

Work and Family Stress and Well-Being: An Examination of Person–Environment Fit in the Work and Family Domains

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Research indicates that work and family are significant sources of stress. However, this research has underemphasized the cognitive appraisal process by which work and family generate stress. This study used person–environment fit theory to examine how the comparison of work and family experiences to the person’s values relates to stress and well-being. Using data from 1758 employees, we assessed fit regarding autonomy, relationships, security, and segmentation for both work and family, and examined the relationship of fit with work and family satisfaction, anxiety, depression, irritation, and somatic symptoms. In general, well-being improved as experiences increased toward values and improved to a lesser extent as experiences exceeded values. Well-being was also higher when experiences and values were both high than when both were low. These relationships were generally strongest for within-domain fit and well-being (i.e., work fit and work satisfaction, family fit and family satisfaction), and several relationships were moderated by work and family centrality. © 1999 Academic Press

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Stress is a growing concern in contemporary society. Research shows that stress has important human costs in terms of mental and physical illness (Adler & Matthews, 1994; Coyne & Downey, 1991; Ganster & Schaubroeck, 1991; Kinicki, McKee, & Wade, 1996). Stress also has significant financial consequences. The New York Business Group on Health estimates that stress costs employers \$75–80 billion annually in absenteeism, turnover, lost productivity, and health and disability claims (Mann, 1996). The cost of stress to society at large is also substantial. It has been estimated that stress contributes to 90% of medical disorders (Gibson, 1993) and is therefore a major factor in escalating health care costs, which in the United States reached nearly \$950 billion in 1994, or 13.7% of the gross domestic product (U.S. Department of Commerce, 1996).

Work and family are particularly potent sources of stress, given that most adults devote the bulk of their time, energy, and attention to these two life domains (Burke & Greenglass, 1987; Zedeck, 1992). Unfortunately, recent socioeconomic trends indicate that work and family are becoming increasingly stressful. For example, cost-cutting and downsizing have heightened work demands and reduced job security (Bayer, 1996; Fisher, 1992; Shaw & Barrett-Power, 1997). Concurrently, the rise of dual-earner couples has intensified the struggle to manage family responsibilities (Brett & Yogev, 1988; Gupta & Jenkins, 1985; Higgins & Duxbury, 1992; Lundberg, 1996), and family relations have weakened due to the breakdown of traditional family structures (Demo & Acock, 1996; Pardeck, Brown, Christian, & Schnurbusch, 1991).

Researchers have developed models to explain how work and family influence stress and well-being (e.g., Eckenrode & Gore, 1990; Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Greenhaus & Parasuraman, 1986; Higgins, Duxbury, & Irving, 1992; Kopelman, Greenhaus, & Connolly, 1983; Martin & Schermerhorn, 1983; Parasuraman, Purohit, Godshalk, & Beutell, 1996). Although these models differ in various respects, each predicts that perceived work and family experiences directly influence well-being. Notably absent from these models is cognitive appraisal, which refers to the subjective evaluation of perceptions relative to internal standards, such as desires, values, or goals (Lazarus & Folkman, 1984). With cognitive appraisal, researchers can address what is perhaps the central question in the study of psychological stress: Why do different people experience the same situation as stressful or benign? Some models of work and family stress use individual differences as moderators of the effects of work and family experiences on well-being (e.g., Eckenrode & Gore, 1990; Frone *et al.*, 1992; Greenhaus & Parasuraman, 1986; Higgins *et al.*, 1992; Martin & Schermerhorn, 1983; Parasuraman *et al.*, 1996). However, using individual differences as moderators does not capture the subjective comparison of perceived work and family experiences to internal standards, a process that defines cognitive appraisal (Edwards, 1992; Lazarus & Folkman, 1984).

Cognitive appraisal is central to theories of psychological stress (e.g., Edwards, 1992; French, Caplan, & Harrison, 1982; Lazarus & Folkman, 1984; McGrath, 1976). Of these theories, perhaps the most versatile is person–

environment (P-E) fit theory (Edwards, Caplan, & Harrison, 1998; French *et al.*, 1982). P-E fit theory defines stress as a perceived mismatch between the environment and the person's values, desires, or goals (Harrison, 1978). By defining stress in this manner, P-E fit theory directly incorporates cognitive appraisal into the conceptualization of stress. P-E fit theory predicts that a perceived match between the person and environment is beneficial to mental and physical well-being, whereas a perceived mismatch signifies stress, produces mental and physical strain (i.e., damage to well-being), and stimulates efforts to resolve P-E misfit (French *et al.*, 1982).

Although P-E fit theory holds great promise for understanding psychological stress, current P-E fit research has two shortcomings. First, despite the generality of P-E fit theory, most P-E fit research has focused on work stress (Caplan & Harrison, 1993; Edwards *et al.*, 1998). As a result, researchers have not realized the potential of P-E fit theory for understanding stress from nonwork sources, such as family. Second, studies of P-E fit have not developed strong predictions regarding the form of the relationship between P-E fit and well-being (Edwards *et al.*, 1998). Instead, most studies have relied on the general premise that fit is beneficial and misfit is harmful. This premise is overly simplistic, as well-being may vary depending on whether perceptions exceed or fall short of values (French *et al.*, 1982; Locke, 1976) and on whether fit represents a match between low versus high levels of person and environment constructs (Edwards & Harrison, 1993; Imparato, 1972). Although P-E fit theory recognizes different possible relationships between P-E fit and well-being, it does not provide strong conceptual criteria for predicting when a particular relationship will occur.

This study builds on P-E fit theory to investigate stress and well-being associated with work and family. The central research questions addressed by this study are twofold: (a) what mechanisms determine the nature of the relationship between P-E fit and well-being, and (b) what factors influence the relative effects of work P-E fit and family P-E fit on well-being? By investigating these questions, this study contributes to work-family research and P-E fit research. This study contributes to work-family research by using P-E fit theory to capture the cognitive appraisal process by which work and family experiences generate stress and influence well-being. By capturing this process, we attempt to explain why work and family experiences are stressful for some people but not for others. This study contributes to P-E fit research in two ways. First, whereas previous P-E fit research has focused on work, we examine P-E fit associated with both work and family. Second, we develop *a priori* hypotheses regarding the relationship between P-E fit and well-being that take into account the direction of misfit and the absolute levels of person and environment constructs. Finally, this study contributes to both work-family research and P-E fit research by investigating factors that influence the relative effects of work P-E fit and family P-E fit on well-being.

OVERVIEW OF PERSON-ENVIRONMENT FIT THEORY

P-E fit theory incorporates two basic distinctions regarding the person and environment. The first is between the objective and subjective person and

environment. The objective person refers to attributes of the person as they actually exist, whereas the subjective person is the person's perception of his or her own attributes (i.e., the person's self-concept). The objective environment signifies physical and social situations and events as they exist independent of the person's perceptions, whereas the subjective environment refers to situations and events as perceived by the person. According to P-E fit theory, the objective person and environment affect their subjective counterparts, although these effects are imperfect due to perceptual biases, limits on human information processing, cognitive construction processes, and situational barriers that impede access to objective information (Edwards *et al.*, 1998; Harrison, 1978).

The second distinction is between two versions of P-E fit (French *et al.*, 1982). One version entails the fit between the values of the person and the supplies in the environment available to fulfill values (S-V fit; Dawis, 1992; Edwards, 1992; French *et al.*, 1982; Locke, 1976). Values refer to the desires of the person and thus signify a general construct that subsumes interests, preferences, and goals (Edwards, 1992; Schuler, 1980). Supplies refer to aspects of the environment that may fulfill the person's values (French *et al.*, 1982). Supplies include extrinsic rewards, such as pay and recognition, and intrinsic rewards derived from activities or experiences in the environment. The other version of P-E fit involves the fit between the demands of the environment and the person's abilities (D-A fit; French *et al.*, 1982; McGrath, 1976; Shirom, 1982). Demands are qualitative and quantitative requirements faced by the person and include objective demands (e.g., commute time, length of workweek) and socially constructed norms and role expectations. Abilities comprise skills, energy, time, and resources the person may muster to meet demands.

The present study focuses on subjective S-V fit, for two reasons. First, this study is concerned with work and family stress. As noted previously, P-E fit theory defines stress as misfit between perceptions and values, and this definition of stress corresponds to subjective S-V misfit. Therefore, by focusing on subjective S-V fit, we directly incorporate the concept of stress into our study. Accordingly, our hypotheses, measures, and analyses refer to subjective rather than objective supplies and values, under the assumption that these subjective constructs are imperfectly related to their objective counterparts (Edwards *et al.*, 1998). Our focus on subjective S-V fit is consistent with research on psychological stress, which deals with stress as experienced by the person (Edwards, 1992; Lazarus & Folkman, 1984; Schuler, 1980). Second, a central goal of this study is to understand how work and family stress relate to well-being. According to P-E fit theory, S-V fit directly affects well-being, given that obtaining what one values creates pleasure (Diener, 1984; Locke, 1976), promotes self-esteem (Hyland, 1987), and stimulates physiological processes that enhance health (Edwards & Cooper, 1988; Karasek, Russell, & Theorell, 1982). Although some theorists argue that D-A fit also directly affects well-being (Cox, 1987; Shirom, 1982), Harrison (1978) contends that D-A fit influences well-being only when meeting demands provides the person what he or she values, as when meeting a production quota yields financial rewards or

enhances the person's sense of competence (White, 1959). Thus, by examining S-V fit rather than D-A fit, we focus on a more proximal cause of well-being.

RELATIONSHIP BETWEEN SUPPLIES-VALUES FIT AND WELL-BEING

Most studies of the relationship between S-V fit and well-being rely on two simplifying assumptions: (a) well-being is maximized at perfect S-V fit (i.e., where supplies match values), and (b) S-V fit leads to the same level of well-being regardless of the absolute levels of supplies and values (Assouline & Meir, 1987; Edwards, 1991). In most studies, these assumptions are embedded in analytical methods that cannot detect whether the assumptions are violated. Studies using alternative methods (e.g., Edwards, 1994, 1996; Edwards & Harrison, 1993; Elsass & Veiga, 1997; Hesketh & Gardner, 1993; Livingstone, Nelson, & Barr, 1997) have found that these assumptions rarely hold. These findings are not surprising, as P-E theory indicates that the relationship between S-V fit and well-being may follow a variety of functional forms (French *et al.*, 1982; Harrison, 1978; Kulka, 1979; Naylor, Pritchard, & Ilgen, 1980; Rice, McFarlin, Hunt, & Near, 1985), few of which conform to the simplifying assumptions underlying most studies of S-V fit.

To capture the potential complexity of the relationship between S-V fit and well-being, we conceive this relationship as a three-dimensional surface in which supplies and values jointly influence well-being (Edwards, 1996; Edwards & Cooper, 1990; Edwards & Harrison, 1993). We develop hypotheses regarding these surfaces by addressing three basic questions. First, does well-being improve, worsen, or remain constant as supplies increase toward values? Second, does well-being improve, worsen, or remain constant as supplies exceed values? Third, does S-V fit when supplies and values are both low yield the same level of well-being as when supplies and values are both high? These questions correspond to fundamental properties of a surface relating supplies and values to well-being, and additional questions may be addressed as dictated by relevant theory (Edwards, 1996; Edwards & Harrison, 1993; Edwards & Parry, 1993; Kulka, 1979; Naylor *et al.*, 1980; Rice *et al.*, 1985). Below we examine potential answers to these questions and then apply this reasoning to generate hypotheses for this study.

Well-Being as Supplies Increase toward Values

P-E fit theory predicts that, as supplies increase toward values, well-being improves (French *et al.*, 1982; Harrison, 1978). This prediction reflects the premise that insufficient supplies signify unfulfilled needs, desires, or goals, and this lack of fulfillment creates tension and negative affect, thereby reducing well-being (Dawis & Lofquist, 1984; Diener, 1984; Lazarus & Folkman, 1984; Locke, 1969; Murray, 1938). It follows that, as supplies increase toward values, fulfillment is achieved, and well-being should improve. This prediction applies to S-V fit on all value dimensions (Harrison, 1978). Dimensions that refer to conditions or events that are undesirable (e.g., physical danger, social isolation)

can usually be reframed as value dimensions (e.g., physical safety, social companionship), and increases in supplies toward values on these reframed dimensions should improve well-being.

Well-Being as Supplies Exceed Values

Although P-E fit theory posits that well-being invariably improves as supplies increase toward values, it states that well-being may improve, worsen, or remain constant as supplies exceed values (French *et al.*, 1982; Harrison, 1978). These alternative predictions depend on the effects of excess supplies on: (a) S-V fit on the same dimension over time, and (b) S-V fit on other dimensions (Harrison, 1978). Building on this reasoning, Edwards (1996) derived four processes to describe the effects of excess supplies on well-being. Two of these processes, *depletion* and *interference*, indicate that excess supplies worsen well-being. Depletion occurs when excess supplies reduce the likelihood that values on the same dimension will be met in the future, as when drawing excess support from a confidant makes that person less available at a later time. Interference occurs when excess supplies inhibit S-V fit on other dimensions, as when excess challenge makes it difficult to achieve desired levels of task performance. Both depletion and interference yield a symmetric relationship between S-V misfit and well-being, such that well-being worsens as supplies exceed or fall short of values (Locke, 1969; Rice *et al.*, 1985).

Two other processes, *conservation* and *carryover*, indicate that excess supplies enhance well-being. Conservation occurs when excess supplies are retained to fulfill values on the same dimension at a later time, as when excess income is saved to meet future financial needs. Carryover occurs when excess supplies for one value are used to fulfill other values, as when excess control enables the person to initiate changes that bring supplies in line with values on a range of dimensions. Conservation and carryover produce monotonic relationships between S-V misfit and well-being, such that well-being improves as supplies increase toward values and continues to improve as supplies exceed values (Rice, Phillips, & McFarlin, 1990; Sweeney, McFarlin, & Inderrieden, 1990).

When excess supplies do not influence S-V fit on other dimensions or future S-V fit on the same dimension, well-being will remain constant as supplies exceed values, approximating the level of well-being associated with perfect S-V fit. As a result, the relationship between S-V fit and well-being is asymptotic, increasing as supplies approach values and remaining constant as supplies exceed values (French *et al.*, 1982; Harrison, 1978; Rice *et al.*, 1985).

Well-Being for Low versus High Supplies and Values

Studies examining variation in well-being associated with the absolute levels of supplies and values have found that when the degree of S-V fit is held constant, well-being is often higher when supplies and values are both high than when both are low (Edwards, 1994, 1996; Edwards & Harrison, 1993; Imperato, 1972; Livingstone *et al.*, 1997). We offer two explanations for this

finding, each of which provides a conceptual basis for the hypotheses we later develop.

First, high supplies on one dimension may generate supplies that fulfill values on other dimensions, thereby enhancing well-being. For example, perfect S-V fit exists for a person who has and wants a simple, routine job and for a person who has and wants a complex job. However, complex jobs often bring high pay, status, and other rewards, and people often want more of these rewards than they currently have (Evans, 1969; Wall & Payne, 1973; Wanous & Lawler, 1972). Therefore, high levels of these rewards signify increased supplies toward values, which should improve well-being (Harrison, 1978). This explanation is analogous to carryover, which also describes how supplies on one dimension facilitate S-V fit on other dimensions. However, the present explanation refers to the effects of high supplies when supplies and values are equal, whereas carryover involves the effects of supplies that exceed values.

Second, attaining supplies that fulfill high values may yield a sense of accomplishment, in that high values connote ambitious aspirations or goals. This sense of accomplishment itself constitutes a supply for values regarding mastery, competence, and self-worth (Harrison, 1978; Morse, 1975; White, 1959). Because these values usually exceed their associated supplies (Caplan, 1983; deCharms, 1968; Maslow, 1954), heightened feelings of mastery, competence, and self-worth represent increases in supplies toward values on these dimensions, which should improve well-being. This explanation invokes the notion of *metafit*, meaning that the attainment of S-V fit on one dimension may itself constitute a supply for S-V fit on other dimensions.

Application to Supplies-Values Fit on Specific Dimensions

The foregoing discussion yields three general conclusions regarding the relationship between S-V fit and well-being. First, well-being should improve as supplies increase toward values. Second, well-being may improve, worsen, or remain constant as supplies exceed values, depending on the effects of excess supplies on S-V fit on the same dimension over time and on S-V fit on other dimensions. Third, well-being is likely to improve as supplies and values both increase. We now draw from these general conclusions to derive specific hypotheses regarding the relationship between well-being and S-V fit on four value dimensions. We chose these dimensions because they represent important human values that are relevant to both work and family. Our choice of these dimensions does not deny the potential relevance of other values, but instead allows us to focus on a manageable set of dimensions that are relevant to our context of inquiry.

We should note two points concerning our hypotheses of the relationship between S-V fit and well-being. First, we capitalize on the generality of P-E fit theory by developing hypotheses that apply to both work and family. We subsequently test these hypotheses separately for work and family and compare relationships between S-V fit and well-being for these two life domains. Second, for these hypotheses, we refer to well-being in general terms. Later, we discuss

how the relationship between S-V fit and well-being may vary according to whether well-being is domain-specific (e.g., work satisfaction, family satisfaction) or entails the overall functioning of the person (e.g., anxiety, depression, physical health).

Autonomy. The first dimension is *autonomy*, defined here as *control over the nature and timing of one's activities* (Hackman & Oldham, 1980). Autonomy is a fundamental human motive, as it signifies the ability to influence the conduct of one's life (Bolton, 1980; Ryff & Keyes, 1995; Schwartz, 1994). Because autonomy is a fundamental human motive, it is relevant to both work and family (Ganster, 1989; Hackman & Oldham, 1980; Voydanoff, 1988; Zedeck, 1992). Autonomy is particularly relevant to the study of stress and well-being, as stress research has identified lack of control as a significant source of stress (Abramson, Seligman, & Teasdale, 1978; Ganster, 1989; Karasek & Theorell, 1990) and availability of control as an important coping resource (Folkman, 1984; Silver & Wortman, 1980; Sutton & Kahn, 1987).

For autonomy, increases in supplies toward values should improve well-being, given that too little autonomy denotes insufficient control over one's life (Abramson *et al.*, 1978; Burger, 1984; Ganster, 1989). Excess autonomy may improve or worsen well-being, depending on the effects of conservation, depletion, carryover, and interference. Excess autonomy probably cannot be conserved, because autonomy is not a resource that can be saved. For similar reasons, having excess autonomy in the present is unlikely to deplete autonomy available for the future. Excess autonomy will likely have substantial carryover effects, because autonomy signifies control that may be used to acquire supplies that fulfill values on multiple dimensions (Caplan, 1987; Folkman, 1984; Ganster, 1989; Harrison, 1978). On the other hand, excess autonomy may create interference if it deprives the person of guidance from others (Burger & Cooper, 1979), although these detrimental effects are likely only if excess autonomy is substantial. On balance, we expect that excess autonomy will improve well-being, provided supplies for autonomy do not greatly exceed values for autonomy. This assertion is consistent with results reported by Elsass and Veiga (1997), who found that anxiety decreased as actual job autonomy exceeded desired job autonomy. The foregoing discussion leads to the following hypothesis:

HYPOTHESIS 1A: For autonomy, well-being will increase as supplies increase toward values and will continue to increase as supplies exceed values, decreasing only when excess supplies are substantial.

Well-being should be higher when autonomy supplies and values are both high than when both are low, for three reasons. First, high supplies for autonomy may accompany high supplies for responsibility and authority, and people who value autonomy may also value these supplies. Therefore, high supplies and values for autonomy may occur when supplies for authority and responsibility fulfill their corresponding values, which would contribute to well-being. Second, wanting and attaining high levels of autonomy may itself constitute a supply for values regarding accomplishment and adjustment. These two

explanations derive from our general discussion of the potential improvements in well-being associated with high supplies and values. A third explanation, specific to autonomy, is that people may value autonomy because it allows them to freely allocate time and resources to meet pressing demands. Thus, high values and supplies for autonomy may serve as proxies for high demands and control, respectively. Research has shown that high demands coupled with high control enable the person to cope successfully with challenging situations, leading to satisfaction and growth (Karasek & Theorell, 1990). In sum:

HYPOTHESIS 1B: For autonomy, well-being will be higher when supplies and values are both high than when both are low.

Relationships. The second dimension is *relationships*, which refer to *personal connections with other people* (Baumeister & Leary, 1995). Humans have an inherent motive to establish and maintain relationships with others (Alderfer, 1972; Baumeister & Leary, 1995; Ryff & Keyes, 1995), and this motive applies to relationships at work (Smith, Kendall, & Hulin, 1969) and with family members (Demo & Acock, 1996; Piotrkowski, Rapoport, & Rapoport, 1987). Relationships also play a dominant role in stress research, which has examined how relationships may enhance well-being directly and by providing social support that facilitates coping with stress (Cohen & Wills, 1985; House, Landis, & Umberson, 1988).

For relationships, increases in supplies toward values signify the attainment of desired connections with others, which should improve well-being (House *et al.*, 1988). Excess supplies for relationships are probably subject to conservation rather than depletion, because connections that are stronger than desired in the present may be maintained as social resources for the future (Bosse, Aldwin, Levenson, & Spiro, 1993; Francis, 1990; Kahn & Antonucci, 1980). Excess relationships may produce interference by intruding on privacy (Harrison, 1978) or by inhibiting work on tasks that require concentration and solitude. However, these problems will probably be more than offset by the benefits of carryover, because excess relationship supplies provide a base of social support from which the person may draw to resolve S-V misfit on various dimensions (Cohen & Wills, 1985; Holahan & Moos, 1987; House *et al.*, 1988). This assertion is consistent with studies showing a positive relationship between social support and coping efficacy (Holahan & Moos, 1987). In combination, these effects suggest the following hypothesis:

HYPOTHESIS 2A: For relationships, well-being will increase as supplies increase toward values and will continue to increase as supplies exceed values.

High relationship supplies and values should be associated with greater well-being than low supplies and values, for two reasons. First, as noted above, high supplies for relationships indicate the availability of social support, which may facilitate coping with a range of stressors, thereby improving well-being. Second, wanting and attaining strong connections with others suggests that

the person has achieved ambitious goals regarding friendship and social integration. Achieving these goals may itself constitute a supply for values regarding competence in social situations (Schneider, Ackerman, & Kanfer, 1996). Hence:

HYPOTHESIS 2B: For relationships, well-being will be higher when supplies and values are both high than when both are low.

Security. The third dimension is *security*, meaning *the belief that membership in a role is stable and likely to continue* (Schwartz, 1994). Like autonomy and relationships, security is a basic human motive (Bolton, 1980; Schwartz, 1994), and studies show that security of work and family roles is integral to well-being and functioning in both domains (Barling & Macewen, 1992; Kuhnert & Palmer, 1991; Larson, Wilson, & Beley, 1994; Piotrkowski *et al.*, 1987; Roskies & Louis-Geurin, 1990).

Well-being should improve as supplies for security increase toward values, because too little security implies an intolerable level of uncertainty, and resolving this uncertainty should reduce anxiety and improve health (Kuhnert & Palmer, 1991; S. M. Miller, 1981; Roskies & Louis-Geurin, 1990). Excess security is probably not subject to conservation or depletion, because security may fluctuate due to economic and social forces that are independent of the level of security a person had in the past (Shaw & Barrett-Power, 1997). These fluctuations probably have greater effects on work security than on family security, because work security hinges on transactional agreements that are more mutable than blood relationships and legal ties among family members. Excess security should not interfere with S-V fit on other dimensions, because security can be voluntarily drawn upon only as needed. However, excess security may create carryover by permitting the person to confidently express ideas and take risks. Overall, this reasoning suggests that excess security should increase well-being. However, we believe this increase will be smaller than that associated with resolving insufficient security, based on the assumption that the threat of too little security is more extreme than the potential benefits of too much security. Consequently:

HYPOTHESIS 3A: For security, well-being will increase as supplies increase toward values and will continue to increase as supplies exceed values, although to a smaller degree.

High supplies and values for security should be associated with greater well-being than low supplies and values, for two reasons. First, high supplies for security may result from effective role performance, assuming the stability of one's role is partly contingent upon meeting the demands of that role. Effective role performance may bring additional contingent rewards that help fulfill values on a variety of dimensions, thereby enhancing well-being. Second, if security increases with role performance, then wanting and attaining a high degree of security implies that the person has met high standards of role performance. Meeting these high standards may itself constitute a supply for achievement and competence (White, 1959). Hence:

HYPOTHESIS 3B: For security, well-being will be higher when supplies and values are both high than when both are low.

Segmentation. The fourth dimension is *segmentation*, or *the degree to which work and family are separated or insulated from one another* (Lambert, 1990; Zedeck, 1992). Segmentation is not an inherent barrier between work and family (Blood & Wolfe, 1960) but instead results from active efforts of the person to manage the boundary between work and family (Eckenrode & Gore, 1990; Lambert, 1990). Segmentation is central to research on the work–family interface (Burke & Greenglass, 1987; Lambert, 1990; Zedeck, 1992) and has been identified as an important human value (Pryor, 1983, 1987). Segmentation is relevant to research on stress and well-being, as it enables the person to suppress the transfer of stressful experiences between work and family (Eckenrode & Gore, 1990; Lambert, 1990).

For segmentation, an increase in supplies toward values helps the person maintain a desired boundary between work and family (Burke & Greenglass, 1987; Greenhaus & Beutell, 1985; Lambert, 1990), which should improve well-being. Excess segmentation can be conserved if it prompts others to adjust the demands they place on the person. For example, an employee without children may unilaterally refuse to take work calls at home, even when such calls would not be disruptive. This pattern may reduce the likelihood that work will intrude on family time if the employee ultimately has children. Conversely, excess segmentation can be depleted if it rests on the good will of others. For instance, an employee with no pressing deadlines at work may nonetheless refuse to let family concerns intrude on work time. This behavior may exhaust the patience and grace of family members, who may subsequently demand greater attention from the employee irrespective of his or her workload. Excess segmentation may produce carryover by allowing prolonged, uninterrupted focus on the various role demands within a domain. However, these benefits may be offset by interference, in that excess segmentation may prevent the person from knowing whether problems have emerged in the other domain (S. M. Miller, 1981). For example, during international travel an employee may be out of contact with family members and worry about their safety and well-being. Excess segmentation may also prevent the integration of work and family into a coherent view of life as a whole (Beutell & Greenhaus, 1983; Sekaran, 1983). In combination, these arguments yield the following hypothesis:

HYPOTHESIS 4A: For segmentation, well-being will increase steeply as supplies increase toward values and will gradually decrease as supplies exceed values.

High supplies and values for segmentation will lead to the same level of well-being as low supplies and values, due to two countervailing effects. First, when segmentation supplies and values are both high, the person has achieved an ambitious goal regarding the separation between work and family. On the other hand, when segmentation supplies and values are both low, the person has achieved an ambitious goal regarding the integration of work and family. These effects should offset one another, producing no variation in well-being as supplies and values for segmentation jointly increase or decrease. Consequently:

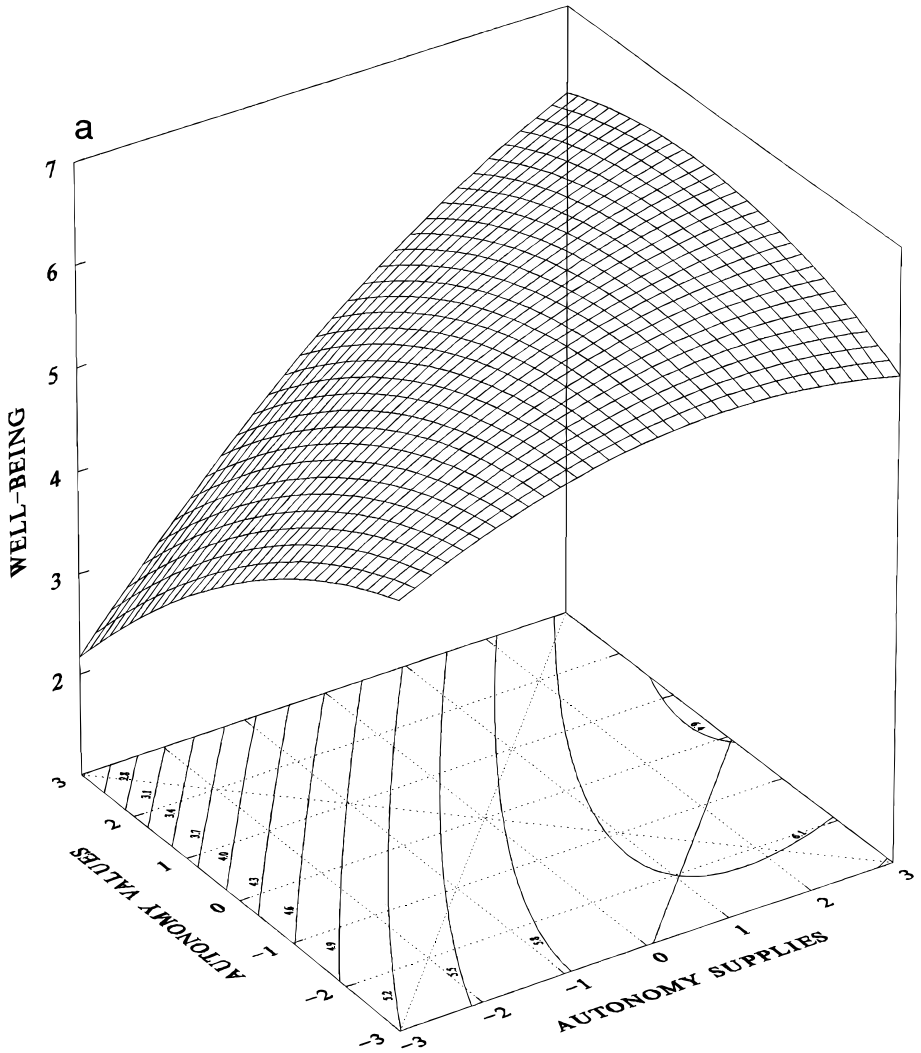


FIG. 1. Three-dimensional surfaces depicting hypothesized relationships between S-V fit and well being. Supplies and values are depicted in scale-centered form, such that -3 represents “none at all” and $+3$ represents “very much” (see Methods section). (a) Hypothesis 1: autonomy S-V fit and well-being. (b) Hypothesis 2: relationships S-V fit and well-being. (c) Hypothesis 3: security S-V fit and well-being. (d) Hypothesis 4: segmentation S-V fit and well-being.

HYPOTHESIS 4B: For segmentation, well-being will be at the same level when supplies and values are both high as when both are low.

The preceding hypotheses are depicted as three-dimensional surfaces in Fig. 1. For each surface, supplies and values are horizontal axes perpendicular to one another, and well-being is the vertical axis. Perfect S-V fit is shown by a dotted line running diagonally from the near corner to the far corner of the horizontal plane defined by supplies and values. These hypothetical surfaces are used to evaluate the empirical surfaces analyzed in this study.

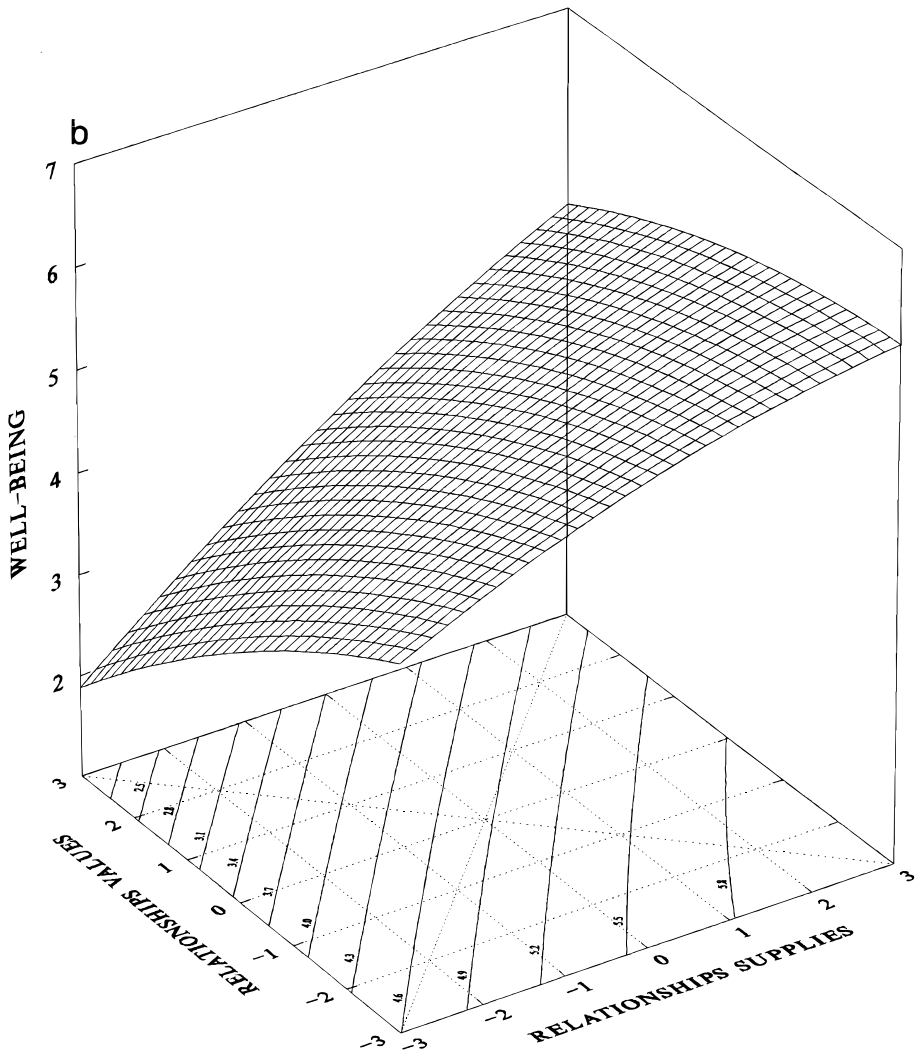


FIG. 1—Continued

RELATIVE EFFECTS OF WORK AND FAMILY SUPPLIES-VALUES FIT ON DOMAIN-SPECIFIC AND OVERALL WELL-BEING

Thus far, we have discussed relationships between S-V fit and well-being that apply to both work and family. This parallel structure underscores the premise that, as a process theory, P-E fit theory applies to stress in all life domains, including work and family. This structure also allows us to examine whether work S-V fit or family S-V fit exhibits a stronger relationship with well-being, holding constant the substantive content of the S-V dimension (Kabanoff, 1980; Zedeck, 1992). Previous studies have reported differences in the relationships of work and family stressors with well-being (e.g., Bergermaier, Borg, & Champoux, 1984; Klitzman, House, Israel, & Mero, 1990; Kopelman *et al.*, 1983; Parasuraman, Greenhaus, & Granrose, 1992; Rousseau, 1978),

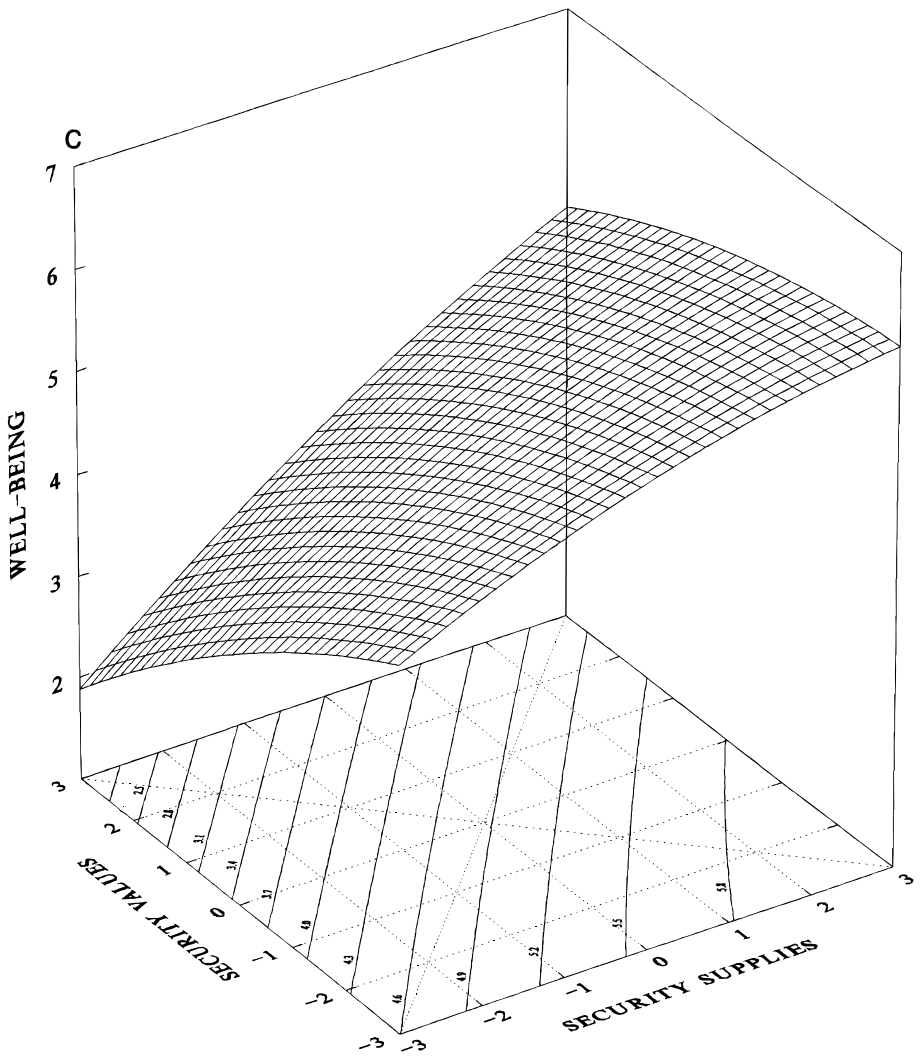


FIG. 1—Continued

but few studies have examined factors that may create these differences (Gecas & Seff, 1990). In this study, we examine two key factors that may influence the strength of the relationship between S-V fit and well-being for work and family.

Domain Centrality

One factor that may influence the strength of the relationship between S-V fit and well-being is *domain centrality*, or *the degree to which work or family is considered important to the person's life as a whole* (Gecas & Seff, 1990). As domain centrality increases, S-V misfit should have a stronger relationship with well-being, given that deviations of supplies from values in a domain considered more important should be experienced as more threatening to the

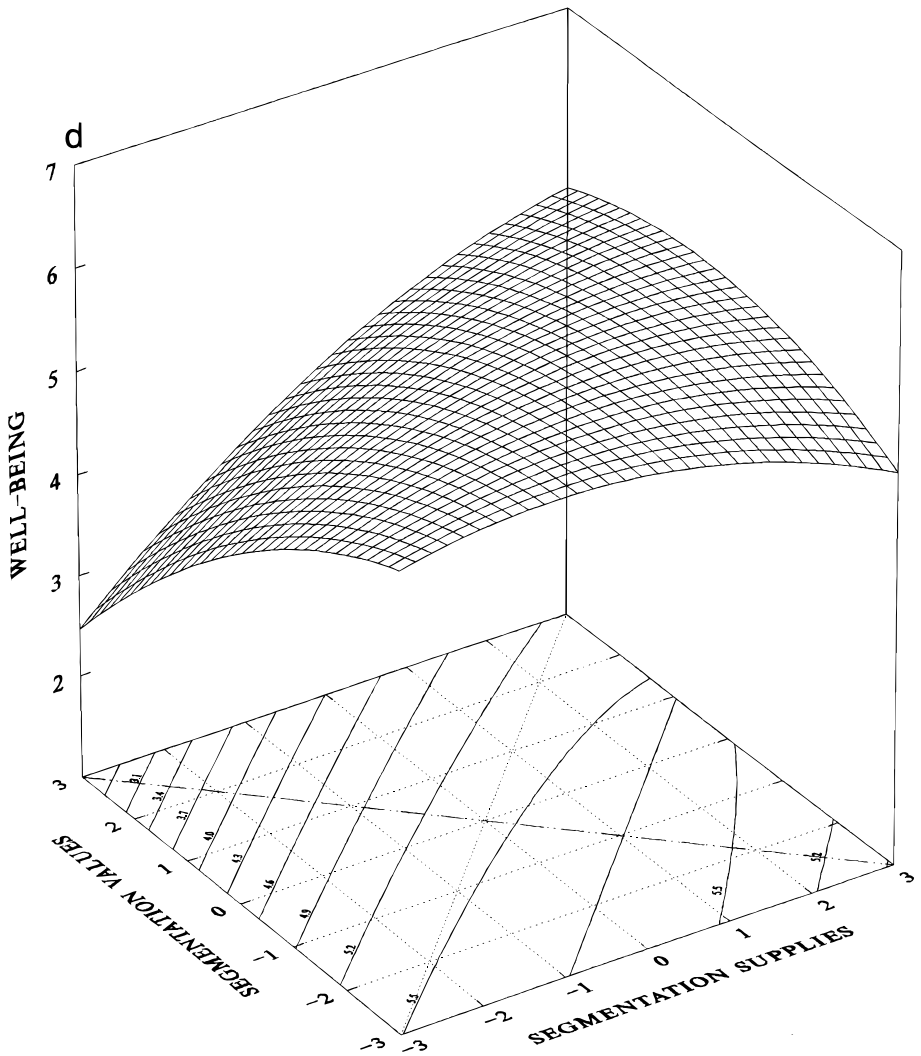


FIG. 1—Continued

person's overall self-esteem (Gecas & Seff, 1990; Locke, 1976; Mobley & Locke, 1970; Rice *et al.*, 1985). Thus, we view domain centrality as a moderator that intensifies the relationship between S-V fit and well-being, increasing the slopes of the surfaces shown in Fig. 1. Therefore:

HYPOTHESIS 5A: As work centrality increases, the relationship between work S-V fit and well-being will become stronger.

HYPOTHESIS 5B: As family centrality increases, the relationship between family S-V fit and well-being will become stronger.

Domain-Specific Well-Being versus Overall Well-Being

A second factor that may influence the strength of the relationship of S-V fit with well-being entails the distinction between domain-specific and overall

well-being. Domain-specific well-being refers to outcomes that are particular to a life domain. For example, work satisfaction and family satisfaction represent affective dimensions of well-being particular to work and family, respectively. In contrast, overall well-being refers to the general mental and physical health of the person. Models of work and family stress suggest that domain-specific well-being may mediate the effects of domain-specific stressors on overall well-being (Coverman, 1989; Frone *et al.*, 1992; Higgins *et al.*, 1992; Kopelman *et al.*, 1983; Rice *et al.*, 1985). Hence, for a given domain, S-V fit will be more strongly related to well-being specific to that domain than to overall well-being. S-V fit should also be more strongly related to domain-specific well-being than to well-being associated with the other domain, as affective experiences particular to a domain should logically result from experiences in that domain as opposed to experiences in other domains (Rice *et al.*, 1985). Therefore:

HYPOTHESIS 6A: Within the work domain, S-V fit will be more strongly related to work well-being than to family well-being or overall well-being.

HYPOTHESIS 6B: Within the family domain, S-V fit will be more strongly related to family well-being than to work well-being or overall well-being.

METHOD

Sample

Surveys were distributed by campus mail to a random sample of 5833 employees at a large public university, representing approximately 20% of the university workforce. The sample was stratified by age, gender, and job type to enhance its representativeness for university policy considerations. The survey stated that respondents would be entered into a drawing for a \$500 cash prize. After 3 weeks, a reminder postcard was sent by campus mail to the entire random sample. Usable surveys were returned by 1758 employees, yielding a response of about 30%. This response rate was modest by conventional standards (Roth & BeVier, 1998) and may have been limited by lack of interest in the survey topic among employees without significant family responsibilities. Nonetheless, the obtained sample was large and comprised a reasonably diverse set of persons in a variety of work and family situations, as described below.

Respondents ranged in age from 21 to 69 years and averaged 40 years. Approximately 66% were women, and about 85% were Caucasian, 5% were African American, and 5% were Asian, with the remainder comprising Hispanic, Native American, and other ethnicities. About 94% had completed high school, 64% held a bachelor's degree, and 34% had earned an advanced or professional degree.

Jobs held by respondents included professional and administrative (28%); clerical (18%); faculty (12%); graduate student assistantship or postgraduate fellowship (8%); hospital physician, administrator, or technician (10%); nurse (9%); medical resident (6%); maintenance and technical work (4%); and other miscellaneous positions. Respondents worked an average of 42 h per week (median = 40 h) and earned an average of just over \$35,000 annually from

their primary employer (median annual salary = \$25,000). Total household income for respondents averaged slightly over \$64,000 (median annual household income = \$55,000).

Marital status of respondents was 65% married, 7% living with a domestic partner, 9% separated or divorced, 1% widowed, and 17% single. About 60% of respondents had at least one child, and for these respondents, the median number of children was 2. In addition, nearly 30% of respondents had at least one dependent parent, in-law, or other relative. Overall, 75% of respondents had at least one child or dependent relative, and of the remaining respondents, over half were married or living with a domestic partner.

The representativeness of the sample was evaluated relative to the university workforce and the working population in the United States. Compared to the university workforce, the sample did not differ in average age but had a higher proportion of women (66% versus 58%), relatively more clerical and administrative employees, and relatively fewer faculty, graduate student assistants, and maintenance workers. Compared to the U.S. working population (U.S. Bureau of the Census, 1996), the sample was about 3 years younger; contained a greater proportion of women, Caucasians, and Asians; and had higher levels of education and income. With regard to job type, the sample had relatively more professional, administrative, technical, and clerical jobs and fewer manufacturing, transportation, and manual labor jobs. In terms of family status, the sample contained relatively more married and fewer single persons, although the median number of children in the sample (i.e., 2) was equal to the national median. These differences are not surprising, given the focus of the study on work–family issues and the organization and geographic region in which the study was conducted.

Measures

Respondents completed measures of supplies and values for autonomy, relationships, security, and segmentation for work and family. Each measure contained 4 items, yielding 64 supply and value items in all (i.e., 4 items each for 4 supplies and 4 values for work and family). Items were drawn from the independence, relationships, security, and detachment scales of the Work Aspect Preference Scale (Pryor, 1983). These scales have shown good psychometric properties in previous research (Bagozzi & Edwards, 1998; Macnab & Fitzsimmons, 1987; Pryor, 1987). Items from these scales were modified to solicit ratings of supplies (i.e., actual amount) and values (i.e., acceptable amount) for work and family. Values were rated in terms of acceptable rather than ideal amount to avoid ceiling effects (Locke, 1969). All items were rated on a 7-point scale ranging from “none at all” to “very much,” and these ratings were averaged to create supplies and values scores ranging from 1 to 7. Prior to quadratic regression analysis (see below), supplies and values measures were scale centered by subtracting the scale midpoint (i.e., 4) to reduce multicollinearity and facilitate interpretation (Edwards, 1994).

Measures of domain-specific well-being included work and family satisfaction, each measured with three items drawn from Hackman and Oldham (1980) and Ironson, Smith, Brannick, Gibson, and Paul (1989). Items were chosen that directly described affective responses to work or family (e.g., "In general, I am satisfied with my job") as opposed to possible consequences of affect (e.g., "I frequently think of quitting my job"). Items were rated on a 7-point scale ranging from "strongly disagree" to "strongly agree," and these ratings were averaged to create summary scores for work satisfaction and family satisfaction.

Measures of overall well-being included anxiety, depression, irritation, and somatic symptoms, using measures from Caplan, Cobb, French, Harrison, and Pinneau (1980). These measures contain 4, 6, 3, and 10 items, respectively, and have demonstrated good psychometric properties (Caplan *et al.*, 1980; French *et al.*, 1982). Each item was rated in terms of symptom frequency during the past month, using a 7-point scale ranging from "never" to "almost always." Ratings were averaged to create measures with scores ranging from 1 to 7. These measures were reverse-coded when used as dependent variables in quadratic regression analyses, such that higher scores indicated greater well-being.

Work centrality was assessed using the six-item work involvement scale developed by Kanungo (1982), and family centrality was measured by modifying the Kanungo (1982) measure to refer to the importance of family (Frone *et al.*, 1992). Both work and family versions of this measure have shown good psychometric properties (Adams, King, & King, 1996; Frone *et al.*, 1992; Kanungo, 1982). Items were rated on a 7-point scale ranging from "strongly disagree" to "strongly agree," and these ratings were averaged to create work centrality and family centrality scores.

Analysis

Surfaces relating S-V fit to well-being were tested using polynomial regression analysis (Edwards, 1994; Edwards & Parry, 1993). These analyses entailed the estimation of quadratic regression equations using a measure of well-being as the dependent variable and supply and value measures for autonomy, relationships, security, or segmentation for work or family as the independent variables, along with three quadratic terms constructed from these measures (i.e., supplies squared, the product of supplies and values, and values squared). A general expression for these equations is

$$WB = b_0 + b_1S + b_2V + b_3S^2 + b_4SV + b_5V^2 + e. \quad (1)$$

In Eq. (1), S and V represent supplies and values, respectively, and WB represents well-being. Each equation controlled for age, gender, and income, due to the likely relationships of these variables with well-being.

Surfaces corresponding to the quadratic regression equations were further analyzed using response surface methodology (Edwards & Parry, 1993). For this study, we focused on the shape of each surface along the $V = -S$ and

$V = S$ lines. Shapes along these lines correspond to the first and second parts of Hypotheses 1–4, respectively. This correspondence can be seen by examining Fig. 1, in which the $V = -S$ line runs diagonally from left to right across the horizontal plane defined by supplies and values and the $V = S$ line runs from the near corner to the far corner of the plane. Moving from the left corner to the right corner along the $V = -S$ line, supplies increase toward values and, after the $V = S$ line is crossed, supplies exceed values. Thus, the shape of the surface along this line corresponds to the first part of Hypotheses 1–4. Shape along this line can be tested by setting V equal to $-S$ in Eq. (1) and solving for coefficients on S and S^2 :

$$\begin{aligned} \text{WB} &= b_0 + b_1S - b_2S + b_3S^2 - b_4S^2 + b_5S^2 + e \\ &= b_0 + (b_1 - b_2)S + (b_3 - b_4 + b_5)S^2 + e. \end{aligned} \quad (2)$$

Equation (2) indicates that, along the $V = -S$ line, the curvature of the surface is represented by the quantity $b_3 - b_4 + b_5$, and the slope of the surface at the point $S = 0$ (and, by construction, $V = 0$) is represented by the quantity $b_1 - b_2$ (when measures are scale-centered, as in the present study, the point $S = 0$, $V = 0$ is at the center of the plane defined by the supplies and values measures). Thus, if well-being increased as supplies increased toward values and began to decrease when excess supplies were substantial (i.e., Hypothesis 1a), the surface would be positively sloped along the $V = -S$ line at the point $S = 0$ and would have a slight downward curvature (see Fig. 1a). Accordingly, $b_1 - b_2$ would be positive and $b_3 - b_4 + b_5$ would be negative.

Returning to Fig. 1, moving from the near corner to the far corner along the $V = S$ line indicates an increase from low levels of supplies and values to high levels of supplies and values. Hence, the shape of the surface along this line corresponds to the second part of Hypotheses 1–4. Shape along this line can be tested by setting V equal to S in Eq. (1):

$$\begin{aligned} \text{WB} &= b_0 + b_1S + b_2S + b_3S^2 + b_4S^2 + b_5S^2 + e \\ &= b_0 + (b_1 + b_2)S + (b_3 + b_4 + b_5)S^2 + e. \end{aligned} \quad (3)$$

Equation (3) shows that, along the $V = S$ line, the curvature of the surface is represented by $b_3 + b_4 + b_5$, and the slope of the surface at the point $S = 0$ is represented by $b_1 + b_2$. Thus, if well-being increased linearly moving from low supplies and values to high supplies and values (Hypothesis 1b), the surface would be positively sloped along the $V = S$ line at the point $S = 0$ and would have no curvature, such that $b_1 + b_2$ would be positive and $b_3 + b_4 + b_5$ would not differ from zero. Shapes of surfaces along the $V = -S$ and $V = S$ lines were tested using procedures for testing linear combinations of dependent regression coefficients (Cohen & Cohen, 1983; Edwards & Parry, 1993). Results from additional response surface analyses (e.g., locations of stationary points and principal axes, shapes of surfaces along principal axes) based on the quadratic regression equations estimated in this study may be obtained from the first author.

Testing moderator effects of work and family centrality. Hierarchical regression analysis (Cohen & Cohen, 1983) was used to test the moderating effects of work centrality and family centrality on the relationship between S-V fit and well-being. For each quadratic equation, the five terms were multiplied by work centrality or family centrality (depending on the domain under analysis), and the increment in R^2 yielded by these terms was tested, controlling for centrality, the original five quadratic terms, and age, gender, and income. If the increment in R^2 was statistically significant, coefficients from the equation were used to determine whether centrality intensified the effects of S-V misfit on well-being, as predicted by Hypothesis 5.

Comparing the relationship between S-V fit and well-being within and across domains. Multivariate multiple regression analyses (Dwyer, 1983) were used to examine the relationship between S-V fit and all six measures of well-being as a set. We adapted procedures for testing dependent correlations (Steiger, 1980; Tabachnick & Fidell, 1989) to compare the variance explained by the five quadratic terms, controlling for age, gender, and income. Analyses focused on whether the increment in variance explained in within-domain satisfaction was greater than the increment explained in satisfaction with the other domain and in measures of overall well-being, pertaining to Hypothesis 6.

Treatment of missing data. Although listwise deletion of observations with missing data is common in organizational research, this procedure is inferior to methods that impute values for missing observations (Little & Rubin, 1987; Roth, 1994). However, imputed values become less dependable as the proportion of missing data increases. To reduce problems with listwise deletion and, at the same time, limit the number of imputed values, we identified respondents with a single missing item on any measure and substituted the mean of the remaining items for that respondent for the missing value. This procedure increased sample size by about 3% relative to the sample size that would have been produced by listwise deletion.

Screening data for outliers and influential observations. Influential observations are those that have a demonstrably greater impact on parameter estimates than most other observations (Belsley, Kuh, & Welsch, 1980). Influential observations can unduly affect results from quadratic regression equations and analyses of response surfaces. Therefore, each equation was screened for outliers and influential observations using leverage (i.e., the diagonal values of the hat matrix), studentized residuals, and Cook's D statistic (Belsley *et al.*, 1980; Fox, 1991) as criteria. Observations that exceeded the minimum cutoff on all three criteria (Bollen & Jackman, 1990) and were clearly discrepant on plots that combined these criteria were dropped from the equation. This procedure was conservative, affecting no more than 17 observations per equation, or less than 1% of the sample used in each analysis.

Controlling Type I error. Each hypothesis regarding the relationship between S-V fit and well-being (i.e., Hypotheses 1–4) was tested for both work and family and for both domain-specific and overall well-being, yielding 10

regression analyses in all. To control the risk of Type I error associated with these analyses, we used the sequential Bonferroni procedure (Holm, 1979; Seaman, Levin, & Serlin, 1991). This procedure requires the researcher to define the family of tests for which Type I error is controlled. For our purposes, a family comprised the tests of the R^2 values from the 10 regression equations for each hypothesis (Hochberg & Tamhane, 1987; R. G. Miller, 1981). For each family of tests, the obtained probability levels were listed in ascending order. The first (i.e., smallest) probability was multiplied by the total number of tests (i.e., 10), the second probability was multiplied by the number of remaining tests (i.e., 9), and so forth until all probabilities were corrected. For each R^2 value that reached significance, coefficients from the equation were tested using the nominal alpha level (i.e., .05). This procedure struck a balance between Type I and Type II error by considering only those equations that reached significance at the required familywise alpha while testing the coefficients from those equations in the usual manner. Probabilities were also corrected for tests of the R^2 from regression equations containing centrality, with families defined in the same manner.

RESULTS

Descriptive statistics, reliability estimates, and correlations for all measures are reported in Table 1. Means for all values measures were higher than their corresponding supplies measures, suggesting that respondents generally wanted more of these dimensions than they currently had. However, for each dimension, bivariate distributions of supplies and values scores showed good dispersion on either side of the line of perfect S-V fit, thereby permitting meaningful tests of fit hypotheses. The mean for family centrality was notably higher than the mean for work centrality, indicating that respondents generally felt that family was more important than work. Well-being among respondents was moderately high, as evidenced by fairly high means for work and family satisfaction and low means for anxiety, depression, irritation, and somatic symptoms. Reliability estimates ranged from .72 to .95, with a median of .84. Thus, all estimates exceeded the .70 criterion suggested by Nunnally (1978) and were considered acceptable. Correlations among supplies and values measures within the work and family domains were positive and generally moderate in magnitude. However, for family, relationships and security measures were highly correlated, suggesting that family security was conceived primarily in terms of the quality of relationships with family members. Consistent with prior research (Caplan *et al.*, 1980), anxiety, depression, irritation, and somatic symptoms were positively correlated with one another and negatively correlated with both satisfaction measures.

Relationship between S-V Fit and Well-Being

Analyses of surfaces pertaining to Hypotheses 1–4 are reported in Tables 2 and 3. Recall that Hypothesis 1a predicted that, for autonomy, well-being would

TABLE 1

Descriptive Statistics, Reliability Estimates, and Correlations Among Measures

Measure	Mean	SD	1	2	3	4	5	6	7	8	9
Work supplies											
1. Autonomy	4.55	1.21	(.76)								
2. Relationships	5.02	1.06	0.58	(.83)							
3. Security	4.82	1.55	0.25	0.38	(.95)						
4. Segmentation	4.19	1.44	0.17	0.22	0.18	(.72)					
Work values											
5. Autonomy	5.05	.98	0.43	0.18	0.02	0.07	(.72)				
6. Relationships	5.55	.88	0.01	0.08	0.22	0.19	0.30	(.79)			
7. Security	5.94	1.08	0.16	0.29	0.13	0.15	0.56	0.51	(.91)		
8. Segmentation	5.00	1.35	-0.02	0.02	0.02	0.56	0.22	0.35	0.33	(.77)	
Family supplies											
9. Autonomy	5.33	1.03	0.14	0.20	0.14	0.14	0.11	0.10	0.14	0.08	(.84)
10. Relationships	5.57	.97	0.10	0.23	0.16	0.07	0.05	0.09	0.13	0.02	0.71
11. Security	5.51	1.13	0.09	0.23	0.17	0.07	0.00	0.08	0.09	0.00	0.52
12. Segmentation	4.53	1.27	0.08	0.10	0.08	0.20	0.07	0.03	0.10	0.20	0.31
Family values											
13. Autonomy	5.71	.89	0.03	0.06	0.06	0.11	0.28	0.33	0.37	0.22	0.57
14. Relationships	6.05	.75	-0.01	0.08	0.10	0.08	0.18	0.43	0.44	0.21	0.27
15. Security	6.10	.88	0.00	0.07	0.07	0.06	0.25	0.40	0.48	0.20	0.36
16. Segmentation	4.87	1.25	-0.02	0.03	0.04	0.20	0.13	0.21	0.24	0.31	0.14
Centrality											
17. Work centrality	3.52	1.14	0.12	0.07	0.00	-0.13	0.04	-0.10	-0.02	-0.21	-0.03
18. Family centrality	5.74	.93	-0.06	0.06	0.04	0.02	0.01	0.17	0.16	0.04	0.13
Dependent variables											
19. Work satisfaction	5.14	1.43	0.33	0.46	0.27	0.08	0.02	0.02	0.07	-0.13	0.11
20. Family satisfaction	5.84	1.24	0.03	0.15	0.12	0.06	0.00	0.03	0.05	-0.01	0.35
21. Anxiety	2.74	1.06	-0.13	-0.21	-0.17	-0.16	0.00	0.01	-0.01	-0.03	-0.19
22. Depression	2.89	1.12	-0.14	-0.27	-0.18	-0.14	-0.01	0.04	-0.01	0.03	-0.25
23. Irritation	3.42	1.24	-0.13	-0.21	-0.12	-0.11	0.02	0.07	-0.01	0.05	-0.11
24. Somatic symptoms	1.79	.77	-0.13	-0.16	-0.12	-0.15	-0.02	0.02	-0.01	-0.02	-0.14

Note. $N = 1644$. Reliability estimates (Cronbach's alpha) are reported along the diagonal. Correlations greater than or equal to .06 were statistically significant ($p < .05$).

increase as supplies increase toward values and continue to increase as supplies exceed values, decreasing only when excess supplies were substantial. Support for this hypothesis would be evidenced by a positive slope along the $V = -S$ line at the point $S = 0, V = 0$ (i.e., a positive value for $b_1 - b_2$) combined with a negative (i.e., downward) curvature along this line (i.e., a negative value for $b_3 - b_4 + b_5$). Tables 2 and 3 show that, for all dependent variables for both work and family, the slope of the surface was positive along the $V = -S$ line at the point $S = 0, V = 0$. However, the downward curvature along this line was significant only for satisfaction. Thus, Hypothesis 1a was supported for satisfaction and received partial support for measures of overall well-being.

Hypothesis 1b stated that well-being would be higher when supplies and

TABLE 1—*Continued*

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
(.87)														
0.80	(.88)													
0.20	0.18	(.81)												
0.30	0.20	0.18	(.84)											
0.39	0.44	0.03	0.50	(.85)										
0.46	0.35	0.06	0.69	0.81	(.87)									
0.01	-0.01	0.62	0.36	0.23	0.25	(.85)								
-0.03	-0.04	0.05	-0.05	-0.08	-0.08	0.04	(.77)							
0.33	0.35	-0.08	0.14	0.44	0.38	-0.06	-0.05	(.79)						
0.18	0.17	0.03	0.02	0.06	0.04	-0.01	0.24	0.09	(.89)					
0.63	0.63	0.06	0.05	0.22	0.20	-0.09	-0.06	0.35	0.20	(.89)				
-0.21	-0.21	-0.12	-0.04	-0.01	-0.03	-0.02	0.00	-0.03	-0.21	-0.21	(.77)			
-0.35	-0.35	-0.10	-0.01	-0.01	-0.03	0.02	-0.03	-0.07	-0.32	-0.40	0.62	(.90)		
-0.18	-0.17	-0.08	0.04	0.02	-0.01	0.00	-0.13	-0.03	-0.26	-0.18	0.53	0.56	(.88)	
-0.17	-0.19	-0.11	0.02	0.06	0.03	0.02	0.01	0.01	-0.12	-0.18	0.65	0.51	0.45	(.82)

values for autonomy were both high than when both were low. If a surface has no curvature along the $V = S$ line, this hypothesis could be tested by evaluating the slope of the surface at the point $S = 0, V = 0$, represented by the quantity $b_1 + b_2$ in Tables 2 and 3. However, most surfaces were curved upward along the $V = S$ line, meaning that the slope along the $V = S$ line varied according to the levels of S and V . In this case, an alternative strategy is to test the difference in well-being for high versus low scores of supplies and values. For these tests, we identified high and low scores by first locating the point along the $V = S$ line midway between the supply and value means. From this point, we added and subtracted a value midway between the standard deviations of the supply and value measures. For example, after scale centering, the means of

TABLE 2

Results from Quadratic Regressions of Well-Being on Supplies and Values for Work

	Results from quadratic regression controlling for age, gender, and income						Shape along $V = S$ line		Shape along $V = -S$ line	
	S	V	S^2	SV	V^2	R^2	$b_1 + b_2$	$b_3 + b_4 + b_5$	$b_1 - b_2$	$b_3 - b_4 + b_5$
Autonomy										
Satisfaction ^b	.356***	-.267***	-.039*	.108***	.001	.123***	.089 ^a	.070*	.623***	-.146*
Anxiety	.094*	-.128*	.004	.034	.006	.023***	-.034	.044*	.222**	-.024
Depression ^b	.069	-.136*	.005	.075**	.004	.031***	-.067 ^a	.084**	.205**	-.066
Irritation ^b	.098*	-.215**	-.034	.090**	.024	.033***	-.117	.080**	.313***	-.100
Somatic symptoms	.074**	-.106**	-.005	.012	.026	.017***	-.032	.033*	.180**	.009
Relationships										
Satisfaction	.587***	-.113	-.028	.070*	-.026	.220***	.474 ^{a,***}	.016	.700***	-.124*
Anxiety	.216***	-.113	-.019	.032	.015	.053***	.103 ^a	.028	.329**	-.036
Depression	.250***	-.124	-.023	.066*	-.006	.084***	.126 ^a	.037	.374***	-.095
Irritation ^b	.235***	-.163	-.071**	.109**	.006	.070***	.072 ^a	.044	.398**	-.174**
Somatic symptoms	.102**	-.037	-.008	.020	-.002	.028***	.065 ^a	.010	.139*	-.030
Security										
Satisfaction	.235***	-.142*	.003	.006	.033	.067***	.093 ^a	.042	.377***	.030
Anxiety	.085*	-.085	.005	.018	.006	.035***	.000 ^a	.029	.170	-.007
Depression	.102**	-.092	-.011	.022	.003	.037***	.010	.014	.194*	-.030
Irritation	.054	-.131*	-.014	.040*	.002	.030***	-.077	.028	.185*	-.052
Somatic symptoms	.043	-.032	.007	.005	-.002	.015***	.011	.010	.075	.000
Segmentation										
Satisfaction	.169***	-.199***	.000	.037	-.033	.045***	-.030	.004	.368***	-.070
Anxiety	.129***	-.050	-.009	.038	-.020	.041***	.079 ^{a,***}	.009	.179**	-.067
Depression	.107**	-.065	-.009	.049*	-.024	.035***	.042 ^a	.016	.172**	-.082*
Irritation ^b	.083*	-.068	-.032*	.069**	-.029	.033***	.015	.008	.151***	-.130*
Somatic symptoms	.056*	.004	.002	.025	-.022*	.024***	.060 ^{a,***}	.005	.052	-.045

Note. N ranged from 1627 to 1665. For columns labeled S , V , S^2 , SV , and V^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously (S = supplies, V = values). The column labeled R^2 indicates the variance explained by the five quadratic terms, controlling for age, gender, and income. Columns labeled $b_1 + b_2$ and $b_3 + b_4 + b_5$ represent the slope of each surface along the $V = S$ line, and columns labeled $b_1 - b_2$ and $b_3 - b_4 + b_5$ represent the slope of each surface along the $V = -S$ line (b_1 , b_2 , b_3 , b_4 , and b_5 are the coefficients on S , V , S^2 , SV , and V^2 , respectively).

^a Along the $V = S$ line, well-being was significantly higher for high supply and value scores than for low supply and value scores ($p < .05$). The procedure used to identify high and low scores is described in the text.

^b For this equation, the three quadratic terms (S^2 , SV , V^2) were significant as a set ($p < .05$).

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

TABLE 3

Results from Quadratic Regressions of Well-Being on Supplies and Values for Family

	Results from quadratic regression controlling for age, gender, and income						Shape along $V = S$ line		Shape along $V = -S$ line	
	S	V	S^2	SV	V^2	R^2	$b_1 + b_2$	$b_3 + b_4 + b_5$	$b_1 - b_2$	$b_3 - b_4 + b_5$
	Autonomy									
Satisfaction ^{a,b}	.610***	-.553***	-.145***	.143***	.051	.176***	.057 ^c	.049	1.163***	-.237**
Anxiety ^a	.273***	-.307***	.025	-.029	.072*	.052***	-.034 ^c	.068*	.580***	.126
Depression ^a	.349***	-.379***	-.054*	.093*	.012	.098***	-.030 ^c	.051	.728***	-.135
Irritation ^a	.099	-.423***	-.027	.119**	.034	.044***	-.324**	.126***	.522***	-.112
Somatic symptoms	.115*	-.188**	.014	.009	.019	.034***	-.073 ^c	.042*	.303**	.024
Relationships										
Satisfaction ^a	.844***	.010	-.104***	.122**	-.088*	.407***	.854 ^{c***}	-.070*	.834***	-.314***
Anxiety	.098	-.140	.016	.072	-.016	.056***	-.042 ^c	.072*	.238	-.072
Depression ^a	.385***	-.199	-.044*	.095*	-.042	.142***	.186 ^c	.009	.584***	-.181*
Irritation	.202*	-.079	.012	.043	-.036	.050***	.123 ^c	.019	.281	-.067
Somatic symptoms	.075	-.137	.008	.040	-.012	.039***	-.062 ^c	.036	.212	-.044
Security										
Satisfaction ^{a,b}	.879***	-.327***	-.076***	-.006	.079**	.398***	.552 ^{c***}	-.003	1.206***	.009
Anxiety	.209**	-.200*	-.005	.026	.019	.057***	.009 ^c	.040	.409**	-.012
Depression	.441***	-.325***	-.031	.018	.034	.143***	.116 ^c	.021	.766***	-.015
Irritation	.157*	-.043	.012	.035	-.044	.044***	.114 ^c	.003	.200**	-.067
Somatic symptoms ^a	.109*	-.196***	.019	.012	.013	.058***	-.087 ^c	.044**	.305***	.020
Segmentation										
Satisfaction ^a	.140***	-.175***	-.068**	.114***	-.036	.037***	-.035	.010	.315***	-.218***
Anxiety ^a	.076*	-.075*	.024	.036	.007	.027***	.001 ^c	.067***	.151*	-.005
Depression ^a	.114***	-.118**	-.012	.092***	-.025	.040***	-.004 ^c	.055***	.232***	-.129**
Irritation ^a	.022	-.018	.034	.081**	-.054**	.028***	.004 ^c	.061***	.040	-.101*
Somatic symptoms ^a	.060**	-.060*	.019	.017	-.000	.023***	.000 ^c	.036**	.120**	.002

Note. N ranged from 1627 to 1665. For columns labeled S , V , S^2 , SV , and V^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously (S = supplies, V = values). The column labeled R^2 indicates the variance explained by the five quadratic terms, controlling for age, gender, and income. Columns labeled $b_1 + b_2$ and $b_3 + b_4 + b_5$ represent the slope of each surface along the $V = S$ line, and columns labeled $b_1 - b_2$ and $b_3 - b_4 + b_5$ represent the slope of each surface along the $V = -S$ line (b_1 , b_2 , b_3 , b_4 , and b_5 are the coefficients on S , V , S^2 , SV , and V^2 , respectively).

^a Along the $V = S$ line, well-being was significantly higher for high supply and value scores than for low supply and value scores ($p < .05$). The procedure used to identify high and low scores is described in the text.

^a For this equation, the three quadratic terms (S^2 , SV , V^2) were significant as a set ($p < .05$).

^c For this equation, the four cubic terms (S^3 , S^2V , SV^2 , V^3) were significant as a set ($p < .05$).

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

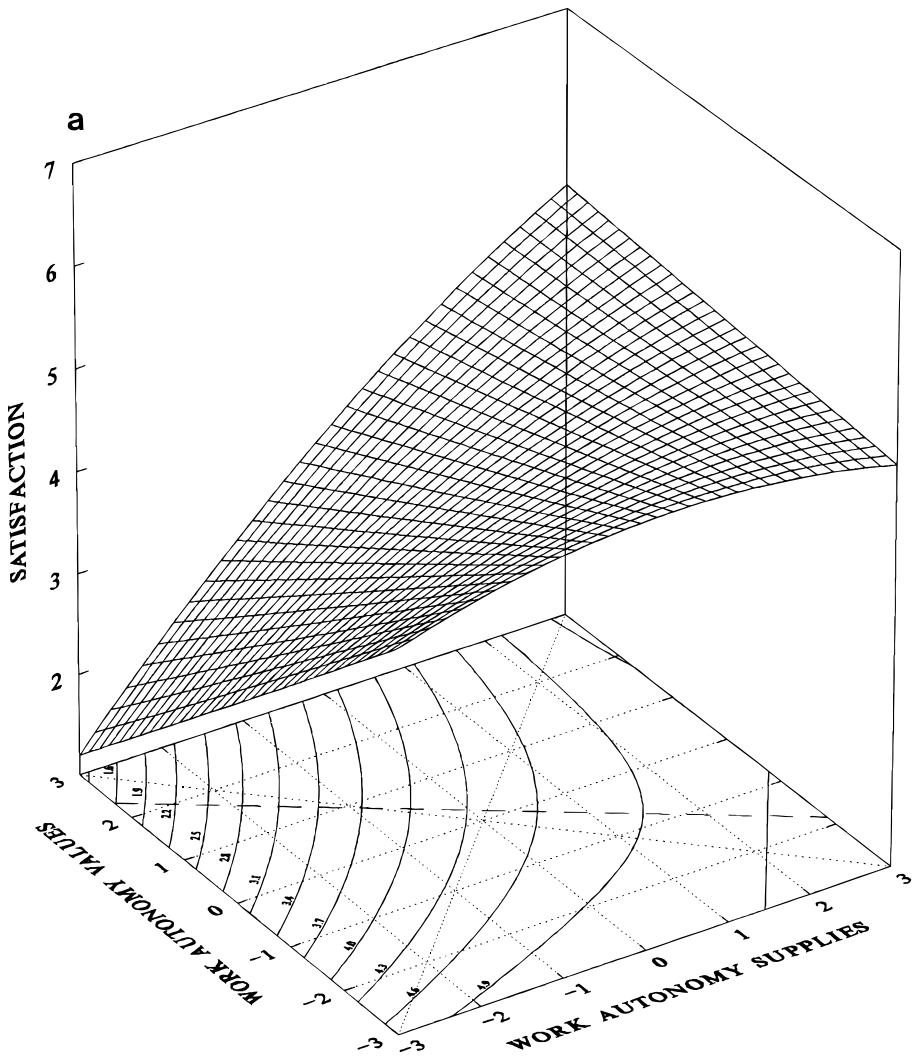


FIG. 2. Estimated surfaces relating autonomy S-V fit to satisfaction for work and family. (a) Work autonomy S-V fit and work satisfaction. (b) Family autonomy S-V fit and family satisfaction.

the work autonomy supply and value measures were 0.55 and 1.05, respectively (these means are four units smaller than the corresponding figures reported in Table 1). The point midway between these means is thus 0.80. The point midway between the work autonomy supply and value standard deviations (1.21 and .98, respectively, as reported in Table 1) was 1.095. Thus, for work autonomy supply and values, we used 1.895 and -0.295 to represent high and low scores along the $V = S$ line. If well-being was higher at the high score along the $V = S$ line than at the low score, then Hypothesis 1b would be supported. Results supported this hypothesis for two measures of well-being in the work domain and four measures in the family domain. Thus, Hypothesis 1b received moderate support.

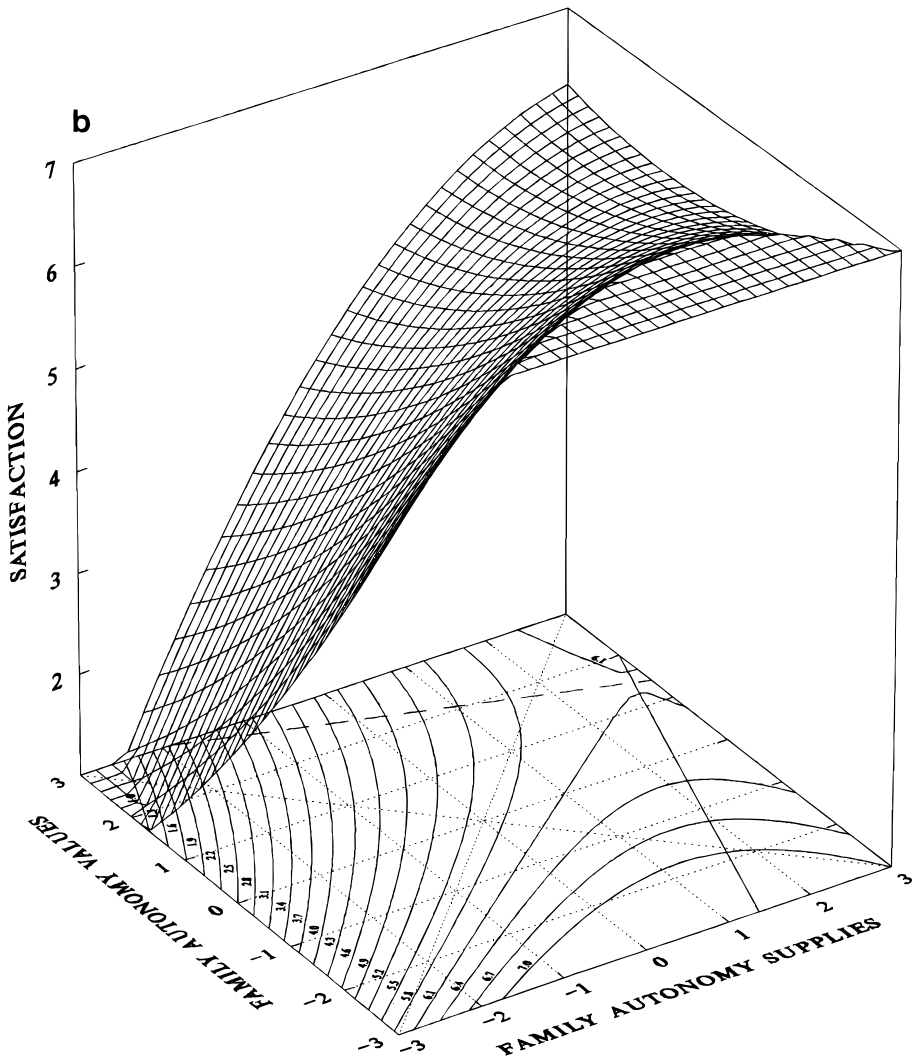


FIG. 2—Continued

To illustrate the preceding results, Fig. 2 depicts estimated surfaces relating autonomy S-V fit to satisfaction. As can be seen, these surfaces correspond closely to the predicted surface shown in Fig. 1. Specifically, satisfaction increased as supplies increased toward values and leveled off as supplies exceeded values, decreasing slightly when supplies exceeded values by about two units. In addition, along the $V = S$ line, satisfaction was higher at high supply and value scores (1.895 and 2.480 for work and family, respectively) than for low supply and value scores (-0.295 and 0.560 for work and family, respectively).

Hypothesis 2a stated that well-being would increase as relationship supplies increased toward values and continue to increase as supplies exceeded values. This hypothesis corresponds to a positive slope along the $V = -S$ line at the point $S = 0$, $V = 0$. A positive slope was found for all well-being measures in the work domain and for two of five measures in the family domain (see Tables

2 and 3), providing fairly strong support for Hypothesis 2a. Of these well-being measures, four also exhibited a downward curvature along the $V = -S$ line, indicating that the increase in well-being diminished when excess supplies were substantial.

For relationships, several surfaces exhibited curvature along the $V = S$ line. Therefore, Hypothesis 2b was tested by comparing well-being for high and low supply and value scores, using the procedure applied to Hypothesis 1b. In every case, well-being was higher when supply and value scores were both high than when both were low, thereby supporting Hypothesis 2b.

Hypothesis 3a posited that, for security, well-being would increase as supplies increased toward values and continue to increase as supplies exceeded values, although perhaps to a lesser extent. Tables 2 and 3 show that surfaces were positively sloped along the $V = -S$ line for all measures of well-being in the family domain and three of five measures in the work domain. However, none of the surfaces showed significant downward curvature along the $V = -S$ line, meaning that the increase in well-being did not diminish as supplies exceeded values. This lack of curvature may be partly due to the small proportion of respondents who reported excess security (i.e., for both work and family, the proportion of respondents who reported supply scores that exceeded value scores by at least one unit was less than 7%). Overall, these results provide general support for Hypothesis 3a.

To test Hypothesis 3b, we again compared well-being for high and low supply and value scores. For family, all measures of well-being were higher when supplies and values were both high than when both were low, whereas for work, this difference was significant for only two of five measures of well-being. Thus, Hypothesis 3b received fairly strong support, particularly in the family domain.

Hypothesis 4a contended that, for segmentation, well-being would increase steeply as supplies increased toward values and gradually decrease as supplies exceeded values. This hypothesis corresponds to a positive slope along the $V = -S$ line at the point $S = 0, V = 0$, combined with a downward curvature along this line. For both work and family, surfaces for four out of five well-being measures were positively sloped along the $V = -S$ line at the point $S = 0, V = 0$. Of these eight surfaces, five exhibited significant downward curvature, indicating that well-being began to decrease when supplies moderately exceeded values. These results provide fairly strong support for Hypothesis 4a.

Hypothesis 4b predicted that well-being would be essentially the same when segmentation supplies and values were both high as when both were low. Contrary to this prediction, 7 of 10 measures of well-being were higher when supply and value scores were high rather than low. For family, four surfaces were also curved upward along the $V = S$ line, indicating that, within the bounds of the data, well-being did not increase until supplies and values were both high (i.e., approximately one standard deviation above the means of supplies and values). These results provide weak support for Hypothesis 4b.

Moderating Effects of Work and Family Centrality

Hypotheses 5a and 5b stated that, for both work and family, centrality would strengthen the relationship between S-V fit and well-being. Hierarchical regression analyses revealed a moderating effect for centrality for five equations in the work domain and three equations in the family domain, collectively comprising two equations for relationships, two for security, and four for segmentation. For relationships and security, the moderating effects of centrality were as predicted, such that the slope of the surface relating S-V fit to well-being was steeper at higher levels of centrality. These effects are illustrated in Fig. 3, which depicts surfaces for family relationships S-V fit and family

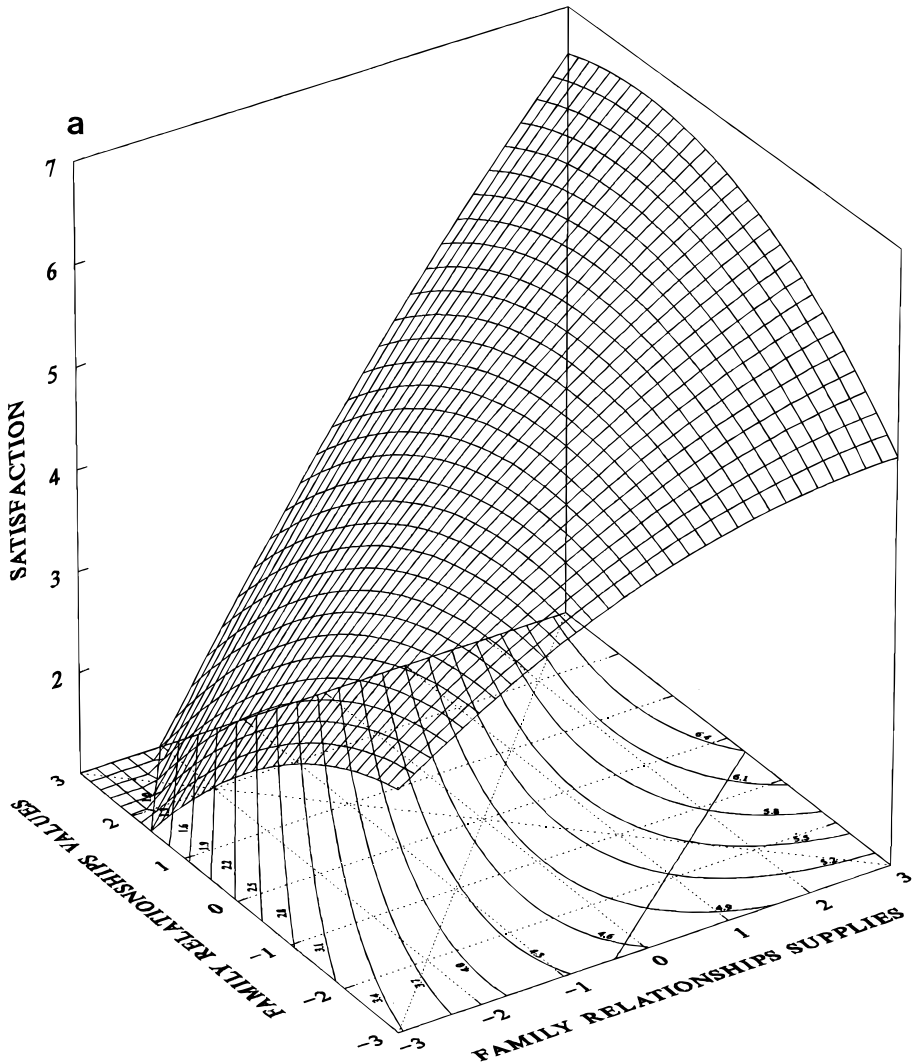


FIG. 3. Estimated surfaces relating family relationships S-V fit to family satisfaction at three levels of family centrality. (a) Family centrality low. (b) Family centrality moderate. (c) Family centrality high.

satisfaction at three levels of family centrality. In contrast, the moderating effects for segmentation were contrary to predictions, yielding surfaces that were more steeply sloped when centrality was lower. These effects are illustrated in Fig. 4, which portrays the relationship between work segmentation S-V fit and anxiety at three levels of work centrality. These surfaces show that, when work is peripheral to one's life, either too little or too much separation of work from family is linked to lower well-being.

Domain-Specific Well-Being versus Overall Well-Being

Hypotheses 6a and 6b predicted that, for both work and family, S-V fit would be more strongly related to domain-specific well-being than to satisfaction with the other domain or to overall well-being. Table 4 reports results from

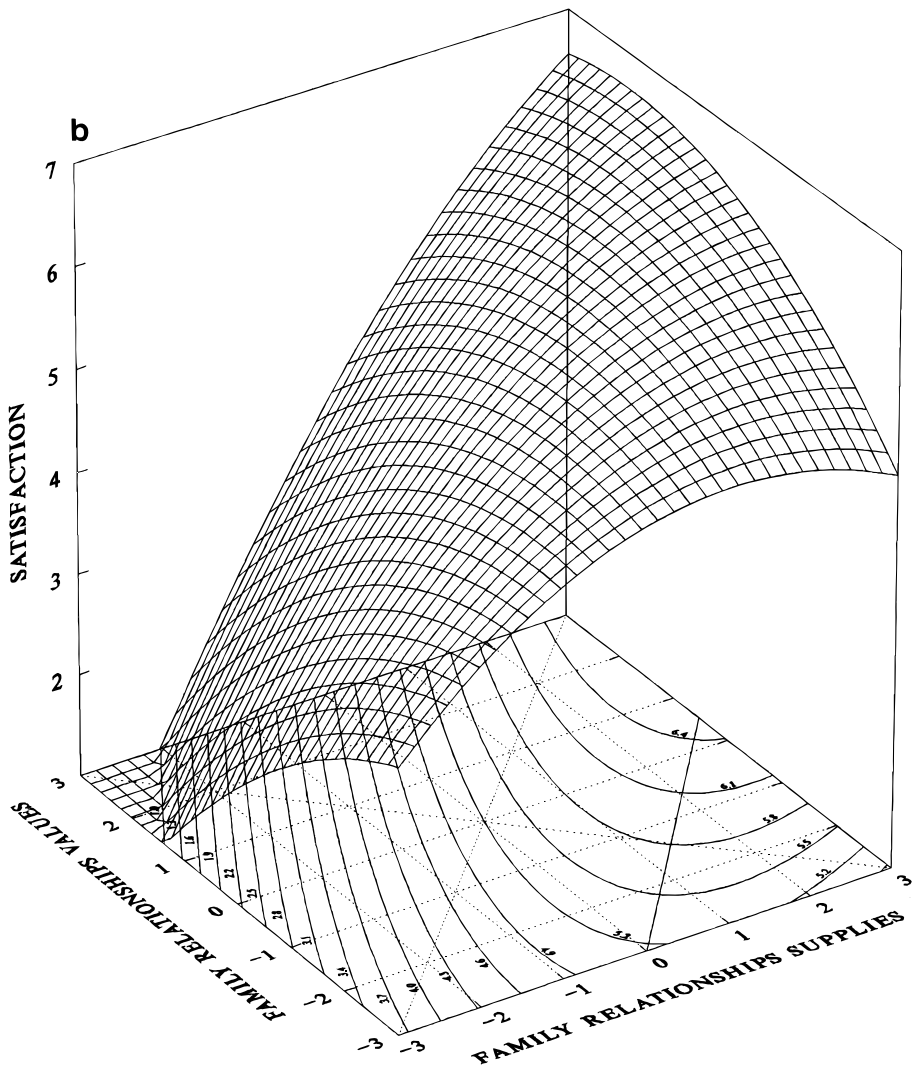


FIG. 3—Continued

multivariate multiple regression analyses using all six measures of well-being as a set, showing the increment in variance explained by the five quadratic terms for each dimension of S-V fit for the work and family domains. These results indicated that, for all dimensions except segmentation, the increment in variance explained for within-domain satisfaction was significantly higher than for the remaining five measures of well-being. Thus, Hypotheses 6a and 6b received support for three of the four value dimensions. Further analyses indicated that, after controlling for within-domain satisfaction, the increment in variance explained in overall well-being by the five quadratic terms remained significant for each S-V fit dimension ($p < .05$). These results, combined with the significant relationships between S-V fit and within-domain satisfaction (Tables 2 and 3) and between within-domain satisfaction and each measure of overall well-being (Table 1), suggest that within-domain satisfaction partially

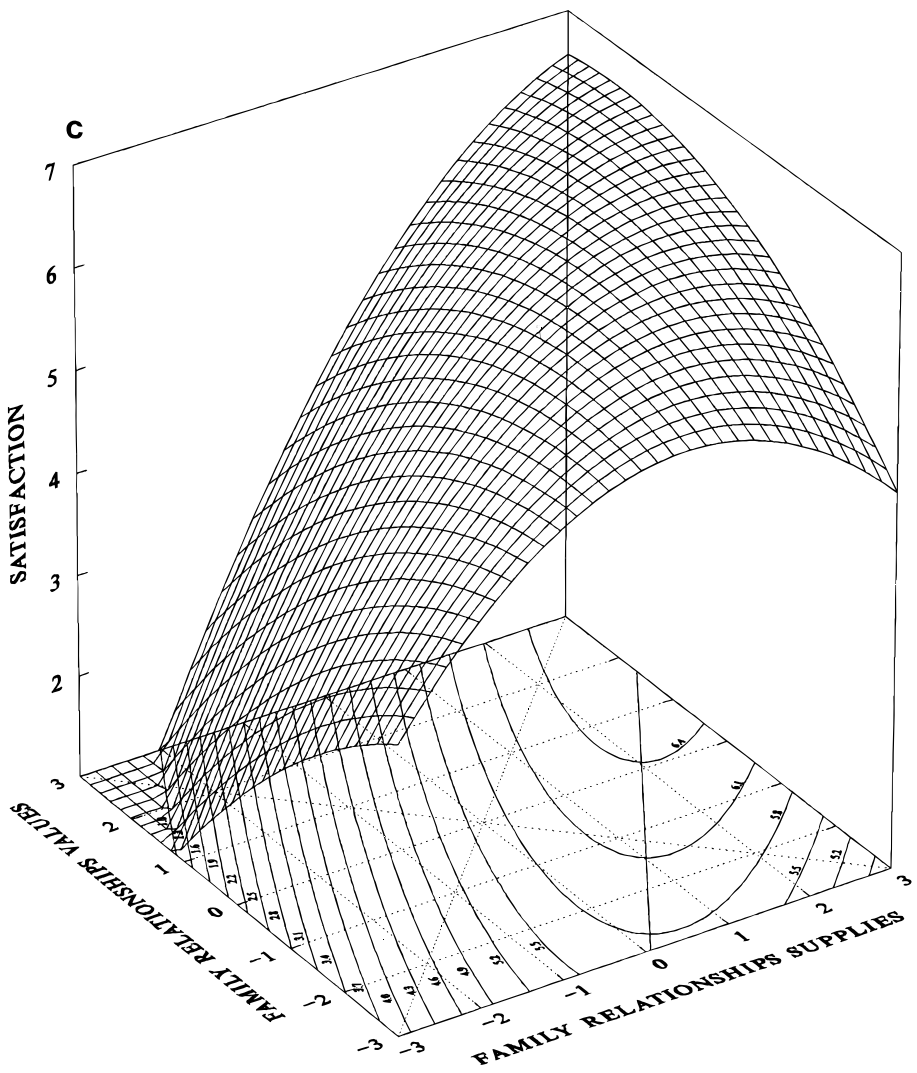


FIG. 3—Continued

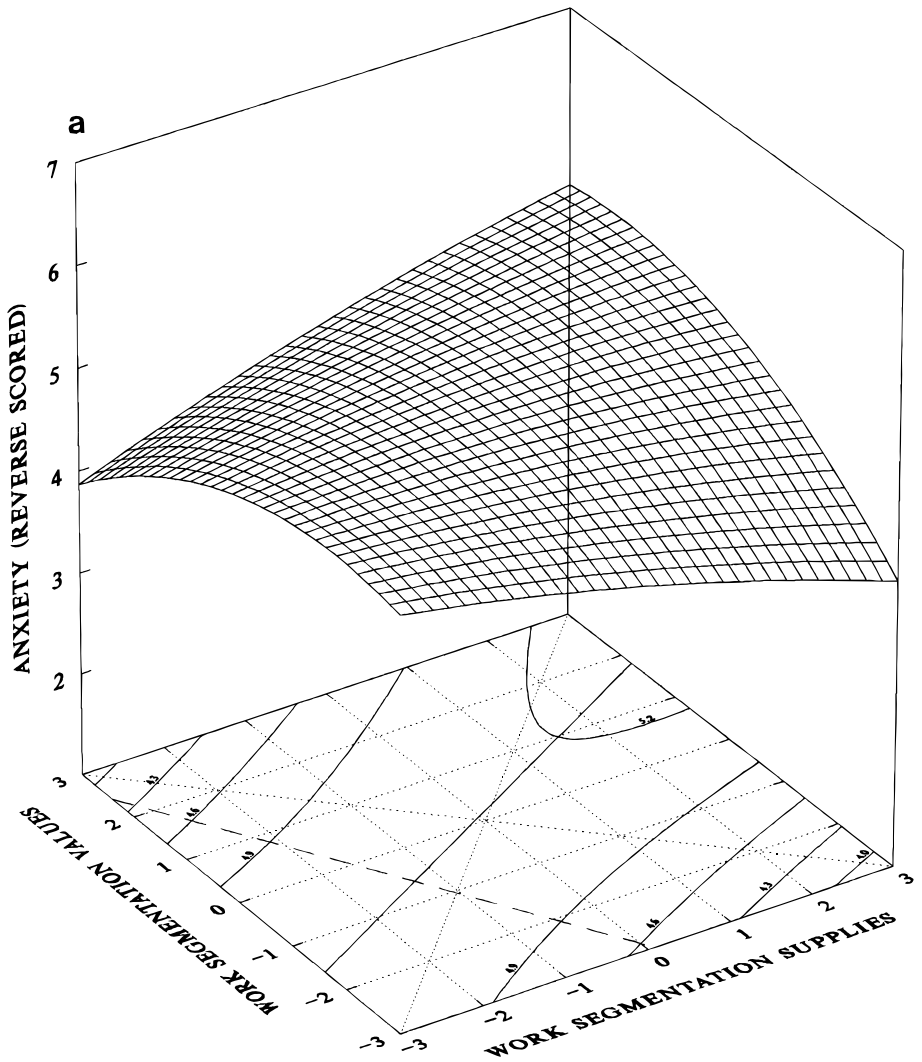


FIG. 4. Estimated surfaces relating work segmentation S-V fit to anxiety at three levels of work centrality. (a) Work centrality low. (b) Work centrality moderate. (c) Work centrality high.

mediates the relationship of work and family S-V fit with overall well-being (Baron & Kenny, 1986). Table 4 also shows that S-V fit for family relationships and security generally explained the most variance in overall well-being, particularly depression.

DISCUSSION

The results of this study are generally consistent with the hypothesized relationships between S-V fit and well-being. Specifically, for autonomy, well-being increased as supplies increased toward values and continued to increase as supplies exceeded values. This finding is consistent with our assertion that excess autonomy produces a carryover effect by enabling the person to acquire

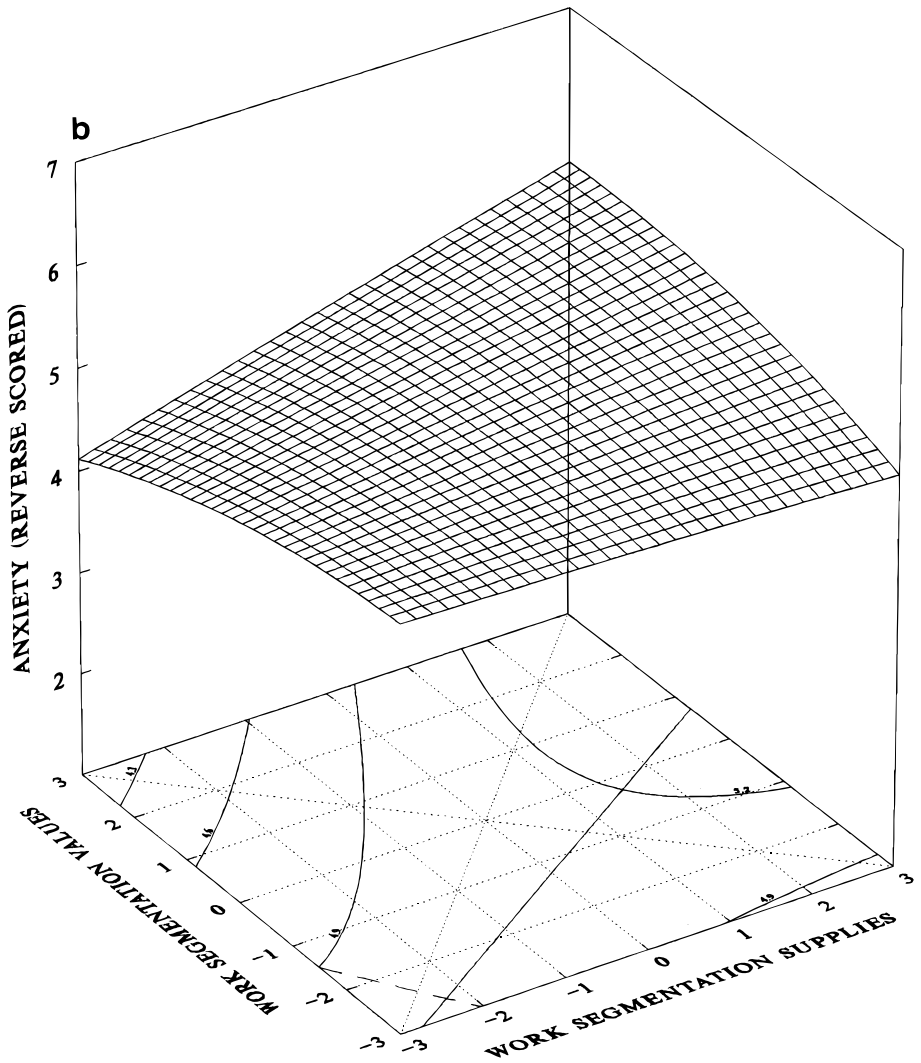


FIG. 4—Continued

supplies that fulfill values on other dimensions (Caplan, 1987; Folkman, 1984; Ganster, 1989; Harrison, 1978). This assertion is further supported by the positive correlations between autonomy supplies and relationships, security, and segmentation supplies for work and family, as reported in Table 1. Moreover, satisfaction began to decrease when supplies greatly exceeded values, suggesting that too much autonomy may have created S-V misfit regarding guidance from others (Burger & Cooper, 1979). In addition, well-being was generally higher when autonomy supplies and values were both high than when both were low. This finding supports our contention that high levels of autonomy supplies and values enhance well-being by facilitating S-V fit for responsibility, authority, and achievement (Karasek & Theorell, 1990).

For relationships, well-being generally increased as supplies increased toward values and continued to increase as supplies exceeded values. This finding

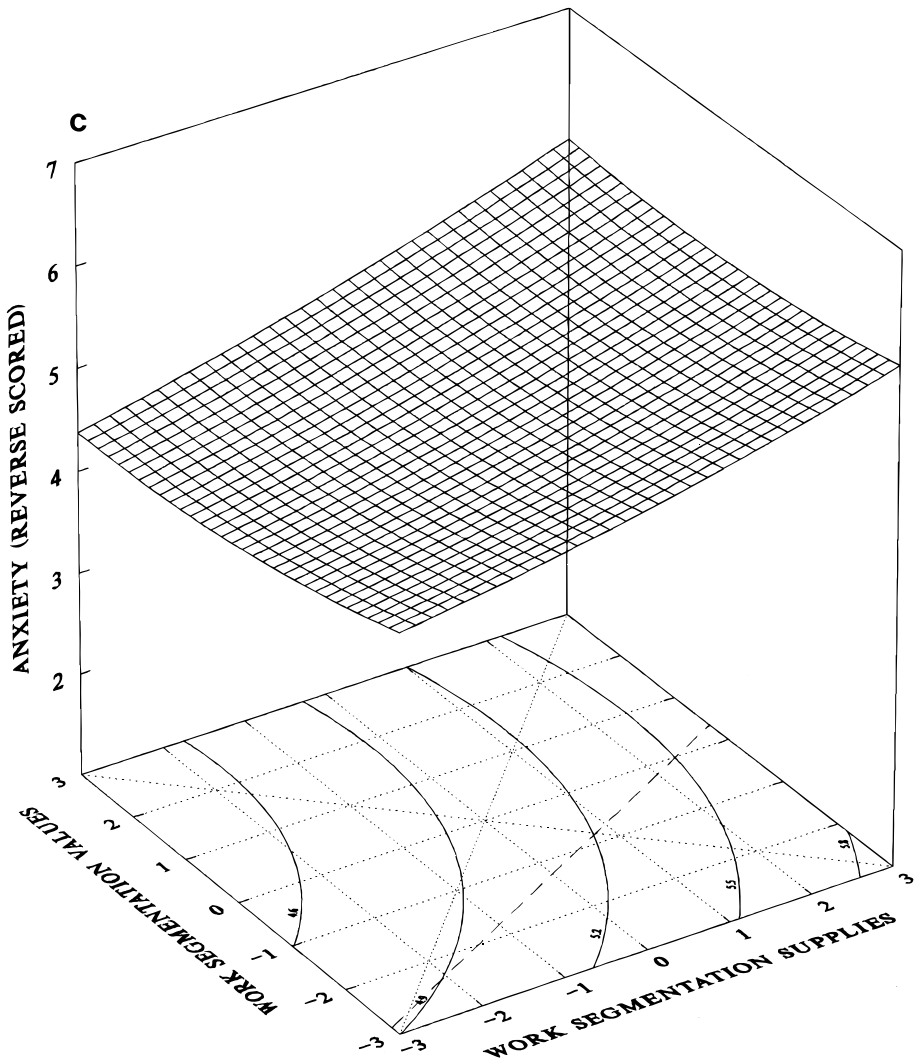


FIG. 4—Continued

is consistent with our reasoning that excess relationship supplies may be conserved as a social resource (Bosse *et al.*, 1993; Francis, 1990; Kahn & Antonucci, 1980) and produce carryover by providing social support that facilitates S-V fit on other dimensions (Cohen & Wills, 1985; Holahan & Moos, 1987; House *et al.*, 1988). This carryover effect is consistent with the positive correlations between relationship supplies and other supplies, as reported in Table 1. When excess relationship supplies were substantial, satisfaction decreased and, to a lesser extent, irritation and depression increased. These findings suggest that, when relationship supplies far exceeded values, conservation and carryover may have been offset somewhat by interference regarding privacy (Harrison, 1978). Well-being was also higher when relationship supplies and values were both high than when both were low, suggesting that wanting and having strong

TABLE 4
Comparison of Variance Explained by S-V Fit for Well-Being Measures

Value dimension	Well-being measures					Somatic symptoms
	Within-domain satisfaction	Cross-domain satisfaction	Anxiety	Depression	Irritation	
Work domain						
Autonomy	.121	.003 ^a	.027 ^a	.034 ^a	.036 ^a	.019 ^a
Relationships	.209	.025 ^a	.050 ^a	.075 ^a	.059 ^a	.026 ^a
Security	.078	.023 ^a	.036 ^a	.039 ^a	.028 ^a	.014 ^a
Segmentation	.044	.007	.037	.036	.030	.028
Family domain						
Autonomy	.161	.016 ^a	.051 ^a	.092 ^a	.033 ^a	.035 ^a
Relationships	.393	.035 ^a	.055 ^a	.132 ^a	.044 ^a	.035 ^a
Security	.385	.025 ^a	.055 ^a	.134 ^a	.041 ^a	.054 ^a
Segmentation	.034	.005	.028	.036	.026	.021

Note. N ranged from 1571 to 1591. Table entries represent the increment in variance explained in each well-being measure by the five quadratic terms (i.e., S , V , S^2 , SV , V^2) for each value dimension, controlling for age, gender, and income. All table entries greater than .006 differ significantly from zero ($p < .05$).

^aThis R^2 was significantly smaller than the R^2 for within-domain satisfaction ($p < .05$).

relationships signifies social competence that may itself fulfill social motives (Schneider *et al.*, 1996).

Well-being increased as security supplies increased toward values and continued to increase at essentially the same rate as supplies exceeded values. Apparently, the benefit of increasing security to desired levels was comparable to the carryover of excess security to S-V fit on dimensions such as idea expression and risk-taking. However, as noted previously, relatively few respondents reported having more security than desired, making it difficult to detect a change in slope as security supplies exceeded values. Well-being was also higher when security supplies and values were both high than when both were low, suggesting that high levels of these variables may signify the achievement of high standards of role performance, which itself serves as a supply for values regarding competence (White, 1959).

Finally, for segmentation, well-being increased as supplies approached values and tended to decrease as supplies exceeded values. The decrease in well-being for excess segmentation was manifested primarily by affective indices such as satisfaction, depression, and irritation. Perhaps these indices are particularly sensitive to feelings of isolation and alienation that may arise when life domains are more separated than desired (Barnett & Gotlib, 1988). Contrary to predictions, well-being was higher when segmentation supplies and values were both high than when both were low. This finding suggests that wanting and attaining a high degree of separation between work and family may signify effective

management of the boundary between these domains. Effective boundary management may facilitate role performance in both domains, which in turn should enhance well-being.

Limited support was found for the moderating effect of domain centrality on the relationship between S-V fit and well-being. For S-V fit on relationships and security, the expected moderating effect was found in four analyses, indicating that the surface relating S-V fit to well-being became more steeply sloped as centrality increased. However, for S-V fit on segmentation, the opposite effect was found in four analyses in the work domain, such that the relationship between work S-V fit and well-being became stronger as work centrality decreased. In retrospect, this finding is conceptually plausible. Specifically, people who view work as unimportant may be intolerant of intrusions of work into other life areas, such as family. For these people, insufficient work segmentation would harm well-being. In contrast, for people who view work as highly important, the intrusion of work into family may be tolerated and therefore would have little effect on well-being. Although this reasoning explains the decrease in well-being associated with insufficient work segmentation when work centrality is low, it does not account for the decrease in well-being for excess work segmentation. Because these findings were unexpected, they require replication before further speculation is warranted.

For most dimensions, S-V fit was more strongly related to domain-specific well-being than to overall well-being or to well-being associated with the other domain, a pattern that has been found in previous studies (Kopelman *et al.*, 1983; Parasuraman *et al.*, 1992). The only exception to this pattern was S-V fit for segmentation, which exhibited relationships of similar magnitude with within-domain, between-domain, and overall well-being. One explanation for these findings is that, by referring to the relationship between work and family, segmentation transcends these domains. Therefore, achieving S-V fit for segmentation would enhance satisfaction with both work and family as well as overall well-being.

Our analyses also showed that overall well-being was more strongly related to family S-V fit than to work S-V fit (see Table 4), a finding that corroborates prior research (e.g., Bergermaier *et al.*, 1984; Klitzman *et al.*, 1990; Kopelman *et al.*, 1983; Rousseau, 1978). Our attempts to explain this difference using domain centrality as a moderator were only partly successful, as few significant moderating effects were found. However, these analyses focused on variation in centrality within either the work or family domain. Comparing centrality between domains (see Table 1) shows that, for this sample, family centrality was considerably higher than work centrality. Thus, the stronger relationships for family S-V fit may be explained in part by the generally higher degree of importance associated with family.

Finally, our analyses suggest that, for all S-V fit dimensions, work and family S-V fit is related to overall well-being not only indirectly through domain-specific well-being, but also directly. These direct relationships challenge the assumption that work and family stressors influence overall well-being only

through domain-specific well-being (Coverman, 1989; Frone *et al.*, 1992; Higgins *et al.*, 1992; Kopelman *et al.*, 1983; Rice *et al.*, 1985). However, our analyses focused on a single aspect of domain-specific well-being (i.e., work and family satisfaction), and the direct associations we found may be mediated by other domain-specific aspects of well-being not included in this study. For example, domain-specific tension (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964) may mediate the relationship between work and family S-V fit and overall anxiety. On the other hand, some dimensions of overall well-being (e.g., physical health) have no within-domain analog and therefore may be influenced directly by work and family S-V fit. These alternative causal pathways merit further research.

Limitations

Several limitations of this study should be noted. First, the design of the study was cross-sectional, making it impossible to verify that S-V fit influenced well-being. Although unlikely, it is possible that respondents with higher well-being construed or created greater S-V fit. Second, all data were self-report, which may have inflated interitem correlations due to common method variance (Podsakoff & Organ, 1986). However, common method variance is unlikely to create nonlinear and interactive relationships such as those found in our analysis (Evans, 1985). Third, by relying on self-report data, our findings pertain only to the fit between *subjective* supplies and values. This limitation is warranted by our focus on psychological stress, which arises from the person's *perception* of the situation and self (Edwards, 1992; French *et al.*, 1982; Harrison, 1978; Lazarus & Folkman, 1984; Schuler, 1980). Nonetheless, P-E fit research would benefit from studies of the relationship between subjective and objective person and environment constructs. Fourth, correlations between family relationships and security measures were high, suggesting that tests of S-V fit for these dimensions were somewhat redundant. Nonetheless, we retained both dimensions to ensure parallelism with analyses in the work domain, where correlations between relationships and security were not excessive. Fifth, although the four value dimensions were correlated, we analyzed S-V fit for each dimension separately. These correlations create interpretative difficulties if the researcher is interested in the relationship of S-V fit with well-being holding constant S-V fit on other dimensions. However, the processes underlying our hypotheses, particularly carryover and interference, *depend upon* relationships between S-V fit on the focal dimension and S-V fit on other dimensions. Had we statistically controlled these relationships, we would have masked the very processes that underlie our hypotheses.

Two final limitations pertain to the sample used in this study. First, our sample differed from the university workforce and the U.S. working population on several sociodemographic dimensions. It is unclear whether or how these differences influenced relationships among variables used to test our hypotheses. Second, we obtained a 30% response rate, which raises concerns regarding self-selection bias. Available evidence suggests that response rate may have little effect on relationships among variables such as those examined in this

study (Goudy, 1978; Schalm and Kelloway, 1998). Nonetheless, these limitations restrict the generalization of our findings beyond our sample, and further research is needed using other samples and methods that provide higher response rates.

SUMMARY AND CONCLUSION

This study examined the relationship of S-V fit in the work and family domains with well-being. For most dimensions of S-V fit, well-being increased as supplies increased toward values and either continued to increase or leveled off as supplies exceeded values. In addition, well-being was generally higher when supplies and values were both high than when both were low. Limited support was found for domain centrality as a moderator of the relationship between S-V fit and well-being, although most of the obtained moderating effects were conceptually plausible. Finally, S-V fit was more strongly related to within-domain well-being than to cross-domain or overall well-being. Nonetheless, overall well-being was more strongly related to family S-V fit than to work S-V fit, perhaps due to the greater importance ascribed to family in our sample.

These findings provide tentative answers to the two general questions that motivated this study. First, our results suggest that depletion, interference, conservation, and carryover represent theoretically meaningful mechanisms that influence the relationship between S-V fit and well-being. By using these mechanisms to derive hypotheses, researchers can go beyond simple assertions that S-V fit is beneficial to well-being. Future research should investigate how these mechanisms correspond to different categories of value dimensions. For example, dimensions that facilitate coping, such as autonomy and relationships in the present study, may be generally prone to carryover, enhancing S-V fit on a range of dimensions. In contrast, dimensions that represent countervailing desires (e.g., social contact versus privacy) may exhibit interference, as an increase in supplies for one dimension implies a decrease in supplies for the other dimension. This research may uncover general attributes of value dimensions that can be used to predict how depletion, interference, conservation, and carryover apply to S-V fit on specific value dimensions in a particular study.

Second, this study indicates that the relative effects of work S-V fit and family S-V fit on well-being are influenced in part by domain centrality and by the degree to which well-being is specific to work or family. However, the moderating effects of domain centrality were limited, and future studies should consider other factors that may explain the relative effects of work S-V fit and family S-V fit on well-being. One possible factor is the amount of attention devoted to work versus family. For example, holding constant the degree of work and family S-V misfit, a person who ruminates on family S-V misfit is likely to experience greater stress from family than from work (Edwards, 1992). The relative effects of work and family S-V misfit on well-being may also be influenced by the degree to which misfit in either domain can be resolved. For instance, persons in jobs with little autonomy but who have great control over

their family situations may find it more difficult to resolve work S-V misfit than family S-V misfit and therefore would experience greater stress from work than from family. Thus, focus of attention and the feasibility of resolving S-V misfit may moderate the relative effects of work S-V fit and family S-V fit on well-being. These possibilities merit attention in future research.

This study also demonstrated the utility of P-E fit theory for understanding the relationship between work and family stress and well-being. We found that well-being was related not simply to perceptions of work and family experiences, but rather to the fit between the perceptions and values of the person. This finding supports a central tenet of P-E fit theory and underscores the essential role of cognitive appraisal in stress research. Future studies should further explore the viability of P-E fit theory for understanding work and family stress. For example, existing models of work and family stress may be extended to include cognitive appraisal as embodied in S-V fit, such that work and family experiences are compared to values regarding those experiences. These extensions would provide an important integration of these models with research on psychological stress in general and P-E fit theory in particular.

Finally, our results indicate that uniform prescriptions for resolving work and family stress are likely to be ineffective. Rather, efforts to manage work and family stress should be individualized, based on careful assessment of the fit between the person and his or her own work and family environments. Moreover, our study highlights the notion that work and family stress may be managed by directing interventions simultaneously toward the person and his or her work and family environments, thereby utilizing multiple avenues for resolving P-E misfit and enhancing well-being (Harrison, 1985).

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