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Work, Family, and Mental Health: Testing Different Models of Work-Family Fit

Using family resilience theory, this study examined the effects of work-family conflict and work-family facilitation on mental health among working adults to gain a better understanding of work-family fit. Data from the National Survey of Midlife Development in the United States (MIDUS) were used to compare different combinations of work-family conflict and work-family facilitation. Results suggest that family to work facilitation is a family protective factor that offsets and buffers the deleterious effects of work-family conflict on mental health. The results across these outcomes suggest that work-family conflict and facilitation must be considered separately, and that adult mental health is optimized when family to work facilitation is high and family to work and work to family conflict is low.

Flexibility and family is one of three major challenges facing workers and employers at the dawn of the 21st century (U.S. Department of Labor, 1999). As social and demographic trends create increased urgency and demand for sufficient family time among workers, employers are requiring greater levels of flexibility on the part of employ-

ees in order to compete in the global marketplace. Active involvement in both work and family are both widely viewed as signs of a life well-lived, yet the opposing pressures of work and family and the sequela of work-family conflict have been associated with clear detriments to individuals and families (for recent meta-analysis see Allen, Herst, Bruck, & Sutton, 2000). Clearly how work and family intersect in a person's life, or rather how they fit, has important ramifications for individuals and families; therefore, it is important to specify and understand what constitutes this fit.

Historically, fit has not been well defined in the theoretical and empirical literature. The preponderance of work-family research has conceptualized fit as the absence of work-family conflict (for recent reviews of the literature see Barnett, 1998; Frone, in press; Greenhaus & Parasuraman, 1999; Perry-Jenkins, Repetti, & Crouter, 2000); however, workers' everyday experiences tell us that work and family are both sources of growth and support as well as burdens and strains (Barnett; Barnett & Hyde, 2001; Crouter, 1984). This evidence suggests the possibility that work and family can benefit each other, and compelling evidence suggests that work-family conflict is distinct from positive spillover or work-family enhancement (Grzywacz & Marks; Kirchmeyer, 1992a). Integrating the conflict and the enhancement perspectives, work-family fit was recently conceptualized as the combination of enhancement and conflict (Barnett, 1998); unfortunately, *which combination* of enhancement and conflict best facilitates individual, work, and/or family-related outcomes remains to be specified. Therefore, the

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primary goal of this study was to further specify the fit construct by empirically testing three different combinations of work-family conflict and work-family facilitation.

LITERATURE REVIEW

Theoretical Background

Work-family conflict and work-family facilitation are central concepts in emerging perspectives on work and family dynamics (Barnett, 1998; Frone, in press). Work-family conflict represents incompatibilities between work and family responsibilities because of limited resources (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) and is characterized by experiences such as missing an important dinner with one's partner because of working late or being physically drained at work because the individual was up the night before with a sick child. Work-family facilitation, including related concepts such as work-family compatibility (Barnett & Baruch, 1985; Barnett & Hyde, 2001) and work-family enhancement (Greenhaus & Parasuraman, 1999), represents the synergies or complementarities that occur when individuals combine work and family (Frone, 2003; Grzywacz, 2002). Although much less studied, reports by workers who suggest that the patience required in childrearing helps them interact more effectively with coworkers or clients (Kirchmeyer, 1992b), or accounts that paid work provides a needed reprieve that helps individuals better parent (Hochschild, 1997), both exemplify the process of work-family facilitation. Highlighting these two interconnections, Barnett (1998) proposed that work-family fit is the lived experience of combining work and family and the resulting "multiple dimensions of compatibility [facilitation] and conflict" (p. 167). Barnett (1998, 1999) further contends that work-family fit is a pivotal experience affecting individuals and their families, as well as employers.

Although Barnett's (1998) conceptual definition of work-family fit provides an important starting point for work-family theory and research, it is limited. Perhaps most notably, the fit component of the model lacks a theoretical basis for explaining how conflict and facilitation operate together in shaping individual, family, or organizational outcomes. This theoretical gap produces operational confusion: Are the multiple dimensions of work-family experience best treated as independent, unique effects, or should researchers use other mathematical representations of fit in empirical models? Moreover, how are these representations of fit to be interpret-

ed? Thus a theoretically based exploration of different representations of the fit construct would enrich Barnett's model and provide a foundation for future research.

Family resilience theory, which argues that a family's resources or capabilities allow it to thrive in the face of significant risk, provides a valuable perspective for articulating a more precise specification of work-family fit (for a recent discussion of the resilience perspective see Patterson, 2002). First, the processes involved in work-family fit map nicely onto the central concepts of the family resilience perspective. Work-family conflict, which is widely accepted as being bidirectional (i.e., work conflicts with family and family conflicts with work; Crouter, 1984; Frone, Yardley, & Markel, 1997), exemplifies both enduring and episodic forms of the demands concept in family resilience theory. Additionally, work-family conflict poses significant theoretical risk to individuals and families because successful integration of work and family is posited to be a primary task during young and middle adulthood (Lachman & Boone-James, 1997). Empirically, enduring forms of conflict, such as the difficulty confronted by shift workers in finding adequate child care, as well as specific instances of conflict such as having a sick child but not being able to take sick leave, are consistently linked to a variety of negative individual and family outcomes (Allen et al., 2000; Heymann, 2000). Thus not only does work-family conflict map nicely onto the demand concept, but theory and empirical evidence suggest it poses significant risk to individuals and families.

The conceptual match between family capabilities and work-family facilitation, also posited to be bidirectional (Grzywacz & Marks, 2000), further suggests that the family resilience perspective is an appropriate framework for considering work-family fit. First, the posited gains from role accumulation such as role privileges, status security, and personality enrichment (Sieber, 1974) are conceptually isomorphic with those used to describe the resources required by families to accommodate or adapt to imposing demands (Patterson, 2002). Next, operational indicators of work-family facilitation frequently exemplify family behavior patterns that have been demonstrated to be important in the face of family stress. For example, an item reflecting the extent to which conversations with family members are helpful for resolving difficulties at work has been used in several studies (Grzywacz & Marks; Kirchmeyer, 1992a), and such items are indicative of active coping: an

important family capability for resilience (Patterson). Finally, workers frequently report that the benefits of combining work and family make the strains worthwhile (Barnett & Hyde, 2001), suggesting that varying levels of work-family facilitation enable some families to thrive while confronting the enduring work-family challenge.

The family resilience framework is also helpful because it articulates possible strategies underlying work-family fit that describe how conflict and facilitation operate together (McCubbin, McCubbin, Thompson, & Thompson, 1998). The elimination strategy reflects the extent to which family capabilities, such as work-family facilitation, allow families to evaluate imposing demands as nonthreatening and not requiring further attention. For example, some workers carve out unique work arrangements or negotiate innovative arrangements with their spouses or partners so that they can maximize the personal and familial gains of paid work (e.g., role modeling for children, financial wherewithal) while minimizing work-family conflict (Hattery, 2001). The assimilation strategy, by contrast, recognizes the potential threat of the demand (e.g., work-family conflict); however, family capabilities allow the demand to be viewed as acceptable and manageable without altering a family's form or function. Akin to this strategy, Hattery interviewed a series of women who clearly recognized that they were making tradeoffs in their attempts to weave work and family, but who firmly believed that the benefits outweighed the stresses or conflicts. For example, one working mother commented:

The costs are that I have absolutely no free time. I don't do cross-stitch; I don't read. You know, as far as having a lot of free time to myself, I don't have it anymore. To me, that kind of goes along with it; I can deal with that. (Hattery, 2001, p. 63).

Thus family resilience theory would suggest that work-family fit represents the extent to which work-family facilitation can eliminate experiences of work-family conflict, or the extent to which work-family facilitation creates an environment that can tolerate experiences of work-family conflict. Both of these strategies set up different empirical models for evaluating the overall fit between work and family.

Independent effects and *interactive effects* models capture the essence of the elimination strategy, whereas the assimilation strategy can be framed using a *relative difference* model. The in-

dependent effects model posits that family capabilities and family demands would exert additive effects on a given outcome. This model assumes that the magnitude of the effect for each work-family process is different from the others, thereby drawing attention to both the levels of family capabilities and demands and their salience or impact. Thus in this model work-family fit would represent the extent to which the level and salience of work-family facilitation offset or *eliminate* the effects of work-family conflict. An extension of this model is the interactive effects model, whereby work-family fit would be characterized by interaction effects between the different forms of work-family conflict and work-family facilitation. Akin to the classic stress buffering hypothesis (Cohen & Wills, 1985), facilitation would be particularly important when conflict is high, but may be relatively unimportant when work-family conflict is low. In this model, family demands are redefined or their negative potential is lessened by the presence of adequate family capabilities, thereby minimizing or eliminating the consequences of the demand for the individual or family. Finally, the assimilation strategy emphasizes the joint relationship of family capabilities and demands as opposed to their independent effects. In this model, the effect of a given demand and its corresponding capability are posited to be equal but opposite. Therefore, the primary concern is the extent to which family capabilities exceed the demands, or the degree to which a demand can be *assimilated* into a family's structures and functions. This ability can be operationalized as the relative difference between a specific family capability (e.g., work to family facilitation) and a family demand (e.g., work to family conflict).

Empirical Background

Mental health or illness is frequently examined in work-family studies, and it is also an appropriate dependent variable for this study. First, mental illness can be seen as a crude indicator of a family's inability to nurture and socialize family members, thereby meeting resilience theory's requirement of modeling competence in core family functions (Patterson, 2002). Next, the widespread use of mental health indicators in work-family studies (e.g., life satisfaction, depressive symptoms) suggest that mental health is sensitive to even minor variation in work-family experiences (Frone, 2000). Moreover, the widespread use of mental

health provides comparability between this and other studies. Finally, mental health is itself a resource for individuals and families; thus it is a pivotal marker of a family members' individual and collective capacity to survive and thrive.

Individual and contextual factors are frequently implicated in work-family conflict and facilitation, and by extension, work-family fit. Gender, for example, is often a central variable in studies of work and family. Although differences in the meaning of work- and family-related experiences are frequently noted (e.g., Larson, Richards, & Perry-Jenkins, 1994), only rarely do gender differences in levels of work-family experiences arise. Indeed, several researchers have commented on the absence or inconsistency of gender differences in feelings of work-family conflict or feelings of success in balancing work and family (Frone, 2003; Frone, Russell, & Cooper, 1993; Milkie & Peltola, 1999). Moreover, explicit tests of gender differences in the effects of work-family experiences on mental health frequently yield null findings, suggesting that the components of work-family fit exert comparable effects on men's and women's mental health (Frone et al., 1993; Grzywacz, 2000). Gender is treated as a control variable in this study, however, because work and family responsibilities are gendered and the prevalence of mood and affective disorders is greater among women than men (Kohn, Dohrenwend, & Mirotznik, 1998).

Family structure is another central variable in studies of work-family experiences. Families characterized by two working parents with young children are typically sampled in work-family studies because they frequently report the highest levels of work-family conflict (Ernst Kossek & Ozeki, 1998; Galinsky, Bond, & Friedman, 1993). However, adults in these families also may experience more work-family facilitation than their unmarried or childless counterparts (Grzywacz & Marks, 2000). Thus the common practice of focusing on married couples with children creates a unique range of work-family experiences characterized by high levels of conflict and high levels of facilitation that does not allow full exploration of different combinations of these processes. Moreover, restricting work-family studies to married people with children overlooks the fact non-married and childless individuals frequently take on enormous family responsibilities such as providing care for aging kin (Allen & Pickett, 1987; Marks, 1996). Finally, evidence suggests that work-family conflict and stress are relatively sta-

ble throughout midlife and that work-family facilitation increases across the adult life course, indicating that the work-family interface is not only an issue for married couples with young children (Grzywacz, Almeida, & McDonald, 2002). Thus to maximize sample variability but yet acknowledge established differences in work-family experiences by family structure, marital status and parental status are controlled in this study.

For the reasons outlined above, gender, marital status, and having a young child were adjusted for in the multivariate analyses. Additionally, work-family experiences and mental health have been associated with life course and socioeconomic location, as well as a variety of employment circumstances (Barnett, 1998; Grzywacz, Almeida, & McDonald, 2002; Kessler et al., 1994; Kohn et al., 1998). Therefore, paralleling a recent study by Frone (2000), the analyses reported in this study adjusted for the effects of age, race (*non-White* = 1), educational attainment, household earnings, number of hours worked per week, and self-employment status.

The primary objective of this study was to compare three different conceptual models of work-family fit. Consistent with family resilience theory, the general hypothesis guiding this study is that a higher level of family demands (i.e., work to family and family to work conflict) would be associated with more risk of mental illness, but that more family capabilities (i.e., work to family and family to work facilitation) would be associated with less risk of mental illness. However, given the absence of theory and research regarding the nature and purpose of work-family facilitation (Frone, 2003), this study examined two research questions regarding the most appropriate model and the processes underlying work-family fit.

1. Which model of work-family conflict and facilitation (i.e., independent effects, interactive effects, or relative difference) best predicts mental health among working adults?
2. Does work-family facilitation promote elimination or assimilation strategies of adjustment to work-family conflict?

METHOD

Data and Sample

The data for this study are from the National Survey of Midlife Development in the United States (MIDUS) collected by the John D. and Catherine

T. MacArthur Foundation Research Network on Successful Midlife Development in 1995. MIDUS respondents are a nationally representative general population sample of noninstitutionalized persons aged 25–74 who have telephones. The sample was obtained through random digit dialing, with an oversampling of older respondents and men made to guarantee a good distribution on the cross-classification of age and gender. Sampling weights correcting for selection probabilities and nonresponse allow this sample to match the composition of the U.S. population on age, sex, race, and education.

MIDUS respondents first participated in a telephone interview lasting approximately 40 minutes. The response rate for the telephone questionnaire was 70%. Respondents to the telephone survey were then asked to complete two self-administered mail-back questionnaires. The response rate for the mail-back questionnaire was 86.8%. This yielded an overall response rate of 60.8% (0.70×0.868) for both parts of the survey. The analytic sample used here includes all part-time and full-time employed respondents aged 24–62 ($N = 1,986$; 1,038 men and 948 women).

Dependent Variables

Dichotomous depression and anxiety (either generalized anxiety or panic) disorder were operationalized using the Composite International Diagnostic Interview Short Form Scales (CIDI-SF; Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998) assessed during the telephone interview portion of the MIDUS. The CIDI-SF generates scores for psychiatric disorders that represent probability estimates of meeting the full diagnostic criteria (DSM-III-R) for these disorders if the respondent were given the complete Composite International Diagnostic Interview (Kessler et al.). A validation study of the short form scales indicated greater than 90% sensitivity, specificity, and overall agreement between the CIDI-SF and the full CIDI for each major diagnosis (Kessler et al.). On the basis of these results, Kessler et al. contend that the CIDI-SF scales are ideal for use in general-purpose epidemiological studies (p. 183).

The depression scale is comprised of one stem question (i.e., “During the past 12 months, was there ever a time when you felt sad, blue, or depressed for 2 weeks or more in a row?”), and a series of probes to affirmative responses about nine specific symptoms (e.g., losing interest in things, loss of appetite). Additionally, two questions probed the frequency within the referenced 2-week period in

which the respondent felt “sad, blue, or depressed” and “had greater difficulty than usual falling asleep.” The respondent was coded 1 for *depression* if he or she reported yes to the stem question and scored seven or more on the probes.

A dichotomous anxiety variable was constructed with items from two different short form scales that used a similar format as that reported for depression. The stem question for the general anxiety scale asked, “. . . Thinking about the past 12 months, how often did you have each of the following reactions because of your worry?” and was followed by a series of 10 probes reflecting specific somatic responses to worry (e.g., restless because of worry, and sore or aching muscles because of tension). Respondents answering yes to three or more probes were coded as 1 for *general anxiety disorder*. Being coded 1 on the panic scale required the respondent to answer affirmatively to one of the stem questions (e.g., “During the past 12 months, did you ever have a spell or an attack when all of a sudden you felt frightened, anxious, or very uneasy in a situation when most people would not be afraid or anxious?”) and then answer yes to three or more of six probes about those experiences (e.g., “Did you tremble or shake?” or “Did you have hot flashes or chills?”). *Anxiety disorder* was coded 1 if the respondent met the criteria for general anxiety disorder or panic disorder.

The short form assessing the 12-month prevalence of alcohol dependence was intact except for the pivotal indicator of problem drinking. Therefore, a measure of *problem drinking* was created by evaluating the internal consistency of seven survey items indicative of alcohol dependence (e.g., “Were you ever, during the past 12 months, under the effects of alcohol or feeling its after-effects in a situation that increased your chances of getting hurt?” or “Did you have a period of a month or more during the past 12 months when you spent a great deal of time using alcohol or getting over its effects?” [Chronbach’s $\alpha = 0.74$]). A sum score was constructed from affirmative responses and then dichotomized using a cut-point to generate a similar prevalence rate for alcohol abuse and alcohol dependence that has been obtained from other national estimates (Grant et al., 1994; Kessler et al., 1994). Individuals meeting three or more of seven criteria for abuse and dependence were coded 1 for *problem drinking*, and 0 otherwise. Additional sensitivity analyses indicated that the overall pattern of results was uninfluenced by using a more or less

TABLE 1. DESCRIPTIVE STATISTICS FOR ALL ANALYSIS VARIABLES

	<i>M</i>	<i>SD</i>	Range
Outcome variables			
Depression	0.139	0.346	0-1
Anxiety disorder	0.089	0.286	0-1
Problem drinking	0.038	0.276	0-1
Independent variables			
Work to family conflict	2.655	0.728	1-5
Work to family facilitation	2.610	0.838	1-5
Facilitation—conflict	-0.047	1.134	-4-4
Family to work conflict	2.122	0.666	1-5
Family to work facilitation	3.421	0.832	1-5
Facilitation—conflict	1.299	1.096	-3.33-4
Control variables			
Age (years)	40.859	9.826	25-62
Gender (<i>female</i> = 1)	0.517	0.499	0-1
Race/ethnicity (<i>non-White</i> = 1)	0.109	0.312	0-1
Education			
Less than a high school degree	0.080	0.272	0-1
High school degree or GED	0.359	0.480	0-1
Associates degree or some college	0.279	0.449	0-1
College graduate	0.281	0.449	0-1
Annual household earnings (1000s of dollars)	47,900	35,371	0-300,000
Marital status			
Married or cohabiting	0.759	0.428	0-1
Divorced or separated	0.136	0.343	0-1
Never married	0.106	0.307	0-1
Parent to a child under the age of 6	0.217	0.412	0-1
Self-employed	0.185	0.389	0-1

Note: Weighted estimates using data from the National Survey of Midlife Development in the United States (MIDUS; *N* = 1,986).

conservative cut-point for categorizing problem drinking.

Independent Variables

Work to family conflict was assessed with four items: "How often have you experienced each of the following in the past year? (a) Your job reduces the effort you can give to activities at home. (b) Stress at work makes you irritable at home. (c) Your job makes you feel too tired to do the things that need attention at home. (d) Job worries or problems distract you when you are at home." Response categories for each of these items and each of the subsequently described work-family spillover indices ranged from 1 (*never*) to 5 (*all of the time* [Chronbach's $\alpha = 0.82$]).

Work to family facilitation was assessed with responses to three questions: "How often have you experienced each of the following in the past year? (a) The things you do at work help you deal with personal and practical issues at home. (b) The things you do at work make you a more in-

teresting person at home. (c) The skills you use on your job are useful for things you have to do at home" (Chronbach's $\alpha = 0.73$).

Family to work conflict was measured by responses to four questions: "How often have you experienced each of the following in the past year? (a) Responsibilities at home reduce the effort you can devote to your job. (b) Personal or family worries and problems distract you when you are at work. (c) Activities and chores at home prevent you from getting the amount of sleep you need to do your job well. (d) Stress at home makes you irritable at work" (Chronbach's $\alpha = 0.80$).

Family to work facilitation was measured by respondents' answers to three questions: "How often have you experienced each of the following in the past year? (a) Talking with someone at home helps you deal with problems at work. (b) The love and respect you get at home makes you feel confident about yourself at work. (c) Your home life helps you relax and feel ready for the next day's work" (Chronbach's $\alpha = 0.70$).

Analytic Sequence

A series of multivariate logistic regression models were specified to examine the effects of different combinations of work-family conflict and work-family facilitation on mental disorders and problem drinking. In the first model each of the outcomes was regressed on work to family and family to work conflict along with the control variables. In the second model, work to family and family to work facilitation were added to the model. In the third model, work to family conflict \times work to family facilitation and family to work conflict \times family to work facilitation interaction terms were included. In this specification, each of the work-family spillover measures were centered on their respective sample mean, and the interaction terms were constructed from these centered measures to avoid multicollinearity (Aiken & West, 1991; Jaccard, Turrisi, & Wan, 1990). In the last model, the outcome variables were regressed on two difference-score variables reflecting the difference between work to family conflict and facilitation and the difference between family to work conflict and facilitation.

Likelihood difference statistics were calculated to assess the relative fit of nested models. The model specified using the difference scores between various dimensions of work-family conflict and work-family facilitation was not nested within or an extension of the other models; consequently, likelihood statistics did not provide an appropriate comparison. McFadden's rho (McFadden, 1974) was calculated to compare the relative levels of explained variance between nonnested models.

RESULTS

Univariate estimates and mean comparisons suggest that work to family exchanges were more problematic than those from family to work. As indicated by the difference scores between the work to family and family to work conflict and facilitation, the average respondent reported that family facilitated work-related obligations more than it conflicted with work, whereas the work to family difference score was essentially 0. Indeed, mean levels of work to family conflict were statistically equivalent to mean levels of work to family facilitation ($M = 2.66$ and 2.61 , respectively, $t = 0.80$, $df = 1976$, $p \leq 0.425$). Additionally, mean levels of work to family conflict were higher than mean levels of family to work conflict ($M = 2.66$ vs. 2.12 , $p \leq .001$), and mean

levels of work to family facilitation were lower than mean levels of family to work facilitation ($M = 2.61$ vs. 3.42 , $p \leq .001$). Thus first glances suggest that family benefits work more than work benefits family, and that family interferes less with work than work does with family. (Note: The bivariate associations among the four work-family experiences suggest that they are distinct, and that including them in the same multivariate model should not undermine the integrity of the parameter estimates. See Appendix A for a complete zero-order correlation matrix.)

Evidence in Table 1 also indicates that the prevalence of psychiatric disorders in this middle-aged ($M = 41$, $SD = 9.8$), married (75.8%) sample of working adults was modest yet substantial. More than one in seven respondents were estimated to meet the DSM-III-R criteria for a major depressive event during the past 12 months, and one in 11 respondents were estimated to meet diagnostic criteria for general anxiety disorder or panic disorder. By specification, approximately 8.3% of these working adults were characterized as problem drinkers.

Supporting the study's general hypothesis, initial unreported models indicated that higher levels of work to family conflict and family to work conflict were independently associated with greater odds of each outcome. Results reported in Table 2, however, illustrate that work-family fit is more than the absence of conflict. Model 1, for example, indicates that more family to work facilitation is associated with a lower risk of depression and problem drinking. Specifically, each unit increase in family to work facilitation is associated with a 15% decrease in the odds of reporting depression and a 38% decrease in the odds of reporting problem drinking. Results reported for the second model for each of the outcomes in Table 2 demonstrate no evidence that work-family facilitation buffers the deleterious effects of work-family conflict in terms of depression or problem drinking. Finally, results from Model 3 indicate that the odds of meeting diagnostic criteria for depression is lowered as facilitation exceeds conflict (both work to family and family to work), and that the likelihood of being classified as a problem drinker is lowered as family to work facilitation surpasses family to work conflict.

Model comparisons suggest that the independent effects model (i.e., Model 1) provides the best combination of conflict and facilitation for explaining depression and problem drinking. Model 1 had less unexplained variance than the

unreported conflict-only model for both depression ($LR = 1444.31$ vs. $1451.51 = 7.199$ with 2 df , $p \leq .05$) and problem drinking ($LR = 986.61$ vs. $1006.531 = 19.92$ with 2 df , $p \leq .001$), and Model 1 was clearly more parsimonious than the interactive models for both outcomes. Although the difference models were more parsimonious than the others, they also yielded lower levels of additional explained variance above the base model for both depression ($\rho = .031$) and problem drinking ($\rho = .041$) than the independent effects (depression, $\rho = .041$; problem drinking, $\rho = .051$) or the interaction (depression, $\rho = .041$; problem drinking, $\rho = .054$) models.

The pattern of results for anxiety disorder was notably different from those reported for depression and problem drinking. Although both types of work-family conflict were independently associated with greater odds of anxiety disorder, work-family facilitation was unrelated to this outcome. However, Model 2 indicates that both types of facilitation moderate the effects of their work-family conflict counterparts, suggesting that work-family facilitation buffers the negative consequences of work-family conflict. More specifically, when work to family facilitation is high, a high level of work to family conflict is associated with an 11% increase in the odds of anxiety disorder. By contrast, when work to family facilitation is low, a high level of work to family conflict is associated with more than twice the odds of anxiety disorder. Likewise, the reduced odds of anxiety disorder associated with lower work to family conflict are accentuated when work to family facilitation is high. Under conditions of low work to family conflict, the estimated odds of anxiety disorder is 0.89 when work to family facilitation is low but 0.44 when facilitation is high. (The conditioning effect of family to work conflict by family to work facilitation was comparable.) Finally, results from Model 3 suggest that when the level of work-family facilitation surpasses the level of work-family conflict, an individual's odds of meeting caseness for anxiety disorder decreases.

Comparisons of the anxiety disorder models indicate that the interactive model outlines the best combination of conflict and facilitation for explaining anxiety disorder. The addition of the interaction terms to Model 1 significantly decreases the amount of unexplained variance ($LR 1019.85$ vs. $1035.87 = 16.01$ with 2 df , $p \leq .001$). Estimates of McFadden's rho (1974) also indicated that the difference model ($\rho = .028$) provides the least amount of additional explained variance over the base model in contrast

to the independent effects ($\rho = .059$) or the interaction ($\rho = .075$) models.

DISCUSSION

The overall goal of this study was to specify which combination of work-family experiences is optimal for predicting individual outcomes reflective of family competence. The most positive outcomes resulted almost exclusively from low levels of work-family conflict and high levels of work-family facilitation. However, in some cases this combination was manifest in terms of independent, opposite effects (e.g., depression and problem drinking), whereas for anxiety disorders the most health-promoting combination manifests itself as an interaction effect. This pattern of effects suggests that work-family facilitation, as a family capability, may help families adjust to work-family conflict by offsetting or redefining the meaning of the incoming stressor, thereby eliminating its threat.

Unfortunately, why the elimination strategy manifests itself differently for the depression and problem drinking outcomes compared with the anxiety disorder outcome is not well informed by family resilience theory. Perhaps the divergent pattern of results is reflective of the fundamental distinction between these disorders made by the *Diagnosis and Statistical Manual of Mental Disorder* and the likelihood that they are influenced by different environmental factors (Kendler, Neale, Kessler, Heath, & Eaves, 1992). One study of heart transplant patients, for example, indicated that low levels of family support were predictive of anxiety disorder but not depression, suggesting that anxiety disorder is more sensitive than depression to the absence of family resources (i.e., support) in the face of family stress (i.e., heart transplant; Dew et al., 2001). It is also possible that families of individuals with depression differ from families of individuals with anxiety disorders in ways separate from work-family processes, and that it is these unspecified differences that contribute to the differing pattern of results.

Before proceeding with a discussion of these results, it is important to recognize the limitations of this study. First, the prevalence of each outcome was high in this study in contrast to other reports using similar measures, such as the National Comorbidity Study (NCS; Kessler et al., 1994). This difference could reflect the fact that young women were overrepresented in the MIDUS despite the oversampling of older adults and men, or that the NCS did not include older men

TABLE 2. MULTIVARIATE LOGISTIC REGRESSION ESTIMATES OF THE ASSOCIATIONS BETWEEN WORK-FAMILY EXPERIENCES AND MENTAL ILLNESSES

	Depression			Problem Drinking			Anxiety Disorder		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Work to family conflict	.31** (.11)	.30** (.11)		.31* (.14)	.32* (.14)		.48*** (.13)	.45*** (.14)	
Work to family facilitation	-.04 (.09)	-.04 (.09)		.22 (.12)	.21 (.12)		-.13 (.11)	-.06 (.11)	
Family to work conflict	.50*** (.12)	.49*** (.12)		.42** (.15)	.42** (.16)		.63*** (.15)	.72*** (.15)	
Family to work facilitation	-.21** (.09)	-.18* (.09)		-.48*** (.11)	-.49*** (.11)		.09 (.11)	.20 (.12)	
Work to family balance ^a			-.15* (.07)			-.01 (.09)			-.27*** (.08)
Family to work balance ^a			-.35† (.07)			-.50*** (.08)			-.24** (.08)
Work to family interaction ^b		-.04 (.10)			.05 (.13)			-.35** (.12)	
Family to work interaction ^b		-.15 (.11)			.04 (.13)			-.30* (.14)	
Age	-.02** (.01)	-.02** (.01)	-.02** (.01)	-.05*** (.01)	-.05*** (.01)	-.05*** (.01)	-.01 (.01)	-.01 (.01)	-.01 (.01)
Gender (<i>female</i> = 1)	.48*** (.14)	.48*** (.14)	.51*** (.14)	-.75*** (.19)	-.75*** (.19)	-.73† (.18)	.82*** (.18)	.81*** (.18)	.86*** (.18)
Race (<i>non-White</i> = 1)	-.21 (.28)	-.19 (.28)	-.22 (.28)	-.85 (.48)	-.85 (.48)	-.85 (.48)	-.151** (.54)	-.151** (.54)	-.140** (.53)
Education	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Less than high school	-.67* (.29)	-.69* (.29)	-.69* (.29)	.04 (.42)	.05 (.42)	-.01 (.42)	-.49 (.34)	-.54 (.34)	-.53 (.33)
High School or GED	-.50 (.28)	-.52 (.28)	-.48 (.28)	-.16 (.42)	-.15 (.42)	-.16 (.42)	-.43 (.33)	-.47 (.33)	-.44 (.32)
Some College	-.49 (.29)	-.52 (.29)	-.46 (.29)	-.11 (.42)	-.10 (.42)	-.08 (.42)	-.101** (.36)	-.109** (.36)	-.098** (.35)
College graduate	-.03 (.02)	-.03 (.02)	-.02 (.02)	-.03 (.03)	-.02 (.03)	-.02 (.03)	-.02 (.03)	-.02 (.03)	-.03 (.02)
Household earnings ^c	Ref ^d	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Marital status	Ref ^d	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Married or cohabitating	.78*** (.18)	.79*** (.18)	.76*** (.18)	.43 (.24)	.24 (.24)	.43 (.24)	.64** (.22)	.67** (.22)	.58** (.21)
Divorced or separated	.41 (.22)	.44* (.22)	.34 (.21)	.62* (.26)	.61* (.27)	.56* (.26)	.33 (.27)	.42 (.28)	.21 (.27)
Never married or widowed									

TABLE 2. CONTINUED

	Depression			Problem Drinking			Anxiety Disorder		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Parent to child <6 years	-.21 (.20)	-.23 (.20)	-.17 (.20)	.05 (.23)	.06 (.23)	.03 (.22)	-.32 (.26)	-.36 (.26)	-.23 (.25)
Self-employed	-.31 (.20)	-.31 (.20)	-.25 (.19)	-.23 (.24)	-.23 (.24)	-.13 (.23)	.27 (.21)	.27 (.21)	.35 (.21)
-2 Log likelihood	1444.31	1441.98	1456.91	986.61	986.29	995.62	1035.87	1019.85	1067.49

Note: Estimates obtained using data from the National Survey of Midlife Development in the United States (MIDUS; $N = 1,986$).

^aBalance is a combined measure whereby work to family conflict was subtracted from work to family facilitation, and family to work conflict was subtracted from family to work facilitation. ^bInteraction reflects the product term of work to family conflict with work to family facilitation, and family to work conflict with family to work facilitation. All measures were centered on their respective sample mean prior to calculating the interaction terms. ^cReported earnings were divided by 10,000 to enhance interpretability of the parameter estimates. ^dRef = Reference category.

* $p \leq .05$. ** $p \leq .01$. *** $p < .001$ (two-tailed).

(who were also oversampled in the MIDUS). In both cases these oversampling strategies could yield overinflated rates of psychiatric morbidity (E. Wethington, personal communication, November 9, 2001). However, it is also possible that the short form measures employed in the MIDUS performed less than optimally. The current analyses were also conducted using cross-sectional data, so causal inferences cannot be made. This is particularly important given the strong possibility that mental health could be the primary cause of work-family difficulties (conflict and absence of facilitation), rather than the outcome, as well as the possibility that families of individuals with mental illnesses may differ in other important ways separate from work-family experiences. The bias caused by reverse causality as well as the endogeneity between mental health and other family processes would likely overinflate parameter estimates of association between work-family experiences and mental illness. Additionally, the results of this study could be a consequence of common method bias, as both the outcomes and the independent variables were constructed from self-reported data. Finally, it is possible that the work-family dynamics involved in mental illness may be different from the dynamics relevant to other outcomes reflective of family competence such as dyadic adjustment or parental involvement. Given these limitations as well as the paucity of previous research using measures of work-family compatibility or facilitation, additional prospective research is clearly needed.

The results from this study are consistent with the growing body of studies examining how multiple dimensions of the work-family interface affect individual workers, and they suggest that work-family fit is more than the absence of conflict. Like previous cross-sectional and longitudinal work by Frone and colleagues (1993, 1997, 2000), the results of this study suggest that higher levels of both work to family and family to work conflict are associated with poor mental health. Newer to the literature, however, were the repeated protective effects of work-family facilitation, particularly family to work facilitation. These results parallel a recent study indicating that more family to work facilitation was associated with better psychological well-being, independent of the effects of work-family conflict (Grzywacz, 2000). The current study extends this earlier work by linking positive aspects of combining work and family with more objective assessments of mental health.

Echoing a recent observation by Frone (2003),

the overall pattern of results from this study suggests an asymmetrical preference that consistently favors the work side of the work and family equation. Although not explicitly tested, the magnitude of the effects suggests that family interfering with work is more detrimental to mental health than was work interfering with family. Moreover, although family to work facilitation was consistently associated with lower risk of mental illness, work to family facilitation exerted inconsistent effects on mental health. Thus, at least in terms of mental health, it appears as though work-family fit is optimized when work is protected from family disruptions and when family contributes to productivity at work.

Although this study's general pattern of results are consistent with earlier work and empirical reviews, several conceptual limitations are apparent and need to be addressed in future research. First, both work-family conflict and work-family facilitation are best described as bidirectional and multidimensional (Carlson, Kacmar, & Williams, 2000; Frone et al., 1997; Greenhaus & Beutell, 1985; Grzywacz & Marks, 2000; Small & Riley, 1990). Thus the large number of possible combinations of work-family conflict and work-family facilitation make precise specification of work-family fit difficult, particularly in the absence of developed theory regarding work-family facilitation. Like previous studies (e.g., Barnett & Baruch, 1985; Tiedje et al., 1990), we arbitrarily chose combinations of conflict and compatibility that had similar directions (e.g., work to family conflict with work to family facilitation); however, it is possible that other complex combinations more adequately characterize the fit between work and family. For example, if family to work facilitation represents a family's responsiveness to work-related demands, then it may be more important than work to family facilitation for defusing the meaning of work to family conflict.

Additionally, it is important to acknowledge that the different types of work-family conflict (i.e., time-, strain-, and behavior-based; Greenhaus & Beutell, 1985) and work-family facilitation have unique meanings and may influence individuals and families in different ways. The resiliency framework suggests that when family capabilities are particularly suited for the imposing demand, more optimal adaptation will occur in contrast to when capability and demands are matched less well. For example, work-family facilitation brought about by status gains may be important in the face of time-based conflict because they

may enable the individual to secure high-quality, flexible childcare. By contrast, this type of facilitation may be unimportant when a person's physical or psychological resources are drained (i.e., strain-based conflict). The essential conceptual issue that these examples raise is the possibility that work-family *fit* may reflect a generalized combination of conflict and facilitation, but this generalized sense may arise from the accumulation of more specific matches between distinct types of conflict and facilitation.

A third area of conceptual development for future work-family research would explore the differentiation of work-family experiences that are episodic compared with those that are enduring (Greenhaus & Parasuraman, 1999). For example, even in the best possible work-family arrangement, specific events of work-family conflict can occur, such as a last-minute deadline at work or the strain of caring for an ill family member. Moreover, these episodes of conflict or facilitation may be gendered. These examples highlight the possibility that the overall quality of work-family fit may differ from specific events of conflict or facilitation and be experienced differently by members of different groups. Additionally, the distinction between enduring qualities of the work-family interface and specific work-family exchanges highlight the possibility that enduring aspects of fit may buffer or exacerbate specific events when they occur. Consistent with this possibility, results from a recent report suggested that higher levels of family to work facilitation buffered the negative effect of a family to work stressor on binge drinking (Grzywacz, Johnson, Hartwig, & Almeida, 2002). Additional research examining these nuances of work-family exchanges is clearly needed to better understand the work-family interface and to generate family policy and family life education that meets the needs of today's adults.

The general pattern of results from this study suggests that work-family facilitation contributes to "fit" by eliminating or offsetting the negative potential of work-family conflict. If replicated in other research, these results suggest a variety of different interventions for enhancing work-family fit. First, individual-level programs could be developed to help employees better understand the personal benefits they and their families realize from combining work and family. These gains become a cognitive resource that can be invoked during times of conflict to minimize the impact of those episodes. Programs could also target family members in order to alleviate or eliminate the

stress that accompanies another family member's job. For example, family life education programs have been utilized to decrease the negative impact of deployments on military families by providing support- and information-based networks. Finally, organizational interventions could be designed to create additional benefits of combining work and family that, once realized, could promote enduring structural changes that facilitate the ability for individuals to balance their work and family roles.

Limitations notwithstanding, the results of this study clearly suggest that work-family fit is more than the absence of work-family conflict. As the workforce and the labor market continue addressing the challenge of the work-family interface, increased attention needs to be given to work-family facilitation, how it can be cultivated and exploited, and how it operates in conjunction with work-family conflict in shaping desirable individual, family, and work-related outcomes. Such knowledge is an essential first step for developing policy and programs that meet the needs of current and future workers and their families.

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REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Allen, K. R., & Pickett, R. S. (1987). Forgotten streams in the family life course: Utilization of qualitative retrospective interviews in the analysis of lifelong single women's family careers. *Journal of Marriage and the Family*, *49*, 517-526.
- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*, 278-308.
- Barnett, R. C. (1998). Toward a review and reconceptualization of the work/family literature. *Genetic, Social, and General Psychology Monographs*, *124*, 125-182.
- Barnett, R. C. (1999). A new work-life model for the twenty-first century. *Annals of the American Academy of Political and Social Science*, *562*, 143-158.
- Barnett, R. C., & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology*, *49*, 135-145.
- Barnett, R. C., & Hyde, J. S. (2001). Women, men, work, and family. An expansionist theory. *American Psychologist*, *56*, 781-796.
- Carlson, D. S., Kacmar, M. K., & Williams, L. J. (2000). Construction and validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, *56*, 249-276.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310-357.
- Crouter, A. C. (1984). Spillover from family to work: The neglected side of the work-family interface. *Human Relations*, *37*, 425-442.
- Dew, M. A., Kormos, R. L., DiMartini, A. F., Switzer, G. E., Schulberg, H. C., Roth, L. H., et al. (2001). Prevalence and risk of depression and anxiety-related disorders during the first three years after heart transplant. *Psychosomatics*, *42*, 300-313.
- Ernst Kossek, E., & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, *83*, 139-149.
- Frone, M. R. (2000). Work-family conflict and employee psychiatric disorders: The National Comorbidity Survey. *Journal of Applied Psychology*, *85*, 888-895.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143-162). Washington, DC: American Psychological Association.
- Frone, M. R., Russell, M., & Cooper, M. L. (1993). Relationship of work-family conflict, gender, and alcohol expectancies to alcohol use/abuse. *Journal of Organizational Behavior*, *14*, 545-558.
- Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology*, *70*, 325-335.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, *50*, 145-167.
- Galinsky, E., Bond, J. T., & Friedman, D. F. (1993). *The changing workforce: Results of the national study*. New York: Families and Work Institute.
- Grant, B. F., Harford, T. C., Dawson, D. A., Chou, P., Dufour, M., & Pickering, R. (1994). Prevalence of DSM-IV alcohol abuse and dependence. *Alcohol Health and Research World*, *18*, 243-248.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, *10*, 76-88.
- Greenhaus, J. H., & Parasuraman, S. (1999). Research on work, family, and gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 391-412). Thousand Oaks, CA: Sage.
- Grzywacz, J. G. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, *14*, 236-243.
- Grzywacz, J. G. (2002, February). *Toward a theory of work-family facilitation*. Paper presented at the Business and Professional Women's Foundation, The Center for Working Families at Purdue University and the Alfred P. Sloan Foundation's Persons, Processes, and Places: Research on Families, Workplaces and Communities conference, San Francisco, CA.
- Grzywacz, J. G., Almeida, D. M., & McDonald, D. A. (2002). *Work-family spillover and daily reports of*

APPENDIX
ZERO-ORDER CORRELATION MATRIX OF ALL ANALYSIS VARIABLES

	1	2	3	4	5	6	7	8
1. Depression	—							
2. Anxiety disorder	-.36**	—						
3. Problem drinking	.05*	.05*	—					
4. Work to family conflict	.14**	.14**	.10**	—				
5. Work to family facilitation	-.01	-.01	.03	-.04*	—			
6. Family to work conflict	.16**	.16**	.13**	.50**	.13**	—		
7. Family to work facilitation	-.09**	.01	-.11**	-.05*	.26**	-.06**	—	
8. Age	-.07**	.01	-.14**	-.10**	.06**	-.18**	.02	—
9. Gender (<i>female</i> = 1)	.12**	.12**	-.09**	-.03	.02	.02	-.02	.02
10. Race (<i>non-White</i> = 1)	-.01	.07**	-.04	-.07**	-.02	-.03	.05*	-.02
11. Less than high school	.07**	.06**	-.03	-.03	.01	-.01	.03	.09**
12. High school or GED	-.05*	-.01	-.01	-.09**	-.09**	-.07**	-.01	.07**
13. Some college	.03	.05*	.01	.03	.01	.05*	-.02	-.11**
14. College graduate	-.02	-.08**	.01	.08**	.09**	.03	.01	-.03
15. Household earnings	-.09**	-.07**	.01	.10**	.06**	.03	.05*	.09**
16. Married or cohabitating	-.15**	-.06**	-.5*	.02	.02	.02	.17**	.01
17. Divorced or separated	.12**	.08**	.01	-.03	.01	.01	-.12**	.11**
18. Never married	.07**	.01	.07**	.01	-.03	-.04	-.11**	-.13**
19. Parent to child <6 years	-.02	-.04	.07**	.03	-.05*	.16**	.01	-.37**
20. Self-employed	-.05*	.02	-.03	.02	-.14**	.02	.03	-.07**

Note: Weighted estimates from the National Survey of Midlife Development in the United States (MIDUS; $n = 1,986$).
* $p \leq .05$. ** $p \leq .01$ (two-tailed).

- work and family stress in the adult labor-force. *Family Relations*, 51, 28–36.
- Grzywacz, J. G., Johnson, D., Hartwig, D., & Almeida, D. M. (2002, February). *Work-family linkages and problem drinking among adults: Evidence from a large daily diary study*. Paper presented at the Business and Professional Women's Foundation, The Center for Working Families at Purdue University and the Alfred P. Sloan Foundation's Persons, Processes, and Places: Research on Families, Workplaces and Communities conference, San Francisco, CA.
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111–126.
- Hattery, A. (2001). *Women, work, and family: Balancing and weaving*. Thousand Oaks, CA: Sage.
- Heymann, J. (2000). *The widening gap: Why America's working families are in jeopardy, and what can be done about it*. New York: Basic Books.
- Hochschild, A. R. (1997). *The time bind: When work becomes home and home becomes work*. New York: Metropolitan Books.
- Jaccard, J., Turrissi, R., & Wan, C. K. (1990). Interaction effects in multiple regression. *Sage University Papers Series on Quantitative Applications in the Social Sciences*, 72. Newbury Park, CA: Sage.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Kendler, K. S., Neale, M. C., Kessler, R. C., Heath, A. C., & Eaves, L. J. (1992). Major depression and generalized anxiety disorder: Same genes, (partly) different environments? *Archives of General Psychiatry*, 49, 716–722.
- Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H.-U. (1998). The World Health Organization Composite International Diagnostic Interview Short Form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 7, 171–185.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H.-U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the National Comorbidity Survey. *Archives of General Psychiatry*, 51, 8–19.
- Kirchmeyer, C. (1992a). Nonwork participation and work attitudes: A test of scarcity vs. expansion models of personal resources. *Human Relations*, 45, 775–795.
- Kirchmeyer, C. (1992b). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden domain relationships. *Basic and Applied Social Psychology*, 13, 231–249.
- Kohn, R., Dohrenwend, B. P., & Mirotznic, J. (1998). Epidemiological findings on selected psychiatric disorders in the general population. In B. P. Dohrenwend (Ed.), *Adversity, stress, and psychopathology* (pp. 235–284). New York: Oxford University Press.
- Lachman, M. E., & Boone-James, J. (1997). Charting the course of midlife development: An overview. In M. E. Lachman & J. Boone-James (Eds.), *Multiple paths of midlife development* (pp. 1–20). Chicago: University of Chicago Press.
- Larson, R. W., Richards, M. H., & Perry-Jenkins, M. (1994). Divergent worlds: The daily emotional experience of mothers and fathers in the domestic and public spheres. *Journal of Personality and Social Psychology*, 67, 1034–1046.
- Marks, N. F. (1996). Caregiving across the lifespan: National prevalence and predictors. *Family Relations*, 45, 1–10.

APPENDIX
EXTENDED

9	10	11	12	13	14	15	16	17	18	19	20
—											
.06**	—										
-.02	.06**	—									
.04*	-.03	-.22**	—								
.02	.02	-.18**	-.47**	—							
-.06**	-.03	-.18**	-.47**	-.39**	—						
-.11**	-.12**	-.13**	-.12**	-.06**	.28**	—					
-.11**	-.14**	.01	.09**	-.05*	-.05*	.33**	—				
.10**	.09**	.01	-.02	.04	-.02	-.22**	-.71**	—			
.04	.10**	-.01	-.11**	.02	-.10**	-.22**	-.61**	-.14**	—		
-.07**	-.01	-.05*	-.01	.04	-.01	-.01	.16**	-.08**	-.14**	—	
-.08**	-.08**	.03	-.01	-.03	.03	.09**	.07**	-.04	-.05*	-.02	—

McCubbin, H. I., McCubbin, M. A., Thompson, A. I., & Thompson, E. A. (1998). Resiliency in ethnic families: A conceptual model for predicting family adjustment and adaptation. H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer (Eds.), *Resiliency in Native American and immigrant families* (Vol. 2, pp. 3–48). Thousand Oaks, CA: Sage.

McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In P. Zarembka (Ed.), *Frontiers in econometrics* (pp. 105–142). New York: Academic Press.

Milkie, M. A., & Peltola, P. (1999). Playing all the roles: Gender and the work-family balancing act. *Journal of Marriage and the Family*, 61, 476–490.

Patterson, J. M. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and Family*, 64, 349–360.

Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage and the Family*, 62, 981–998.

Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39, 567–578.

Small, S. A., & Riley, D. (1990). Toward a multidimensional assessment of work spillover into family life. *Journal of Marriage and the Family*, 52, 51–61.

Tiedje, L. B., Wortman, C. B., Downey, G., Emmons, C., Biernat, M., & Lang, E. (1990). Women with multiple roles: Role-compatibility perceptions, satisfaction, and mental health. *Journal of Marriage and the Family*, 52, 63–72.

U.S. Department of Labor. (1999). *Futurework: Trends and challenges for work in the 21st century*. Washington DC: U.S. Department of Labor.