.74***	0.43***	0.10		
Couple										
Avoidance ^{b,f}	2.41 (2), <i>p</i> = .30	2.01***	0.50***	0.26***	0.18*					

Note: Results for blame, pressure, and withdrawal behavior are based on a series of dyadic latent growth curve models conducted for husbands and wives simultaneously. Results for avoidance behavior are based on a couple-level latent growth curve model (LGM; the dyadic LGM did not converge because of high correlations between husbands' and wives' avoidance behavior).

^aLinear LGM with slope loadings set to [0;1;2]. ^bResidual variances set equal across time. ^cSlope variance set to [0].

^dResidual covariances not included. ^eResidual variances equal across time for husbands. ^fNonlinear LGM with slope loadings set to [0;free;2].

p* < .05. **p* < .001

Because of strong interdependence between husbands' and wives' avoidance behavior (i.e., the correlation between husbands' and wives' avoidance intercept was .82, and the dyadic LGM did not converge because of this high

multicollinearity), it seemed more appropriate to specify the LGM for avoidance behavior at the couple level. Thus, we specified a couple-level LGM by averaging husbands' and wives' avoidance behavior at each time point and

obtained scores for couples' avoidance behavior. The resulting couple-level LGM demonstrated a good fit, $\chi^2(2) = 2.41$, $p = .300$; CFI = .98; RMSEA = .040. The results showed that couples' avoidance behavior increased over time, as indicated by a significant slope mean (M_S ; see Table 3). Gender-specific follow-up analyses confirmed this increase in avoidance behavior for both husbands ($M_S = .29$, $p < .01$) as well as wives ($M_S = .30$, $p < .001$), as indicated by significant slope means.

We conducted post hoc analyses to determine whether changes in demand-withdraw behaviors generalized across age groups using dyadic multigroup LGM. For both spouses, the results showed no age group differences in the rate of change for blame, pressure, or withdrawal behaviors, as indicated by nonsignificant differences in slope means ($\Delta\chi^2, ps > .05$). For avoidance, results from the multigroup couple-level LGM hinted toward age group differences in the rate of change, as indicated by a marginally significant difference in the slope means, $\Delta\chi^2(1) = 2.72$, $p = .099$. Gender-specific follow-up analyses showed a difference between middle-aged and older wives in their rate of change in avoidance behavior, $\Delta\chi^2(1) = 9.49$, $p < .01$. Middle-aged wives ($M_S = .08$, $p = .357$) showed a smaller and nonsignificant increase in avoidance behavior, whereas older wives showed a more pronounced and significant increase, ($M_S = .61$, $p < .001$). For husbands, the increase in avoidance behavior generalized across age groups, as indicated by nonsignificant age group differences in the slope mean ($\Delta\chi^2, p > .05$). Finally, we investigated age group differences in the intercept means of the four demand-withdraw behaviors. As expected, the results mirrored our preliminary findings regarding cross-sectional baseline differences (reported above). Middle-aged husbands showed higher initial levels of pressure behavior, $\Delta\chi^2(1) = 7.43$, $p < .01$, and lower initial levels of avoidance behavior, $\Delta\chi^2(1) = 4.33$, $p < .05$, as compared to older husbands; all other intercept comparisons were nonsignificant ($\Delta\chi^2, ps > .05$).

DISCUSSION

Demand-withdraw communication is a common, deleterious pattern in which one spouse blames or pressures while the other spouse avoids or withdraws (Christensen, 1988). We conducted the present study to determine how

demand-withdraw behaviors change as couples move into later stages of life. We examined changes in objectively coded demand-withdraw behaviors over a 13-year period for middle-aged and older married couples. Longitudinal findings showed a significant increase in avoidance behaviors over time; this pattern of change was found for both husbands and wives. All other behaviors (blame, pressure, and withdrawal) showed a pattern of longitudinal stability over time. These findings have implications for marital as well as life span developmental research.

Increasing Age, Increasing Avoidance

Building on life span developmental perspectives derived from the SST and motivational theories, we had hypothesized that, as spouses shifted toward less conflict and greater goal disengagement in later life stages, withdraw behaviors would increase. Our results provide partial support, with one type of withdraw behavior (avoidance) increasing while the other (withdrawal) remained stable. In our hypothesis, as in most research on demand-withdraw, avoidance and withdrawal behaviors were grouped together as "withdraw" behavior. But some have argued that these two forms of withdrawing represent distinct behavioral processes that may have very different implications for the course of a conflict interaction (e.g., Caughlin, Hardesty, & Middleton, 2012; Roberts, 2000). Indeed, the constructs of withdrawal and avoidance look very different in their presentation. Avoidance is characterized by a spouse actively avoiding discussing the conflict topic, either by hesitating, changing the topic, or diverting attention (Heavey et al., 1996). Avoidance is typically considered to be a maladaptive response to conflict in as much as it impedes effective conflict resolution (e.g., Roloff & Cloven, 1990). For younger couples, it makes sense that avoidance behaviors may be particularly problematic; issues are newer, and the need to seek solutions may be more pressing due to the high levels of role strain. For long-term married spouses in later stages of life, however, avoidance behaviors might shift from being maladaptive to being a neutral or even adaptive strategy. Although not facilitating conflict resolution per se, avoidance behaviors may move the discussion away from toxic areas and toward more benign topics. For example, older couples in our sample would say things such as "We've discussed this a million times; let's

just agree to disagree. Now what do you want to do for dinner?" Such utterances typically did not engender negative responses but instead led the conversation away from conflict and into neutral or even pleasant topics (as evidenced by the high correlations between husband and wife avoidance scores as spouses appeared to mutually agree to avoid the conflict discussion).

Whereas avoidance tends to be an active process that diverts attention from a conflict, withdrawal tends to be more nonverbal and passive. It is characterized by a spouse removing him or herself from conflict by becoming silent, looking away, or disengaging from the discussion. This is very similar to Gottman's (1989) concept of *stonewalling*, which is defined as a "total lack of listening behavior" and "tuning out of the partner." Stonewalling has been found to be one of the most maladaptive conflict behaviors, even earning a designation as one of the "four horsemen of the apocalypse" (Gottman, 1994). So, whereas withdrawal might be another method of disengagement, it may be more likely than avoidance to elicit a negative response from the partner. Thus, for couples in later life stages, avoidance appears to be uniquely in line with both the motivational and SST perspectives in that it provides a way to disengage from conflict *and* move conflict toward a more positive interaction. These divergent patterns of change for avoidance versus withdrawal highlight the importance of not only disaggregating demand and withdraw behaviors from the couple-level composite but also of considering the unique characteristics of the individual behaviors. Moreover, the finding of increased avoidance with age adds a piece of longitudinal support to the SST and motivational models of life span development, which have often been examined on the basis of cross-sectional data (e.g., Blanchard-Fields, 2007; Haase et al., 2013).

In contrast to our hypothesis, demand behaviors (blame and pressure) generally showed stability over time. An understanding of this lack of longitudinal change may come from further exploration of the motivational theory of life span development (Heckhausen et al., 2010). Although this theory indicates that older adults will increasingly disengage from offending situations and unattainable goals, the same may not be true for goals that are perceived as attainable. It has been suggested that the tendency to engage in attainable goals is stable across

the life span as individuals at all ages seek to influence, shape, and control their physical and social environment (White, 1959). Taking into consideration the function of blame and pressure (as well as withdrawal), the stability in these behaviors may reflect this purpose. Specifically, blame and pressure behaviors can serve the function of pursuing desired changes in one's partner, and withdrawal can be an effective strategy for maintaining the status quo (Holley et al., 2010; Peplau & Gordon, 1997). Therefore, it may be that, even while there is an increase in the overall level of disengagement-related behaviors (i.e., avoidance) being manifest by both spouses, the types of demand and withdraw behaviors that may serve goal pursuit or goal maintenance functions remain relatively stable over time as spouses continue to seek to influence their partner toward attainable desired outcomes.

In terms of the generalizability of our findings, changes that occurred over time did not differ for husbands and wives. Thus, even though husbands and wives started at different initial levels in terms of demand and withdraw behaviors as expected (e.g., Eldridge & Christensen, 2002), there were no differences in how spouses changed over time. Moreover, most mean-level changes generalized across middle-aged and older married spouses. One exception was the finding that older wives increased in avoidance at a faster rate than middle-aged wives, suggesting that wives may be slower to develop avoidance strategies than husbands.

With regard to the cross-sectional differences, two age group differences emerged: Older husbands showed higher levels of avoidance behaviors and lower levels of pressure behaviors than middle-aged husbands at baseline. As with all cross-sectional findings, it can be difficult to determine whether these differences represent age-related effects or cohort effects. Viewed as age-related effects, middle-aged husbands may be confronting more role strain and having more areas in which they want to pursue change, whereas the older husbands may have moved toward greater conflict disengagement and more positive interactions. Viewed as cohort effects, husbands in the older generation (i.e., married in the 1950s) might more tightly adhere to gender-stereotyped demand-withdraw roles than husbands from the middle-aged generation (i.e., married in the 1970s). Given that the

longitudinal findings lent support for age-related increase in avoidance (while pressure remained stable over time), these cross-sectional findings may represent some of each kind of influence, with the difference in avoidance reflecting age-related processes and the difference in pressure reflecting generational differences.

Strengths, Limitations, and Future Directions

The present study was designed to address several gaps in the existing literature on demand-withdraw behaviors and to extend it in several new directions. The findings have broad implications for our thinking about how individuals deal with challenges such as relationship conflicts as they grow older. In terms of strengths, the study used a measure of objectively coded behaviors and demonstrated the value of separate consideration of individual demand and withdraw behaviors. Furthermore, the study had a longitudinal design with a 13-year duration, included different age groups, and used contemporary data analytic methodologies that are appropriate for modeling longitudinal and dyadic data. The present study examined changes in demand-withdraw behaviors in middle-aged and older long-term married couples, a population that is generally underrepresented in the marital literature. As such, this study provides a unique view into communication processes in couples who “survived” through the earlier years of marriage, the more common time for marriages to end (e.g., Gottman & Levenson, 2000).

In terms of weaknesses, this study did not include a younger cohort of couples. Spouses at earlier stages of life course development tend to have different priorities and face different challenges than do middle-aged or older couples. Future studies would benefit from including couples from a wider range of age groups. Furthermore, this study confounded marital duration with age. Although the limitations on marital durations were imposed purposely in order to create homogeneous samples representative of their respective life stages, future studies may want to expand to include, for example, older couples who are newly married. This would allow an examination of the distinct effect of age in contrast to marital duration, which could be important because marital length has been shown to be associated with demand-withdraw behaviors (Eldridge et al., 2007). In addition, although our study is the first to examine

changes in observed demand-withdraw behaviors longitudinally in two age group cohorts, we acknowledge that even more sophisticated study designs (i.e., cohort sequential designs) are needed to fully disentangle age effects from history and cohort effects. It is also worth noting that this study used a single-topic methodology (i.e., spouses mutually selected one conflict issue to discuss) rather than the alternative two-topic methodology (i.e., each spouse selects a conflict issue and both are discussed; Christensen & Heavey, 1990). The two-topic methodology has been valuable in assessing patterns of gender differences and has shown that the conflict topic can strongly influence demand and withdraw behaviors (Eldridge & Baucom, 2012). The single-topic methodology reflected the present study goals of evaluating longitudinal changes in naturalistic conflict discussions between spouses. Future studies, however, may want to consider the potential benefits in using a two-topic conflict protocol.

With regard to our analytical strategy, we used LGM techniques and focused on mean-level changes in demand-withdraw behaviors (i.e., slope means). We explored individual deviations from these mean-level changes (i.e., slope variances) and found most to be nonsignificant or effectively zero. The absence of evidence, however, is not necessarily evidence of absence. LGMs in general—even with large samples ($N = 500$) and several time points—can have low statistical power to detect slope variances and covariances, as has been demonstrated by Hertzog and colleagues (e.g., Hertzog, Lindenberger, Ghisletta, & Oertzen, 2006).

Final limitations pertain to sample attrition and generalizability. The primary reason for attrition in the present study was mortality; this occurred disproportionately for the older couples as compared to the middle-aged couples. This is an issue with all longitudinal studies conducted with older populations, although our analyses (noted above) suggested that attrition did not affect the variables of central interest in the present study. With regard to generalizability, because of the aforementioned limitations regarding age and marital duration, these findings may not generalize to younger or nonmarried couples or to older couples married for a shorter duration of time. Furthermore, the study sample was representative of individuals in their age groups in the San Francisco Bay area. As such, this representative sample is

overrepresented by spouses who are Caucasian, educated, and of a relatively high socioeconomic status (see Levenson et al., 1994); findings from these couples may not generalize to other ethnic and socioeconomic groups.

In terms of future directions, we think it would be useful to examine how age-related changes in demand and withdraw behaviors relate to important outcomes such as marital satisfaction. Research has generally supported a close link between demand-withdraw and marital dissatisfaction, but perhaps this is true for only certain aspects of demand-withdraw and not for others (i.e., avoidance). Life span developmental research suggests that possible benefits of higher avoidance in late life—beyond marital satisfaction—could include benefits to general well-being and even physical health via mechanisms such as lower cortisol (Wrosch, Bauer, Miller, & Lupien, 2007) and adaptive shifts in autonomic and frontostriatal regulation (Brassen et al., 2012). Therefore, the present study raises the exciting possibility that a communication behavior formerly thought of as maladaptive based on research predominantly conducted with younger couples might function quite differently in later life. This might have profound implications, not only for marital research but also for marital therapy at different life stages.

NOTE

This research was supported by National Institute of Aging Grants AG41762 and AG17766 awarded to Robert W. Levenson. We thank our teams of research assistants for their invaluable assistance in conducting this research.

REFERENCES

- Arbuckle, J. A. (2011). AMOS (Version 20.0) [Computer software]. Chicago: SPSS.
- Barnes, H., & Parry, J. (2004). Renegotiating identity and relationships: Men and women's adjustments to retirement. *Ageing and Society, 24*, 213–233. doi:10.1017/S0144686X0300148X
- Berns, S. B., Jacobson, N. S., & Gottman, J. M. (1999). Demand/withdraw interaction in couples with a violent husband. *Journal of Consulting and Clinical Psychology, 67*, 666–674. doi:10.1037/0022-006X.67.5.666
- Birditt, K. S., & Fingerman, K. L. (2005). Do we get better at picking our battles? Age group differences in descriptions of behavioral reactions to interpersonal tensions. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 60B*, 121–128. doi:10.1093/geronb/60.3.P121
- Blanchard-Fields, F. (2007). Everyday problem solving and emotion: An adult developmental perspective. *Current Directions in Psychological Science, 16*, 26–31. doi:10.1111/j.1467-8721.2007.00469.x
- Bookwala, J. (2005). The role of marital quality in physical health during the mature years. *Journal of Aging and Health, 17*, 85–104. doi:10.1177/0898264304272794
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. H. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family, 62*, 964–980. doi:10.1111/j.1741-3737.2000.00964.x
- Brandtstadter, J., & Rothermund, K. (2002). Intentional self-development: Exploring the interfaces between development, intentionality, and the self. *Nebraska Symposium on Motivation, 48*, 31–75.
- Brassen, S., Gamer, M., Peters, J., Gluth, S., & Buchel, C. (2012). Don't look back in anger! Responsiveness to missed chances in successful and unsuccessful aging. *Science, 336*, 612–614. doi:10.1126/science.1217516
- Burgess, E. W., Locke, H. J., & Thomes, M. M. (1971). The family: From traditional companionship (Vol. 4). New York: Van Nostrand Reinhold.
- Burman, B., & Margolin, G. (1992). Analysis of the association between marital relationships and health problems: An interactional perspective. *Psychological Bulletin, 112*, 39–63. doi:10.1037/0033-2909.112.1.39
- Burr, W. R. (1972). Role transition: A reformulation of theory. *Journal of Marriage and the Family, 34*, 407–416.
- Carstensen, L. L. (1991). Selectivity theory: Social activity in life-span context. In K. W. Schaie (Ed.), *Annual review of gerontology and geriatrics* (Vol. 11, pp. 195–217). New York: Springer.
- Carstensen, L. L. (2006). The influence of a sense of time on human development. *Science, 312*, 1913–1915. doi:10.1126/science.1127488
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging, 10*, 140–149. doi:10.1037/0882-7974.10.1.140
- Carstensen, L. L., Graff, J., Levenson, R. W., & Gottman, J. M. (1996). Affect in intimate relationships: The developmental course of marriage. In C. Magai & S. H. McFadden (Eds.), *Handbook of emotion, adult development, and aging* (pp. 227–247). San Diego, CA: Academic Press. doi:10.1016/B978-012464995-8/50014-5
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socio-emotional selectivity. *American Psychologist, 54*, 165–181. doi:10.1037/0003-066X.54.3.165
- Carstensen, L. L., Mayr, U., Pasupathi, M., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of*

- Personality and Social Psychology*, 79, 644–655. doi:10.1037/0022-3514.79.4.644
- Caughlin, J. P., Hardesty, J. L., & Middleton, A. V. (2012). Conflict avoidance in families: Functions, outcomes, and applied implications. In P. Noller & G. Karantzas (Eds.), *The Wiley-Blackwell handbook of couples and family relationships* (pp. 115–128). Oxford, UK: Wiley-Blackwell. doi:10.1111/b.9781444334500.2012.00009.x
- Caughlin, J. P., & Vangelisti, A. L. (2000). An individual difference explanation of why married couples engage in the demand/withdraw pattern of conflict. *Journal of Social and Personal Relationships*, 17, 523–551. doi:10.1177/0265407500174004
- Christensen, A. (1988). Dysfunctional interaction patterns in couples. In P. Noller & M. A. Fitzpatrick (Eds.), *Perspectives on marital interaction: Monographs in social psychology of language* (Vol. 1, pp. 31–52). Clevedon, UK: Multilingual Matters.
- Christensen, A., Eldridge, K., Catta-Preta, A. B., Lim, V. R., & Santagata, R. (2006). Cross-cultural consistency of the demand/withdraw interaction pattern in couples. *Journal of Marriage and Family*, 68, 1029–1044. doi:10.1111/j.1741-3737.2006.00311.x
- Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology*, 59, 73–81. doi:10.1037/0022-3514.59.1.73
- Christensen, A., & Heavey, C. L. (1993). Gender differences in marital conflict: The demand/withdraw interaction pattern. In S. Oskamp & M. Costanzo (Ed.), *Gender issues in contemporary society* (pp. 113–141). Thousand Oaks, CA: Sage.
- Christensen, A., & Shenk, J. L. (1991). Communication, conflict, and psychological distance in nondistressed, clinic, and divorcing couples. *Journal of Consulting and Clinical Psychology*, 59, 458–463. doi:10.1037/0022-006X.59.3.458
- Coffman, D. L., & Millsap, R. E. (2006). Evaluating latent growth curve models using individual fit statistics. *Structural Equation Modeling*, 13, 1–27. doi:10.1207/s15328007sem1301_1
- de Frias, C. M., Lövdén, M., Lindenberger, U., & Nilsson, L. (2007). Revisiting the dedifferentiation hypothesis with longitudinal multi-cohort data. *Intelligence*, 35, 381–392. doi:10.1016/j.intell.2006.07.011
- Duncan, T. E., & Duncan, S. C. (2004). An introduction to latent growth curve modeling. *Behavior Therapy*, 35, 333–363. doi:10.1016/S0005-7894(04)80042-X
- Eldridge, K. A., & Baucom, B. (2012). Demand-withdraw communication in couples: Recent developments and future directions. In P. Noller & G. Karantzas (Eds.), *The Wiley-Blackwell handbook of couples and family relationships* (pp. 144–158). Oxford, UK: Wiley-Blackwell. doi:10.1111/b.9781444334500.2012.00011.x
- Eldridge, K. A., & Christensen, A. (2002). Demand-withdraw communication during couple conflict: A review and analysis. In P. Noller & J. A. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction* (pp. 289–322). New York: Cambridge University Press. doi:10.1017/CBO9780511500077.016
- Eldridge, K. A., Sevier, M., Jones, J., Atkins, D. C., & Christensen, A. (2007). Demand-withdraw communication in severely distressed, moderately distressed, and nondistressed couples: Rigidity and polarity during relationship and personal problem discussions. *Journal of Family Psychology*, 21, 218–226. doi:10.1037/0893-3200.21.2.218
- Erikson, E. H. (1950). *Childhood and society*. New York: W. W. Norton.
- Erikson, E. H. (1982). *The life cycle completed*. New York: W. W. Norton.
- Fincham, F. D. (2003). Marital conflict: Correlates, structure, and context. *Current Directions in Psychological Science*, 12, 23–27. doi:10.1111/1467-8721.01215
- Fogarty, T. F. (1976). Marital crisis. In P. J. Guerin (Ed.), *Family therapy: Theory and practice* (pp. 325–334). New York: Gardner Press.
- Gilford, R., & Bengston, V. (1979). Measuring marital satisfaction in three generations: Positive and negative. *Journal of Marriage and the Family*, 41, 387–398. doi:10.2307/351705
- Gottman, J. M. (1989). *The Specific Affect Coding System*. Unpublished manuscript. University of Washington, Seattle.
- Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Mahwah, NJ: Erlbaum.
- Gottman, J. M., & Levenson, R. W. (2000). The timing of divorce: Predicting when a couple will divorce over a 14-year period. *Journal of Marriage and the Family*, 62, 737–745. doi:10.1111/j.1741-3737.2000.00737.x
- Gottman, J. M., & Notarius, C. I. (2002). Marital research in the 20th century and a research agenda for the 21st century. *Family Process*, 41, 159–197. doi:10.1111/j.1545-5300.2002.41203.x
- Haase, C. M., Heckhausen, J., & Wrosch, C. (2013). Developmental regulation across the life span: Toward a new synthesis. *Developmental Psychology*, 49, 964–972. doi:10.1037/a0029231
- Heavey, C. L., Gill, D.S., & Christensen, A. (1996). *The Couples Interaction Rating System*. Unpublished manuscript, University of California, Los Angeles.
- Heavey, C. L., Layne, C., & Christensen, A. (1993). Gender and conflict structure in marital interaction: A replication and extension. *Journal of Consulting and Clinical Psychology*, 61, 16–27. doi:10.1037/0022-006X.61.1.16

- Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review*, *117*, 32–60. doi:10.1037/a0017668
- Henry, N. J. M., Berg, C. A., Smith, T. W., & Florsheim, P. (2007). Positive and negative characteristics of marital interaction and their association with marital satisfaction in middle-aged and older couples. *Psychology and Aging*, *22*, 428–441. doi:10.1037/0882-7974.22.3.428
- Hertzog, C., Lindenberger, U., Ghisletta, P., & Oertzen, T. W. (2006). On the power of multivariate latent growth curve models to detect correlated change. *Psychological Methods*, *11*, 244–252. doi:10.1037/1082-989X.11.3.244
- Holley, S. R., Sturm, V. E., & Levenson, R. W. (2010). Exploring the basis for gender differences in the demand-withdraw pattern. *Journal of Homosexuality*, *57*, 666–684. doi:10.1080/00918361003712145
- Holtzworth-Munroe, A., Smutzler, N., & Stuart, G. L. (1998). Demand and withdraw communication among couples experiencing husband violence. *Journal of Consulting and Clinical Psychology*, *66*, 731–743. doi:10.1037/0022-006X.66.5.731
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55. doi:10.1080/10705519909540118
- Kenny, D. A. (2012). Measuring model fit. Retrieved from <http://davidakenny.net/cm/fit.htm>
- Kurdek, L. A. (1995). Predicting change in marital satisfaction from husbands' and wives' conflict resolution style. *Journal of Marriage and the Family*, *57*, 153–164. doi:10.2307/353824
- Lachman, M. E. (2004). Development in midlife. *Annual Review of Psychology*, *55*, 305–331. doi:10.1146/annurev.psych.55.090902.141521
- Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1993). Long-term marriage: Age, gender, and satisfaction. *Psychology and Aging*, *8*, 301–313. doi:10.1037/0882-7974.8.2.301
- Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1994). The influence of age and gender on affect, physiology, and their interrelations: A study of long-term marriages. *Journal of Personality and Social Psychology*, *67*, 56–68. doi:10.1037/0022-3514.67.1.56
- Levenson, R. W., & Gottman, J. M. (1983). Marital interaction: Physiological linkage and affective exchange. *Journal of Personality and Social Psychology*, *45*, 587–597. doi:10.1037/0022-3514.45.3.587
- Locke, H. J., & Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. *Marriage & Family Living*, *21*, 251–255. doi:10.2307/348022
- Mares, M.-L., & Fitzpatrick, M. A. (1995). The aging couple. In J. F. Nussbaum & J. Coupland (Eds.), *Handbook of communication and aging research* (pp. 185–205). Mahwah, NJ: Erlbaum.
- Moer, P., Kim, J. E., & Hofmeister, H. (2001). Couples' work/retirement transitions, gender, and marital quality. *Social Psychology Quarterly*, *64*, 55–71. doi:10.2307/3090150
- Napier, A. Y. (1978). The rejection – intrusion pattern: A central family dynamic. *Journal of Marriage and Family Counseling*, *4*, 5–12. doi:10.1111/j.1752-0606.1978.tb00491.x
- Noller, P., Feeney, J. A., Bonnell, D., & Callan, V. J. (1994). A longitudinal study of conflict in early marriage. *Journal of Social and Personal Relationships*, *11*, 233–252. doi:10.1177/0265407594112005
- Olsen, J. A., & Kenny, D. A. (2006). Structural equation modeling with interchangeable dyads. *Psychological Methods*, *11*, 127–141. doi:10.1037/1082-989X.11.2.127
- Orbuch, T. L., House, J. S., Mero, R. P., & Webster, P. S. (1996). Marital quality over the life course. *Social Psychology Quarterly*, *59*, 162–171. doi:10.2307/2787050
- Peplau, L. A., & Gordon, S. L. (1997). Women and men in love: Gender differences in close heterosexual relationships. In T.-A. Roberts (Ed.), *The Lanahan readings in the psychology of women* (pp. 246–268). Baltimore: Lanahan Publishers.
- Pruchno, R., & Rosenbaum, J. (2003). Social relationships in adulthood and old age. In R. Lerner & M. A. Easterbrooks (Eds.), *Handbook of psychology: Developmental psychology* (Vol. 6, pp. 487–509). New York: Wiley.
- Rehman, U. S., & Holtzworth-Munroe, A. (2006). A cross-cultural analysis of the demand-withdraw marital interaction: Observing couples from a developing country. *Journal of Consulting and Clinical Psychology*, *74*, 755–766. doi:10.1037/0022-006X.74.4.755
- Roberts, L. T. (2000). Fire and ice in marital communication: Hostile and distancing behaviors as predictors of marital distress. *Journal of Marriage and Family*, *62*, 693–707. doi:10.1111/j.1741-3737.2000.00693.x
- Roloff, M. C., & Cloven, D. H. (1990). The chilling effect in interpersonal relationships: The reluctance to speak one's mind. In D. D. Cahn (Ed.), *Intimates in conflict: A communication perspective* (pp. 49–76). Hillsdale, NJ: Erlbaum.
- Selzer, M. L. (1971). The Michigan Alcohol Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry*, *127*, 1653–1658.
- Sevier, M., Simpson, L. E., & Christensen, A. (2004). Observational coding of demand-withdraw interactions in couples. In P. K. Kerig & D. H.

- Baucom (Eds.), *Couple observational coding systems* (pp. 159–172). Mahwah, NJ: Erlbaum.
- Shiota, M. N., & Levenson, R. W. (2007). Birds of a feather don't always fly farthest: Similarity in Big Five personality predicts more negative marital satisfaction trajectories in long-term marriages. *Psychology and Aging, 22*, 666–675. doi:10.1037/0882-7974.22.4.666
- Terman, L. M., Bittenwieser, P., Ferguson, L. W., Johnson, W. B., & Wilson, D. P. (1938). *Psychological factors in marital happiness*. New York: McGraw-Hill. doi:10.1037/h0063047
- Vogel, D. L., & Karney, B. R. (2002). Demands and withdrawal in newlyweds: Elaborating on the social structure hypothesis. *Journal of Social and Personal Relationships, 19*, 685–701. doi:10.1177/0265407502195008
- Walker, R. B., & Luszcz, M. A. (2009). The health and relationship dynamics of late-life couples: A systematic review of the literature. *Ageing and Society, 29*, 455–480. doi:10.1017/S0144686X08007903
- Weiss, R. L., & Heyman, R. E. (1997). A clinical-research overview of couples interactions. In W. K. Halford & H. J. Markman (Eds.), *Clinical handbook of marriage and couples intervention* (pp. 13–41). Chichester, UK: Wiley.
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297–333. doi:10.1037/h0040934
- Wrosch, C. (2011). Self-regulation of unattainable goals and pathways to quality of life. In S. Folkman (Ed.), *The Oxford handbook of stress, health, and coping* (pp. 319–333). New York: Oxford University Press.
- Wrosch, C., Bauer, I., Miller, G. E., & Lupien, S. (2007). Regret intensity, diurnal cortisol secretion, and physical health in older individuals: Evidence for directional effects and protective factors. *Psychology and Aging, 22*, 319–330. doi:10.1037/0882-7974.22.2.319
- Wrzus, C., Hanel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin, 139*, 53–80. doi:10.1037/a0028601

Copyright of Journal of Marriage & Family is the property of Wiley-Blackwell and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.