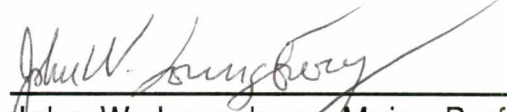


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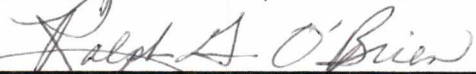
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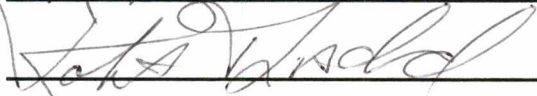


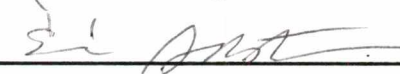
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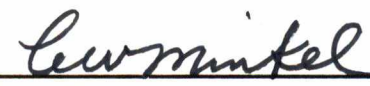








Accepted for the Council:



Vice Provost
and Dean of The Graduate School

AN INVESTIGATION OF THE BOUNDARY
BETWEEN WORK AND NONWORK

A Dissertation
Presented for the
Doctor of Philosophy
Degree

The University of Tennessee, Knoxville

Linda Louise Hoopes

August 1988

DEDICATION

To my family--Raymond Hoopes, Roberta Grooters Hoopes,
Barbara, Carol and John Hoopes
for the love and enjoyment we share.

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ABSTRACT

Understanding the relationship between work and nonwork is becoming increasingly important to theory and practice in psychology. This study focused on one specific aspect of this relationship--situations in which elements of work and nonwork are present simultaneously. The first objective was to determine the various forms which work/nonwork overlap might take, and the second was to investigate links between forms of overlap and three sets of possible antecedents (work demands, nonwork demands and personal lifestyle preferences) as well as several possible consequences (work/nonwork conflict and life, job and nonwork satisfaction). Additionally, the role of several demographic variables in predicting the antecedent variables was investigated.

Participants were 338 working adults who were also spouses and/or parents. Data were collected using a survey questionnaire which measured actual and preferred overlap; work and nonwork demands and involvement; life, job and nonwork satisfaction; and work/nonwork conflict. Several additional questions were included to gather the necessary background information.

Factor analysis (image analysis with Harris-Kaiser rotation) was used to determine the dimensionality of the overlap scale. Nine factors were found: Work Thoughts off the Job, Work Space at

Home, Discussing Work with Family, Socializing with Co-Workers, Business Travel, Nonwork in the Workplace, the use of Commuting as a Mental Transition, Work/Nonwork Activity Similarity, and Schedule Variability. With the exception of the last two, all were found to have acceptable internal consistency reliabilities.

Multiple regression techniques were used to test the remaining hypotheses. Results indicated significant relationships between each set of life constraints and the overlap dimensions; collectively the life constraints and demographics accounted for a substantial proportion of the variability in overlap (from 26 to 62% for the nine dimensions). Significant relationships were also found between the various outcome measures and (a) actual degree of overlap and (b) the degree of congruence between actual and desired levels of overlap. Hypotheses positing a moderating effect of general overlap on the relationship between job, nonwork and life satisfaction received little support.

Results are discussed in terms of implications for theory and practice, and suggestions for future research in this area are made. In general it is concluded that this is a fruitful area for further work, since the various forms of overlap do not appear to bear identical relationships to the various constraints and outcomes investigated, yet previous research has tended to treat work/ nonwork similarity as a unidimensional construct.

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CHAPTER I

INTRODUCTION

Whether it is approached from the perspective of the organization, trying to find the best way to utilize individual talents and energy to achieve organizational goals, or from the perspective of the individual, trying to understand the factors which contribute to a satisfying life, one question which is of paramount importance to psychologists in general and industrial/organizational psychologists in particular is "what is the place of work in the life of the individual?". From a historical perspective, this question has been answered in various ways. Work has been conceptualized as everything from a necessary evil (to be undertaken by those not fortunate enough to live a life of leisure) to the highest good in life--that for which mankind was created (Tilgher, 1973).

Economic, religious and technological changes have all had their impact on the perceived role of work in life, but it is becoming increasingly less possible to characterize societal attitudes towards the place of work in human existence, because the growing diversity and complexity of modern industrialized society makes it less and less likely that individuals will agree on the role of work in life (e.g. Katzell, 1979). Despite this increasing complexity regarding the meaning of work or, perhaps, because of it, in recent years the relationship between the

domains of work and nonwork has received a great deal of attention, with numerous theoretical calls for more holistic views of individuals' lives (Champoux, 1980; Crouter, 1984; Rapoport & Rapoport, 1974). Researchers have begun to recognize the necessity of considering extra-organizational variables in their models of organizational behavior (e.g., Dunnette, 1973; Naylor, Pritchard & Ilgen, 1980; Porter, Lawler & Hackman, 1975) and also of considering work influences in nonwork spheres (e.g., Meissner, 1971; Staines & Pleck, 1986).

One important aspect of these lines of research is that they acknowledge that work must be studied in the context of "life as a whole" rather than in isolation. Recent literature (Andrews & Withey, 1976; Campbell, Converse & Rodgers, 1976; Hoopes & Lounsbury (in press); Near, Smith, Rice & Hunt, 1984) suggests that one useful way of conceptualizing life is as comprising a number of "domains" of experience, of which work is one. The domain, or facet, approach suggests that an individual's life may be seen as a composite of areas, each of which contributes to the experience of life as a whole. From this perspective work would clearly be an important life domain and nonwork, defined as those areas of life which are not primarily related to ones' job, would be its counterpart. Considerable effort has been put into delineating the various domains which constitute the realm of life experience (Andrews & Withey, 1976; Campbell et al., 1976). One relatively unexplored area, however, is the degree to which seemingly disparate domains can actually be considered separate

areas of experience, both in the psychological sense of their meaning(s) to the individual and in the more concrete sense of distinguishable differences in form and content.

Because of the increasing emphasis on the whole person and the recognized importance of the two domains mentioned above, the phrase "work and nonwork" has become quite common in the organizational, sociological and family literature. As it has become clear that there are important relationships which cross domain boundaries, several streams of research have focused on the link between these two domains. Each of these will be briefly addressed below and addressed at greater length in the review of the literature.

Research on stress and coping has approached the work/nonwork relationship as one of competing demands on finite resources, in which the work domain and the various elements of the nonwork domain make time and energy demands which a person may or may not be able to meet. The extent to which a person can not meet all the demands is hypothesized to be a source of physical and mental stress (Greenhaus & Beutell, 1985; Hall & Gordon, 1973) and of organizationally undesirable outcomes including absenteeism and turnover (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), while strategies which reduce the conflicting demands or increase the amount of resources available are seen as coping strategies which reduce stress and increase life satisfaction and other desirable outcomes (Beutell & Greenhaus, 1982; Hall, 1972; Kopelman, Greenhaus & Connolly, 1983).

Conditions which increase or decrease the likelihood of inter-domain conflict are identified and include role conflict, work schedules (Shamir, 1983) and a number of other demands made by elements in each of the domains.

Another line of research concerns the relative importance of the work and nonwork domains in an individual's life as it is related to various individual and organizational outcomes. Dubin has developed (1956) and extensively researched (e.g., Dubin & Champoux, 1975, 1977; Dubin, Champoux, & Porter, 1975; Orzack, 1963) the Central Life Interest scale. This scale, as presently used, identifies individuals as being job-oriented (having an expressed preference for performing specified activities in work settings), non-job oriented (having an expressed preference for performing these activities in a non-work setting) and unfocused (having a flexible preference). Job-oriented individuals, comprising 12-19% of the samples in two studies by Dubin and Champoux (1975, 1977), showed higher organizational commitment and job satisfaction than did those with non-work or flexible focus. Other studies have shown that job-oriented individuals devote more personal time to work.

A third area which has received attention is that of policy implications of the relationship between the domains of work and nonwork. Many employers have begun to recognize that the two parts of life are linked, and to provide opportunities such as flexitime, job sharing, 4-day workweeks, corporate day-care centers and corporate recreation centers which by their very

nature address both work and nonwork concerns (Kanter, 1977). Research to explore the effectiveness of such organizational policies (e.g., Kim & Campagna, 1981) has in general demonstrated that the link between work and nonwork (primarily investigated in terms of family) life is an important one and that it is bidirectional (Crouter, 1984), with elements of the job and the organization affecting life outside of work, and job behavior and perceptions of the job and the organization in turn being affected by family and other nonwork factors.

A fourth area has looked at the two domains in terms of the relationship between activities in one domain and activities in the other. The prevailing and generally competing hypotheses in this area suggest that characteristics of work activities "spill over" into the nonwork domain, that characteristics which are present in excess or in deficient quantity are "compensated for" off the job, or that there is no relationship between activities on and off the job (Dubin, 1973; Kabanoff, 1980; Kornhauser, 1965; Parker, 1971; Wilensky, 1960). Relationships between work and nonwork are sought in terms of such constructs as needs which are met in each domain, characteristics of activities performed in each domain, and satisfaction gained in each domain (see Near, Rice & Hunt, 1980, for a review of this literature).

Finally, a number of investigations have addressed the relationship of specific life domain satisfactions to one another and to overall life satisfaction (e.g., Andrews & Withey, 1976; Campbell et al., 1976; Kornhauser, 1965; Near, Smith, Rice, &

Hunt, 1983). In this area, job satisfaction and satisfaction with various facets of nonwork are looked at as competing or complementary predictors of well-being. An offshoot of this line of research has been an investigation of the causal directionality of the job satisfaction/life satisfaction relationship (Chacko, 1983; Schmitt & Bedeian, 1982) and the work satisfaction/nonwork satisfaction relationship (Orpen, 1978).

Statement of the Problem

Each of these approaches provides a unique perspective on the relationship between work and nonwork. All of them, however, are deficient in their view of the boundary space between the two domains--the area of potential overlap between work and nonwork. In the research cited above, there are two common approaches to this boundary: the first is to treat each domain as self contained--physically and psychologically bounded --with the main variables of interest being the effects that one domain exerts on the other or that both exert on some outcome measure such as stress or life satisfaction. The stress literature, central life interest literature and, to some extent, the research on policy implications and satisfaction fall into this category. This view, of course, simply bypasses the question of overlap. The second approach does take the question of overlap/separation into account; studies in this category may, in fact, even focus on the overlap. Most studies in this category are those attempting to discern relationships between activities in

the two domains. However, with few exceptions, these studies have focused on one aspect of the boundary at a time--looking, for example, at personal time spent on work, or on the ways in which various needs are met across the domains--and have made many assumptions about how and why domain separation/overlap comes about. There has been, then, a substantial amount of attention paid to the boundary between work and nonwork without any systematic study of the overlap which may exist between the two spheres.

Definition of Overlap/Separation

Overlap, as conceptualized in the research described below, would theoretically exist when elements of one domain are present in the other (or, by extension, when it is impossible to tell in which domain a particular element belongs), and would exist in the extreme in situations such as this rural society described by Triandis (1973):

...[they] work every day of the year, from 4 a.m. until it is time to sleep around 8 p.m. However, they never hurry, and they frequently interrupt their work to eat, chat and rest.

The case of a complete lack of overlap between work and nonwork can be portrayed by a hypothetical individual who goes to work, thinks about nothing but work and engages in no extra-work activities, then "turns off" work at a set time and goes home, where he or she encounters no people who are also seen in the workplace, and where no thoughts of work enter his or her head

until he or she has again arrived at the place of employment. These two sketches are clearly depictions of extreme cases. More representative illustrations of overlap between the two domains, however, might include taking a briefcase full of papers to grade home (as opposed to staying at the office to finish them) or discussing weekend plans with friends while at the office.

Rationale for the Proposed Research

The value of better understanding the boundary between work and nonwork is evident in a number of areas. To begin with, such understanding would aid in conceptual development in each of the five areas of work/nonwork research described above.

With regard to the stress and conflict literature, it may be that there are specific types of overlap that are typically conflictual and others that are neutral or conflict-reducing. Burke (1982), for example, found that some occupational demands are significantly related to positive and others to negative nonwork experiences. It might be possible to begin to identify the conditions under which the presence of work in the nonwork sphere and/or nonwork in the work sphere can be beneficial and the conditions under which it is not.

The literature addressing the relative importance of the work and nonwork domains relies primarily on measures concerning preferred settings for particular types of activities. These measures tend to make the above-mentioned assumption that work is done at the workplace and nonwork at home. To the

extent that individuals have physical or psychological overlap between the domains, the Central Life Interest measures may be misleading. Research such as that conducted in this project may help clarify the picture. It may be, for instance, that particular types of overlap are correlated with or indicative of work or nonwork central life interests.

The third area, that of policy implications, could clearly benefit from an understanding of the work/nonwork boundary (e.g., Best, 1977). Discovery of positive or negative outcomes of particular types of overlap/segmentation could be used to guide organizational and public policy in such a way as to minimize negative outcomes such as stress and dissatisfaction and maximize situations in which the domains can mutually enhance one another. Counseling for individuals on how to best choose and maintain a personally desirable work/nonwork balance, exchange of information between organizations and individuals about expectations regarding work/nonwork overlap/separation, development of organizational policies that address these questions...all of these are potential outgrowths of a clearer understanding of the work/nonwork boundary.

The fourth area, that of spillover/compensation of activities between the domains, also stands to gain a great deal from clarification of the dimensionality of overlap. Research in this area has been very fuzzy conceptually--varying definitions of spillover and compensation have been employed with little or no explicit discussion of the definitions used, the form of

activities and their meaning have been treated almost interchangeably, and thus few worthwhile theoretical advances have been made. If it were possible to more clearly specify the dimensionality of the work/nonwork boundary, it might in turn be possible to more clearly identify the conditions under which "spillover", "compensation" and "segmentation" take place or even to reconceptualize the relationship between the domains in a more theoretically productive manner.

Finally, the investigation of the relationship of domain satisfactions to life satisfaction is clearly aided by an investigation of the question of overlap. Current theory portrays life satisfaction as a subjective combination of satisfactions with particular life domains (Andrews & Withey, 1976; Campbell et al., 1976). As such, the question of the relative contribution of work satisfaction and nonwork satisfaction is an important one which has been examined recently by Schmitt & Bedeian (1982) and Orpen (1978). The issue of domain overlap is relevant here--it may well be that for individuals with a high degree of work/nonwork overlap, the boundaries between the two domains are blurred sufficiently to make work satisfaction and nonwork satisfaction less independent in their influence on overall life satisfaction than for individuals with a high degree of separation between the two domains. Some types of overlap, too, may be indicative of work importance and others of nonwork importance, which may in turn be related to the strength of domain/global satisfaction relationships, although mixed results have been found

in this area (Rice, McFarlin, Hunt, & Near, 1982; Steiner & Truxillo, 1987).

In addition to the contributions to be made to each of these subfields, I believe that studying work/nonwork intersections in this systematic way can provide a perspective which begins to unify the diverse approaches which have been taken to the problem of understanding the relationship between the two domains.

Furthermore, the present research is of potential benefit in the study of work values. The topic of the separability/overlap of work and nonwork is a value-laden one. The "traditional" bureaucratic perspective of the organization spawned in the Industrial Revolution centers on the theme of "partial inclusion", in which the organization attempts to achieve control over a portion of the time and behavior of its employees, and work is therefore seen as largely separate from the rest of life (Wilensky, 1960). In contrast, there is a trend in some segments of our culture to value work which incorporates the whole person, and a life in which work and the rest of life are "seamlessly joined". Each of these views leads to very different beliefs about the proper place of work in life. To begin to define the elements which differentiate these two approaches may help us achieve a better understanding of the diverse values found in our society and thence, perhaps, the ability to better mesh organizational and individual needs.

CHAPTER II

REVIEW OF THE LITERATURE

Three general areas of theory and research which are relevant to the present study are reviewed in this chapter. The first section contains an analysis of the literature regarding the relationship between the domains of work and nonwork, particularly that regarding general and dimension-specific overlap and separation of the domains. The second section addresses a variety of demographic and attitudinal variables which potentially affect the ways in which individuals merge or separate the domains in their life space. Finally, the third section reviews outcomes which bear a potential relationship to the ways in which work and nonwork are merged or separated in the life space. The chapter concludes with the presentation of a theoretical model and research hypotheses addressing the questions raised in the literature review.

The Boundary Between Work and Nonwork

Interest in articulating and understanding links between the domains of work and nonwork has increased dramatically in recent years (e.g., Kabanoff, 1980; Kando & Summers, 1971; Staines, 1977). Although there are many definitions of work which have been used in investigating its relationship to other areas of life (e.g., Morse & Weiss, 1955; Tilgher, 1973), the present investigation focuses on work as one's paid employment, since

this is the most relevant meaning of "work" from an organizational point of view. Kabanoff (1980) has articulated this definition as follows:

...work may refer to the set of prescribed tasks that an individual performs while occupying a position in an organization under the condition that the individual will obtain monetary rewards in return for his or her services to the organization. In general, work is a spatially, temporally and, to an extent, socially discrete, well-defined role that we have little trouble in identifying. (pp 67-68).

This definition of work as a distinct role, while convenient, is not without its problems. It requires that nonwork be defined in negative terms--"that which is not work"--and thus in some sense suggests that the work role is central and nonwork peripheral. On the other hand, since all employed adults fulfill, by definition, a work role while the substance of the nonwork domain varies a good deal more across people, this definition of work does at the very least appear to provide a reference point which is comparable across individuals.

Naylor et al. (1980), in their model of human behavior in organizations, use this two-domain model, treating nonwork as the complement of work. They make two points which are relevant to the present investigation. First, characteristic individual patterns of resource allocation exist which, after accounting for minimum requirements in each of the two domains, reflect the perceived marginal return to the individual of expending resources in one domain or the other. This suggests that two factors would affect the overall amount of resources

allocated to work and to nonwork as separate domains: to the extent that minimum requirements are higher in a given domain, more resources would be allocated there; it would also follow that individuals who gain more positive affect overall from spending additional resources in a given domain would put in more than the minimum required amount. These two sources of variability, then, should lead to individual differences in the total amount of resources allocated to work and to nonwork, although not necessarily to the total amount of satisfaction gained overall.

The second point made by Naylor et al. (1980) which bears on this question is that while general level of effort is relatively constant within individuals, it is possible for a portion of one's on-the-job effort to be devoted to organizationally irrelevant acts or, in other words, for activities that are "within the boundary of the job" to be other than "pure" work. Examples that they give include daydreaming and thinking about lunch, but one could easily stretch the category of organizationally irrelevant acts to include behaviors which are relevant to the nonwork domain such as talking to one's spouse on the phone, taking time to run an errand, etc. Similarly, one can see how a portion of an individual's off-the-job effort could be devoted to acts irrelevant to the nonwork domain (that is, devoted to work). This would suggest that the reason for performing the activity, which, in our definition is the feature which distinguishes work from nonwork, may not always correspond to the physical, temporal and social demarcation of roles proposed by Kabanoff (1980).

History

While most modern-day investigations of the relationship between work and nonwork have accepted the dichotomy outlined above (e.g. Dubin, 1956), the two domains have not always been viewed in terms of mutually exclusive roles. Descriptions of pre-industrial life and even modern life in some instances (e.g. Salaman, 1974) reveal a lifestyle in which work is inseparable from the rest of life (Parker, 1971); one in which "...work, nonwork, and leisure spheres of life were totally integrated into one system of living and hence the distinctions among them as we understand them were meaningless (p. 147)". Bohlen and Viveros-Long (1981) note that in the 17th and 18th centuries in Western culture, the workplace and the home were essentially the same, with a great deal of flexibility between work and family time.

The idea that work is a separable part of life is a fairly recent concept, arising, at least in part, out of the Industrial Revolution. The notion of "partial inclusion" is a key concept in the view of specialized work espoused by Weber (1946), and Babbage (1832); the exclusive focus on productivity as the chief end of man's existence can be directly traced to the influences of Luther and Calvin. Nieva (1984) notes that with the shift in the system of labor brought about by the Industrial Revolution came a separation of male and female roles--work and family came to be viewed as radically separate spheres, "with males occupying the work world, and females responsible for the family (p. 15)." Dubin

(1956), in his original conceptualization of the Central Life Interest concept, depicts this dualistic view:

The axiom with which we start scarcely needs elaboration. The segmented character of experience is revealed in the round of daily activities where one kind of activity succeeds another; in the succession of days, and particularly the weekend days when leisure-time activity replaces remunerative work; in the physical separation of such significant locales as place of residence and place of work; and in the numerous autonomous organizations that serve special, and sometimes very esoteric, interests in our lives. (p. 132).

After having gone from an almost completely integrative system to an extremely segmented one, according to Bohen and Viveros-Long (1981), we have been entering a third stage, in which the two worlds are once again merging--as the number of children in the average family has declined and lifespan increased, women have moved into the labor force or, as it is often called, "the world of work". The first occupations entered by women (nursing and teaching) provided a great deal of flexibility, allowing women to be home with children before and after school. As the percentage of women in the workforce has continued to increase, and as the prevailing ethic has become one of self-fulfillment through work, the demarcation of form and meaning between the worlds of work and of nonwork has become increasingly less sharp. This blurring of the boundary has led to the suggestion that work is becoming more like leisure and leisure more like work (e.g. Parker, 1976).

Indeed, as mentioned earlier, a number of individuals have begun to make value judgments concerning the extent to which the domains should overlap. Fridgen (1984) comments: "if it is granted that personal-life activity and work-schedule management are going to become more complex and difficult, each of these realms of our lives must support each other; indeed, each should be integrated with the other (p. 249)." Wiley (1983), in contrast, suggests that compartmentalization of roles is important as a means to reducing role conflict, and several authors (e.g., Kerr, 1962) have decried the loss of "pure leisure" with the incursion of work-inspired goal orientedness into all aspects of our daily life.

Current Theory

Not surprisingly, then, a number of researchers in fields such as sociology (e.g., Champoux, 1978; Wilensky, 1960), marriage and family studies (e.g., Jones & Butler, 1980) and, more recently, psychology (e.g., Kabanoff, 1980) have begun to investigate the domains of work and nonwork in an effort to understand the complex interrelationships between them. Two general types of questions have been asked. The first, in which the domains are treated as separate entities, seeks to identify a set of dimensions which are common to both spheres, and by comparing work to nonwork on these common dimensions infer the relationship between them. Rousseau (1978), for example, used the dimensions of the Job Descriptive Survey (Hackman & Oldham,

1980). Kabanoff and O'Brien (1980, 1982), similarly, used a set of task attributes. Champoux (1978a, 1978b, 1980) asked respondents to describe each domain using semantic differential scales and assessed the similarity of descriptions. Similarities have also been sought in terms of the needs fulfilled in each domain (e.g., Mansfield & Evans, 1975), the personality characteristics expressed (e.g., Adams & Stone, 1977), and the degree of satisfaction obtained (e.g., London, Crandall & Seals, 1977; Orpen, 1978; Rousseau, 1978).

The three major theoretical models employed in this body of research suggest that there are several types of relationships that can obtain between one domain and the other. The "spillover" hypothesis suggests that the relationship will be one of similarity, characterized by a positive correlation between scores on a particular dimension as measured with respect to work and the same dimension in nonwork. Kanungo and Misra (1984) argue that support for this hypothesis is generally found in situations where attitudes or habits at work carry over into nonwork, citing studies by Kornhauser (1965) and Meissner (1971) which show a positive relationship between the degree of routineness, lack of discretion and social interaction and their corresponding leisure counterparts, and Rousseau (1978) who found similarity in terms of task attributes. The "compensation" hypothesis predicts a negative relationship, suggesting that leisure will be used to redress deficits incurred in the workplace. Kanungo and Misra (1984) suggest that this will be supported in situations where

needs not satisfied at work can be satisfied off the job--for example, a lack of social interaction can be redressed through after-work activities. Mansfield and Evans (1975) and Miller and Weiss (1982) have provided support for this hypothesis. Finally, the "segmentation" hypothesis (e.g. Bacon, 1975) predicts a neutral relationship between the two domains, suggesting that they operate more or less independently, with little impact on one another. A number of studies (e.g. Bacon, 1975; Champoux, 1981; London et al., 1977) have provided support for this viewpoint. Not surprisingly, though, these models have been faulted for their oversimplification, their lack of predictive power and their inability to take into account the highly individualistic satisfactions and meanings gained from work and nonwork activities. Heckscher and de Grazia (1959), for instance, note that executives spend a good bit of "out-of-work" time entertaining, planning, and reading, but that this is, for them, penetrated by qualities associated with "voluntary, carefree and social pursuits" and thus would not fall under some definitions of "work". Evans and Bartolome (1980) comment, too, that managers who say they "compensate", or make up for lack of work fulfillment with leisure-time successes, are often engaging in leisure-time activities that are very similar to their work (e.g. transforming a hobby into a business).

Consequently, the models outlined above have been supplemented by more complex models which consider the effects of more than one variable across domains as well as the

subjective meanings of activities. Studies in this recent wave of research have concerned such things as the effects of a variable in one domain on a different variable in the other domain in an attempt to infer underlying psychological relationships. Bishop and Ikeda (1970), for instance, found that job status was linked to choice of leisure activities, attributing this to various role factors. Similarly, Hagedorn and Labovitz (1968) investigated the relationship between occupation and participation in community associations. Melamed and Meir (1981) found a relationship between avocational activity choice and the incongruity between job and interests. Karasek (1976), Staines (1977) and Near et al. (1980) provide thorough reviews of this literature.

The second type of question which has been asked regarding the work/nonwork relationship is one which directly addresses the area of overlap between the two domains. Staines (1977) notes that work and nonwork can directly overlap on several dimensions, having any or all of time, place, people, or activities in common. This would appear to suggest that it is possible to take a neutral, descriptive approach to cross-domain behavior, looking at the extent to which an activity has elements associated with work in conjunction with elements associated with nonwork. One particularly useful way of visualizing this type of relationship is that of open systems theory (Katz & Kahn, 1980), viewing the individual as participating in multiple systems. Although each system can be viewed as having a distinct but permeable boundary, with its own characteristic cycles of

behavior and interactions with the environment, the individual forms the link between the two systems; he or she can theoretically be simultaneously in both systems.

If, in fact, it is possible for the two domains to overlap in an individual's experience, it should be true that individuals can perceive activities to be simultaneously in the realms of both work and nonwork. A recent time-budget study by Shaw (1985a) suggests that this is so. Individuals were asked to record their waking-hour activities during two days--one weekday and one Sunday. Of the activities recorded, 28.5% were designated by the respondents as work, 50.0% as leisure, and 16.8% as a mixture of work and leisure (the remainder, primarily self-maintenance activities, were seen as neither work nor leisure). Lee (1984) investigating "life space structures", also looked at global patterns of behavior across the work and nonwork domains. On the basis of interviews with 39 individuals, she outlined thirteen dimensions to characterize the life space, ultimately grouping individuals into four categories based on presence/absence of high quality and quantity time at home and/or at work. Those with one main focus are termed "nuclear"; they are perceived to have work/nonwork overlap by choosing one location in which to focus both types of activity.

Clearly, then, theorists have begun to explore the space which constitutes the "fuzziness" in the boundary between work and nonwork. So far, however, such research has been fragmented

and oriented more towards description than empirical investigation.

Dimensionality of Overlap

Once the focus is shifted to the area of overlap between work and nonwork domains, it becomes important to understand the different dimensions on which overlap might exist. Staines (1977) addresses this question directly, suggesting that work and nonwork activities can take place in the same time frame, that they can be performed at the same place, that the people involved in each activity can be the same, and that they can embody the same activities. He cites occupational communities (Salaman, 1974), or situations in which individuals in a particular occupation tend, for various reasons, to live and work together, as a particularly clear example of nearly-complete integration of the two domains along these dimensions. Lee (1984) identifies similar dimensions, characterizing life space structures in terms of patterns of time use, spatial location, activity and social interaction. She defines the interaction of these as an overall coping strategy for deploying resources to confront the constraints of work and personal life. Kanungo and Misra (1984) take a more rigid view of the two domains, citing dimensions of time, space, and mental and physical activity as differentiating work from nonwork. In their estimation, the time/space dimension establishes the legitimate physical boundaries for performing of work and nonwork activities, which themselves are

defined by whether their objectives are job- or nonjob-related. Exceptions to this formula constitute "boundary transgressions" which, contrary to the wholistic view expressed by Lee, constitute problems rather than adaptive solutions.

Further examples of the forms of overlap between the two domains abound...Hirsch and David (1983), in a study of 21 nurses, describe a boundary with regard to social interaction outside the work setting. Salaman (1974), in his study of occupational communities, outlines three dimensions: a) the extent to which members perceive themselves in terms of their occupational roles, b) the extent to which members choose friends from within their own occupation rather than from outside, and c) the extent to which members carry or extend their work-based interests and activities into their leisure time. Fridgen (1984), cites social interaction at work as another example of the way in which the line between work and leisure is blurred, while Zerubavel (1981), in his discussion of the societal use of time, notes that the time-based notion of "ever-availability" is associated with professions such as medicine and education which have, to some extent, retained their pre-industrial characteristics of being indistinguishable from the individual who engages in them. Willmott (1971), in an investigation of the ways in which family, work and leisure conflict in British males, sees thinking about work as a very common way that work "spills over" to life off the job. Although some of the thoughts appear to be worries, he quotes one executive who describes his thoughts thus:

Sometimes there is a slight worry about something I should have done and haven't. Apart from that just general thinking about the problems of work. If you are digging a flower bed for a couple of hours you can have a marvellous think about some deep problem of organisation. You are not necessarily trying to think something through at high pressure; you are just mulling it over (p. 579).

He quotes a laborer, in contrast: "When I find myself thinking about work outside the job, that'll be the time to pack the job in" (p. 579).

Each of the above conceptualizations sets out a slightly different view of overlap, but all have in common the viewpoint that overlap occurs when the dimensions characterizing a particular behavior or set of behaviors include elements of both work and nonwork. Summarizing across the various studies, it would appear that a number of dimensions are relevant: time, location, people, physical activity and mental activity are some of the most frequently measured. From these dimensions, it is possible to construct an endless number of examples of situations which are not clearly work or clearly nonwork: having family members visit the workplace, thinking about a work project while mowing the lawn, discussing the workday with a neighbor...and so on. It is this category of activities which are the focus of this investigation.

Variables Potentially Affecting Overlap

Under what conditions will overlap occur? One would expect that individuals can, to some extent, voluntarily integrate the two spheres and choose, for whatever reasons, to cross the boundaries of time, space, etc. which conventionally separate work from nonwork. It is not only plausible but probable, however, that some overlap is also involuntary, existing because of the demands of one domain or the other.

Below are outlined a number of variables that have been identified as leading to actual or preferred overlap or segmentation on one or more of the dimensions mentioned above. These variables have been broken down into three general categories: work-related, nonwork-related, and person-related (not specific to either domain), roughly corresponding to the three categories (living situation, work situation, personality characteristics) outlined by Lee (1984) as affecting life space structures.

Work-Related Variables

Most of the studies summarized below have not directly investigated the question of overlap. Some have focused on the effects of the organization on nonwork life, while others have taken one or more specific jobs and, by comparing them, tried to draw general conclusions about the nature of the job/life relationship. Nonetheless, these studies provide a great deal of

information about work-related characteristics which help shape the life space.

Schedule. One of the dimensions of work activity which is very obviously related to overlap of work and nonwork domains is that of work schedule. Gerstl (1963), for example, in one of the first studies to address occupational differences in lifestyle, cites advertising men as having a "fused" lifestyle due to the flexibility of their working schedule which allows nonworking activity during the day.

There are several aspects of the work schedule that could potentially have an effect on the degree of work/nonwork overlap. Strictly speaking, any work activity that takes place outside of "traditional" working hours (generally considered to be 9 to 5, Monday through Friday) would constitute overlap, as would any nonwork activity taking place inside of these hours. Sundstrom, McClane, Huet-Cox and McArthur (1987) have identified two aspects of what they term the "intrusiveness" of work schedules. The first is the scheduling of working hours during times outside the traditional work-day. The second is the change in schedule from day to day. To these can be added three additional sources of overlap--the deviation of the total number of hours worked from the traditional 40 hours per week (Kanter, 1977), the flexibility given to the individual in determining one's schedule (Gerstl, 1963) and an additional, not so obvious, form of work schedule overlap--that of being "on call", which generally takes place off

the job but arguably constitutes work in the sense that it requires a state of semi-readiness for work, limiting the activities which can be performed, e.g., drinking and travel (Nieva, 1984).

Societal recognition of the traditional boundary definition of work in terms of time can be seen most clearly in hourly work, where pay differentials for evening and night shifts, for weekend and holiday work and for overtime (all times constituting overlap of traditional boundaries) can often add up to two and one-half times base pay, and in the societal stigma often attached to "part-time" work as being less of a real job than full time work.

Job characteristics. Parker (1971) suggests that there are two types of worker profiles with respect to work & leisure which are largely determined by the intrinsically motivating nature of the work. The first group he calls segmentalists. These individuals see the domains as separate and include such groups as bankers and unskilled manual workers, which Parker views as low in intrinsically involving characteristics. The second group, holists, see the domains as integrated and include skilled manual workers, youth employment and child care officers. Parker is not specific about the job characteristics that differentiate the two types of jobs, although one possible model to draw on here is the Job Characteristics Model proposed by Hackman and Oldham (1976).

Portability of work. Gerstl (1963) also compared professors and dentists, describing the former as having a "fused" and the

latter a "segmented" lifestyle, although for different reasons than attributed to advertising men described above. Professors' lifestyles are fused, he proposes, because they bring a lot of work home while dentists, in contrast, have work that is not portable and therefore exhibit a more segmented lifestyle. Lansbury, studying British managers, concludes similarly that degree of overlap appears to be related to the technical complexity of the job, with jobs of high technical complexity restricting the possible degree of overlap due to such things as jargon and special equipment which make work less physically and/or psychologically portable. Parker (1967) lists technical, routine jobs as among those likely to lead to minimal contact with nonwork for many of the same reasons.

Extending this line of argument, one can conceive of other hindrances to portability--for instance, the confidentiality requirement imposed by some professions or interdependent work tasks requiring the presence of co-workers for task accomplishment.

Work load. Kanter (1977), in her discussion of "absorption", or the extent to which occupations absorb and subsume workers' lives and those of family members, cites job demands as a major factor, making a distinction between qualitative aspects of absorptiveness (in which the job makes extreme mental and emotional demands) and quantitative aspects (high demands on time). Both of these should also be distinguished from intrinsic

involvement which leads one to want to spend large amounts of time on the job; her point is that some jobs have extremely heavy expectations regardless. Orpen (1982) makes a similar point in describing "restrictiveness" (limits on the amount of time an employee spends off-the-job) as one aspect of "inclusivity" of a job (Etzioni, 1961).

Job-related norms, values and expectations. Orzack (1963), in a study of professional nurses, notes that they have a much higher preference for having their informal group life and social participation centered on the job than do industrial workers studied by Dubin (1956); he attributes differences in the degree of overlap to public expectations and other job-related constraints. Orpen (1982), drawing the conclusion that policemen form an occupational community while clerks do not, suggests that differences in "pervasiveness" (Etzioni, 1961) of the two jobs (the setting of norms and values which determine appropriate nonwork behaviour) may partially account for this

There are many expectations associated with particular jobs or organizations that, while not a part of the job in the sense of the above-mentioned characteristics, may be related to the degree of overlap. Many companies, for instance, expect individuals to relocate periodically--this sort of change has far-reaching effects on family, living environment, social life, etc. Many professions with a high rate of technological change carry the implicit expectation that some portion of nonwork time will be

spent in reading work-related materials or in continuing education. Staines (1977) notes that a number of jobs may include cultural pressures to become involved in social and other activities, with these expectations even extending to family member participation in formal and informal social activities (Kanter, 1977). Gerstl (1963) notes that observed differences in participation in various organizations/activities are likely to be related to professional expectations. Many jobs, particularly higher-level ones, lead to high expectations of work-role centrality (Mannheim, 1975), both of which suggest workweeks longer than 40 hours. Travel, too, is an expectation, or in many cases a requirement, that potentially affects the work/nonwork relationship (Orpen, 1982).

While the various job attributes linked above to the general notion of "overlap" (schedule flexibility, job characteristics, work portability, workload ,and expectations) may be conjunctive to some degree, it is not clear that they are sufficiently so to allow one to draw universal conclusions about the work factors related to overlap; instead, it appears that several factors must be taken into account.

Nonwork-Related Variables

A number of variables in the nonwork domain have been linked to lifestyle arrangement. Each of these is discussed below.

Family. One of the most obvious nonwork factors affecting the work/nonwork relationship is the family configuration. Mortimer and London (1984) state that widespread changes in family organization "influence the conditions under which employees are able and willing to work" (p. 22).

The first aspect mentioned as important in any examination of the family's effects on work and nonwork links is the features of the family: is there one one working member, or two? One or two parents? Marital status, presence and age of children in the household and the employment status of both partners have been shown to have numerous and wide-ranging effects on lifestyle, and interact with work characteristics, particularly job level, to determine much of the daily routine.

The interrelationships between type of work, individual values, family configuration and lifestyle arrangements are far too complex to be adequately explored here. In general, though, important differentiations have been made between 1) single-earner and dual-earner couples, 2) presence or absence of children, 3) single vs. dual-parent families and 4) traditional vs. egalitarian work values on a number of dimensions relevant to the discussion of work/nonwork overlap. The major issue appears to be the allocation of time, both between work and family and within the family. Clark, Nye & Gecas (1978), in a cross-occupational sample, found, for example, that more time spent in work by husbands did not directly decrease participation in

housekeeping or talking to spouse, but did decrease participation in recreation.

As might be expected, the presence of children leads to a number of time demands, some of which are quite inflexible (e.g., school and daycare hours) and many role or self-expectations regarding the provision of quality parenting. The level of these demands and expectations varies tremendously depending on whether an individual takes on the role of being sole or primary caretaker. Marital status affects work/nonwork arrangements to a large degree as well--single individuals with no children have an extremely high degree of flexibility due to the low level of family demands, while the addition of a partner to the role system introduces a whole host of issues regarding coordination, communication and time allocation. Partner's employment status, too, will affect the choices made regarding household role distribution, with "traditional" households (man working, woman at home) and "egalitarian" households (Giele, 1984) differing in a number of important ways with respect to lifestyle arrangement.

Such variables have been associated with the perceived possibility of travel (Crouter, 1984), work-schedule and other work-related decisions (Nieva, 1984), likelihood of thoughts about home taking place at work (Crouter, 1984) and work vs. nonwork as the focus of activity. Lee (1984) found that differing foci as a function of family status, with, for example, single individuals tending to be work-based or "diffuse" (neither work nor home-based) and married/partnered individuals with no children tending

to have "conjoint" (both work-and home-centered) or diffuse structures. She also found that women with children tended to be home-based while men with children tended to be work-based, home-based or conjoint. Crouter (1984) confirmed this gender difference in her study of 55 working adults, concluding that women appeared more likely than men to feel that home responsibilities came first, especially when children were young (preadolescent). Kanter (1977) cites a study on divorced fathers showing that these men often restructure their work situations (limiting work hours, shifting to part-time work) to accommodate part-time child care, and many studies have shown that women often choose jobs which will allow them to attend to household tasks and other nonwork responsibilities.

For married individuals, the employment status of the spouse may also have an effect on degree of overlap in any number of ways: choice of where to live (Bryson & Bryson, 1980), scheduling of transportation, housework and childcare (Lopata, 1980), willingness or ability of spouse to discuss work-related topics and/or socialize with work-related individuals (Johnson & Johnson, 1980), to name a few.

Commitments and other factors. Although family is perhaps the most salient aspect of the nonwork domain, there are a number of other forces which could also affect the amount of work/nonwork overlap for an individual. A person may, for instance, have commitments to other individuals and/or

organizations outside the workplace which affect lifestyle arrangements. Mode of transportation or distance of home from work may place bounds on the amount of flexibility in the daily schedule (Orpen, 1982). Jackson, Zedeck & Summers (1985) found commuting time to be related to dissatisfaction with work/family congruence (defined as the extent to which the job allowed employees to participate in various family activities), but not to spouse-reported quality of life. In addition, there are any number of characteristics of the home environment unrelated to family configuration which may make it more or less possible to accomplish work-related tasks there. In sum, although the list of possible sources is diverse and extremely individualistic, many characteristics of the nonwork environment have the strong potential to support or discourage integration of work and nonwork domains.

Person-Related Variables

Of course, there is a great deal of evidence to suggest that individuals are not just subject to the demands of their lives but play a very active role in arranging the degree of integration between domains, both in terms of dealing with existing situations and in choosing careers which allow them to pursue lifestyles they perceive to be desirable. Apart from the demands of the work and nonwork domains, there are advantages (and disadvantages) to be gained from establishing various patterns. Lee (1984) suggests that personal characteristics such as values,

locus of control, and introversion/extraversion will affect lifestyle choices. Wilensky (1960), addressing the question of values, suggests that integration of work and leisure is primarily a function of job status. In his view, elites (top of the class structure) and upwardly mobile/aspiring people will integrate leisure and work a great deal, while those in the "non-mobile mass" will withdraw from work into family and social concerns. Kanter (1977) notes, too, that certain ethnic backgrounds may also be associated with greater degrees of overlap.

There are two additional individual difference variables which have received a great deal of attention as potential predictors of lifestyle choice.

Sex. There are many differences in the work/nonwork relationship which are apparently related to sex. To begin with, it is clear that nonwork expectations are greater for women than men (Shaw, 1985b). Pleck (1977) maintains that there is an asymmetrical permeability of boundaries--that for women the expectations of nonwork roles can enter the work domain more freely than those of work can enter the nonwork domain, while for men the reverse is true. In Lee's (1984) sample, for instance, women with children tended to be home-based while men with children tended to be work-based, home-based or conjoint. Crouter's (1984) research on working adults supports this gender difference, in that females judge personal life as spilling over more to work than do males (but only if they are parents),

although she interprets this as a role expectation issue which, in our society, is often related to but not causally related to gender. Bohlen and Viveros-Long (1981) comment that sex-role expectations and work expectations are both very important in determining how people balance work and nonwork. In general there seems to be a large gender effect, although it is unclear to what extent this is related to societal gender-role expectations which are slowly changing in the direction of equality, and to what extent true gender differences account for differential preferences.

Domain preferences. As suggested by Naylor et al.'s (1980) resource allocation model, individuals differ in the extent to which they receive valued rewards from the domains of work and nonwork. These differences lead to predicted differences in the amount of time and energy spent on each domain, with domains receiving resources as a function of the marginal outcomes, such as self-esteem, affiliation, and tangible benefits, to be gained from such an allocation. The personal value attached to the work domain has been termed Work as Central Life Interest (CLI) (Dubin, 1956), Work Role Centrality (WRC) (Mannheim, 1975), and Job Involvement (JI) (e.g. Lodahl & Kejner, 1965) and variously interpreted as the salience of the work-role subidentity (Mannheim, 1975) the preference of the work location for performing various activities (Dubin, 1956) and the importance of work-role performance to self-esteem (Lodahl & Kejner, 1965).

The genesis of WRC has been related to self-employment, occupational rank, occupational rewards, and educational level (Mannheim, 1975).

Theories linking the importance of work to other attitudes and beliefs are well-supported, showing in general that individuals who attach a high value to their work report greater organizational commitment (Dubin et al., 1975) and job satisfaction (Hollon & Chessser, 1976; Dubin & Champoux, 1977) and lower intention to turnover (Seashore, Lawler, Mirvis & Cammann, 1982).

While it has also been proposed that these attitudinal variables are linked to specific behaviors (and therefore potentially to the issue of work/nonwork overlap), the behavioral links are less clear and mostly exist in the form of assumptions implicit in the construction of scales. The CLI measure, for instance, which purports to measure the degree to which work is central as a life interest, defines this as the preference of location for activities, as well as preferences for work activities regardless of setting (e.g. "in my spare time...I just prefer to relax/often think of better ways of doing my work/have a thousand things that need doing) and inquires about informal personal relations with work friends on and off the job. The Lodahl and Kejner JI Scale includes several items reflecting the amount of personal time devoted to the job.

These implicit assumptions lead to problems in understanding the relationship of job involvement to behaviors

defined in this investigation as "overlap". This can perhaps best be illustrated by example. Gechman & Weiner (1973) claim that personal time devoted to work is an operational definition of job involvement. In a sample of 54 elementary school teachers, they found a .37 correlation between work activities performed off the job and the JI scale. Orpen (1982), found correlations of .37-.46 between the extent to which work was reflected in leisure time and the JI scale, and somewhat smaller correlations (.28-.30) between JI and the relationship of friendship choice to occupation, suggesting that while there is some link between job involvement and overlap, estimates of it may be inflated artificially as a result of the implicit assumptions incorporated into job involvement scales.

Another cloudy issue in isolating the link between work importance and overlap is the question of whether work importance/centrality and nonwork importance/centrality are independent or negatively related. Mannheim and colleagues define Work Role Centrality in opposition to the centrality of other activities, suggesting that it is a question of relative allocation of time. Willmott (1971) calls into question the belief that involvement in one sphere must come at the expense of involvement in another; that a person must be "work-centred" or "leisure-centred" or "family-centred". His research, using admittedly crude measures of involvement, suggests that a person could be high or low on any or all of them at once.

Although Bailyn and Schein (1976) conclude, on the basis of a factor which has work involvement loading positively and family involvement loading negatively, that involvement in these domains is not independent, their results are complicated by the finding that while engineers in their sample tended to be family-involved and professors to be work-involved, managers were highly involved in both domains.

Orpen (1982) concludes that job involvement is a necessary but not a sufficient condition for "organizational determinateness" to occur, and notes that instead of job involvement--determinateness, it may be the other way around. He ultimately posits a two-way influence, commenting that "at least two different kinds of limiting factors are proposed for this process of mutual influence. First, at a certain point persons are likely to feel that it is necessary to put some distance between themselves and their occupations, if only to preserve their individuality. Second, as implied earlier, certain kinds of jobs do not have the capacity of penetrating a person's nonworking life markedly even if he identifies strongly with his work."

Finally, taking a lifespan developmental approach, Levinson (1978) and Evans and Bartolome (1984) suggest that while it is not possible for more than a few components of life to take center stage at once, concerns come to the fore sequentially with each domain becoming important at some point. Rapoport & Rapoport (1975), in support of this, find that for men the work role, while extremely important in early adulthood, slips to second or third

place at midlife. Mannheim (1975), in contrast, found no age-related differences in work-role centrality.

In conclusion, it would appear that there are many forces potentially related to the degree of work/nonwork overlap occurring in the life of any individual. Each of the two domains has the potential to affect or limit choices, several individual characteristics have also been identified as having such effects, and there are numerous other idiosyncratic philosophies, values, preferences, etc. which have additional effects on the ways in which work and nonwork are arranged.

Potential Outcomes of Overlap

The final question to be addressed is that of what outcomes might be related to overlap/separation between work and nonwork. Clearly, the extent to which individuals achieve their desired degree of integration will potentially affect satisfaction with either or both of the domains as well as overall life satisfaction. Too much or too little overlap may signal potentially stressful situations. In addition, the extent to which the two domains are integrated may be related to the way in which they are perceived by the individual.

Satisfaction

Satisfaction is undoubtedly the most frequently investigated outcome of lifestyle choice. Diener (1984) provides an excellent review of the broad literature on "subjective well-

being", which he defines to include happiness, life satisfaction and positive affect and, in general, anything attempting to measure "how and why people experience their lives in positive ways" (p. 542). As such, satisfaction would appear to be an extremely important criterion by which to judge the worth to an individual of the lifestyle he or she is living. He suggests that global assessments of life are the most common measures, but also discusses the literature surrounding the structure of well-being. Two landmark investigations in this area have been conducted by Andrews and Withey (1976) and Campbell et al. (1976), who both come to the conclusion that life satisfaction is a multidimensional construct, in which satisfaction with various domains of life experience are combined into an overall judgment.

This domain-specific approach is particularly useful for the purposes of the present investigation, as it allows questions of the relative contribution of the two domains to life satisfaction to be assessed. In general it has been concluded that the structure of domain satisfactions varies across individuals (Cutler, 1979) and that domains most central to individuals' lives most strongly affect their well-being (Andrews & Withey, 1976; Campbell et al., 1976; Cragin, 1983; Friedlander, 1965). For the purposes of the present study, there are two domains of interest: work and nonwork. Each of these has been found on numerous occasions to be related to overall life satisfaction (e.g., Rousseau, 1978), and there is a good deal of current interest in understanding the interrelationship between the two domains and

their links to life satisfaction, (e.g. Chacko, 1983; London et al., 1977; Near et al., 1983, 1984; Schmitt & Bedeian 1982), including possible moderators of the specific/general satisfaction relationship (e.g., Bedeian & Marbert, 1979; Iris & Barrett, 1972; Rice, McFarlin, Hunt & Near, 1985; Rice, Near & Hunt, 1980; Steiner & Truxillo, 1987). In general, it appears that nonwork satisfaction explains more of the variance in life satisfaction than does job satisfaction, although moderators, such as job importance (usually measured in contrast to nonwork importance), do exist.

To link the above to the relationships hypothesized in this investigation, two different approaches to understanding what makes individuals satisfied must be considered. The first of these views satisfaction as a predominance of positive affect over negative, with the important question being the factors which lead to positive affect across people. Diener (1984) lists a number of factors that have been related to subjective well being, including income, age and life cycle stage, gender, race, education, religion, marital status, children, and any number of behavioral and personality characteristics. As summarized by Near et al., (1980), a number of variables have been linked to job satisfaction: age, education, race, religious preference, marital status, presence of children, but not sex, type of community, or participation in nonwork leisure activities. They suggest, as does Stone (1975), that individual differences are less important in

understanding the job/life satisfaction relationship than is a general model of satisfaction.

The second approach to understanding what makes individuals happy embodies the view of satisfaction as the harmonious satisfaction of one's desires and goals (Chekola, 1975; Diener, 1984). This would suggest that satisfaction represents the degree of fit between what one wants and what one has. This approach is supported by research suggesting, for instance, that more highly educated people are somewhat less satisfied than might be predicted given the absolute level of outcomes gained by them, which is generally explained as being due to raising of expectations (e.g. Campbell, 1981).

Lee (1984) concluded, on the basis of comparisons among various groups of individuals exhibiting differing characteristics and life arrangements, that life space structure was not directly related to satisfaction. She found that the type of life structure observed was differentially related to satisfaction depending on family status--for unmarried/partnered individuals the "best" pattern tended to be work-based or "diffuse" (neither work nor home-based), married/partnered individuals with no children tended to work best with "conjoint" (both work-and home-centered) or diffuse structures, suggesting too that the fit between needs and structure are more predictive of satisfaction than are the absolute levels of various factors.

In summary, it would appear that it is important to evaluate satisfaction both at the global level and at the domain level.

Further, the contribution of specific variables, in the form of individual differences, to satisfaction is undoubtedly important and should be considered, but the degree of congruence between actual and desired lifestyle must also be taken into account.

Conflict

An additional outcome measure potentially related to work/nonwork overlap is that of inter-domain conflict. Conflict is conceptually distinct from satisfaction in that it is somewhat less subjective and has been directly linked to stress and its related physical symptoms. Since each system embodies a set of role expectations and demands, one logical form of the overlap question addresses the degree to which the roles implied by the two systems conflict. This question has primarily been conceptualized in terms of competing demands on a finite set of resources (of which time and energy are the two most commonly cited; cf. Naylor et al., 1980). It has been suggested recently, however, that the fact that the domains overlap does not necessarily lead to the conclusion that they conflict; that, in fact, there may be some circumstances in which they are mutually enhancing (Leader, 1987).

Greenhaus & Beutell (1985) in reviewing the literature on work and family, note three sources of potential conflict relevant to this investigation: The first is time-based, defined as time pressure from one role making it physically impossible to comply with other role expectations and/or preoccupation with one role

while trying to meet the demands of another role. Work variables linked in their review to this source include many of those identified earlier in this chapter: number of hours worked per week, irregularity of shiftwork, and inflexibility of schedule (which they tie to lack of schedule control) are several key ones. Pleck, Staines & Lang (1980) conclude that men report more excessive-work-time problems while women report more schedule incompatibility problems. Nonwork variables linked to conflict include: marriage, responsibility for child-rearing, having young children, large families, and the combination of childrearing with a job-involved spouse. For men, the type of employment held by the wife has implications here also.

The second conflict source identified is titled "strain-based"; this refers to psychological demands rather than the more overt types of demand mentioned above. Work sources of strain-based conflict include: ambiguity, low leader support, physical and psychological work demands, autonomy (surprisingly, this showed a positive relationship to strain), and negative emotional spillover, defined as outcomes, including worry, that make satisfying nonwork difficult. Nonwork sources include conflict within family relationships, lack of spouse support, and dissimilar attitudes including, for some women, non pro-feminist attitudes of the husband.

The third source of conflict is termed behavior based, defined as work and nonwork styles and behaviors being incompatible with one another. Greenhaus and Beutell note that

little research has been done on this area, and suggest that more systemic research is needed.

As with the satisfaction literature, it is important to identify variables which are potentially related to conflict. A large number of these were cited above. Shamir (1983), however, found no relationship between marriage, children or sex on conflict (although his study was done in Jerusalem which may have affected the results). In contrast to satisfaction, conflict has not been found to directly relate to the salience of work role. Greenhaus and Beutell (1985) predict, however, that there are stronger demand-strain relationships for salient roles (and that sanctions for role noncompliance will, in effect, increase level of demand). This suggests that individuals who place high value on both domains may be much more likely to feel high levels of conflict than those who primarily focus their attention on one or the other.

As mentioned above, work/nonwork overlap may have varying effects depending on the form it takes. Jones and Butler (1980) suggest that compartmentalization (based on physical location or social situation) might ease role strain between work and nonwork, even if work time demands are high. Hirsch and David (1983) cite Howard, Rechnitzer and Cunningham (1975) and Pines, Aronson and Kafry (1981) as suggesting that compartmentalization is a frequently used, effective strategy for coping with work stress, although they suggest that this lack of

extra-work ties with colleagues may limit the empowerment of the profession (in this case nursing).

To summarize, it appears that conflict, too, is an outcome measure likely to aid in understanding the effects of various forms of work/nonwork overlap. In general it would appear that here, too, the important fact to consider is the fit between one's lifestyle and one's desires, rather than simply the effect of different lifestyles on outcomes.

Development of a Theoretical Model

Based on the literature reviewed above, a tentative theoretical model is proposed. Figure 1 presents this model. As can be seen, the model contains four groups of variables and proposed relationships among them. While these relationships are depicted as though they are causal, it should be recognized that most of the research on which the model is predicated has been conducted using correlational methods. Thus, although the various groups of variables are in fact proposed to operate by exerting pressure in the directions indicated, longitudinal research would be required to begin to assess anything other than direct and indirect associations among the groups of variables.

The first group are background variables believed to affect life choices, pressures, arrangements, etc. These include age, sex, job status, job tenure, income, education, presence of children in the household, marital status and employment status of spouse. While these variables are not of central interest in

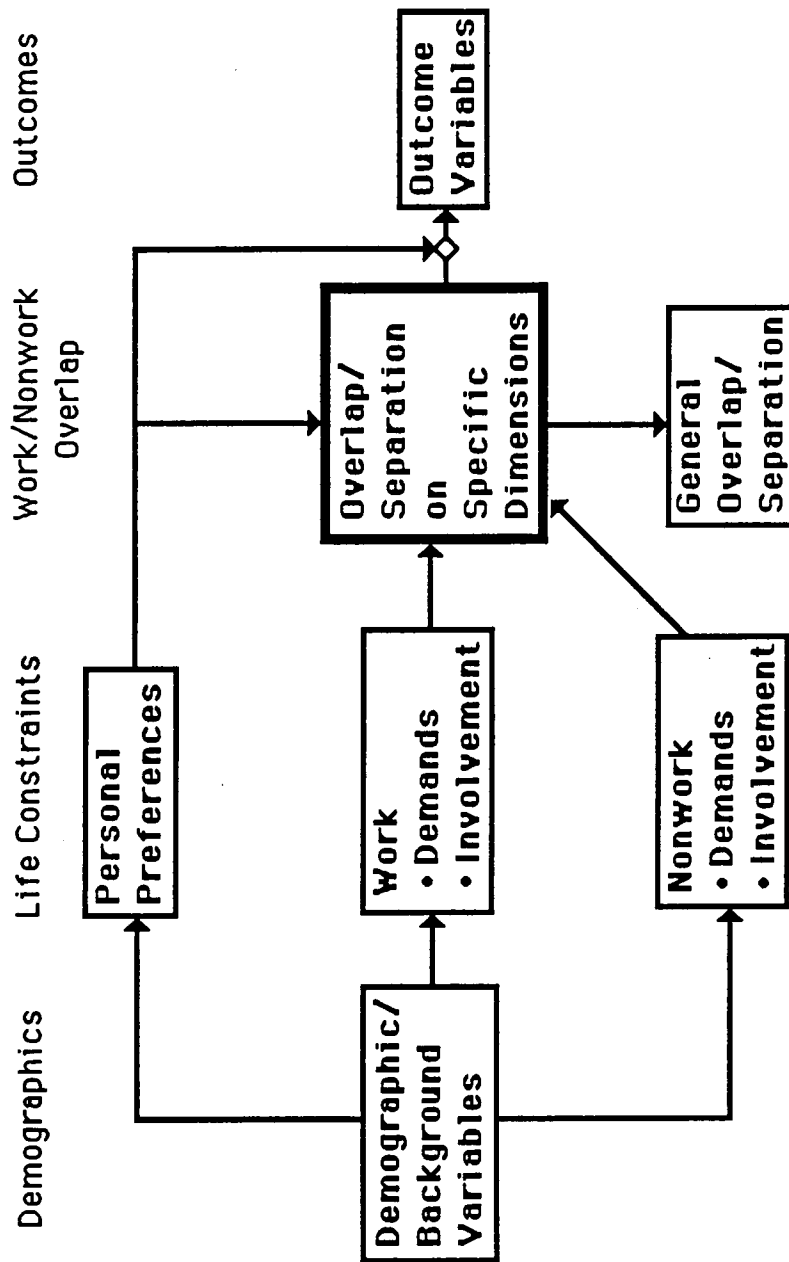


Figure 1. Overview of proposed model.

this investigation, each of them has been found to be related to expectations of individuals in their work and nonwork roles. These variables are expected to relate in predictable ways to the constraints and choices depicted in the second group of variables. For instance, as discussed above, job status is one good indicator of the level of job involvement and of job expectations, while sex has been shown to be linked to job choice and to perceived expectations in home and family roles. Marital status, spouse employment, and presence of children all have implications for the ways in which individuals prefer to and/or are constrained to spend their time, while age and job tenure also have implications for the relative priorities which are set among various roles. Income and education are two measures of the resources which individuals have available to achieve their desired lifestyles. It is therefore proposed that, as a group, these variables will affect each of the three subsets of variables in the second group (termed "Life Constraints").

The Life Constraint variables represent the three classes of constraints and forces presumed to be operating on the lifestyle choices which individuals make. In a sense, they represent three important roles (or groups of roles) held by each individual: work, nonwork (which could include family, friends, and other extra-work role senders) and self. The "self" domain is represented by personal preferences; one's view of how the ideal lifespace would look. The work and nonwork domains are each represented by a set of variables characterizing forces in those domains which have

been empirically or theoretically linked to life arrangements. In the work domain, for instance, the expectations and demands of the job are expected to be important, as are such practical limitations as the portability of work and the amount of control one has. Also included in this set of variables is a measure of job involvement, which is an indicator of the relative importance of this domain. Similarly, for the nonwork domain, variables include measures of the extent to which demands or conditions in and outside of the home constrain lifestyle choices with respect to the overlap of work and nonwork domains. Included here, too, is a measure of domain involvement.

The next stage of the model represents the constellation of life arrangements which are potentially related to the preferences and constraints characterized as "Life Constraints". Analyses of pilot data (see Appendix A for a summary report) indicate that there are eight distinct dimensions characterizing this space; these dimensions appear to reflect many of those suggested in the literature summarized above, including time, space, people, work thoughts, family involvement, etc. Although items which would have supported this were not included in the pilot study, it is also anticipated, based on the literature discussed above, that the domains of work and nonwork can overlap on a ninth dimension, activities, as well. This stage of the model also includes a representation of global overlap, which is believed to be a subjective summary of overlap on the specific

dimensions, similar to the fashion in which life satisfaction is a summary of satisfaction with specific life domains.

The final stage of the model posits relationships between overlap dimensions and several outcomes which are of interest to researchers in this field. The first is overall life satisfaction, which is, as mentioned briefly above, a global summation of domain satisfactions. The second and third included are work and nonwork satisfaction, since it is believed that each of these is primarily affected by the events occurring in the corresponding domain. The final outcome is work/nonwork conflict. Each of these dimensions is potentially related to the question of life space structure. Lee (1984) found few consistent satisfaction differences among individuals with differing life structures, although she proposes that the goodness of fit, or congruence, between certain life characteristics and one's chosen structure will be reflected in satisfaction. It is therefore proposed that the congruence between desired and actual structure will affect happiness. Further, it is suggested that there is nothing intrinsically more or less satisfying in specific degrees of overlap, and that there will consequently be little or no relationship between dimension overlap and any of the outcome measures.

The model positing summation of domain satisfactions into an overall sense of life satisfaction has received a good deal of support, although it is not exactly clear how the domain satisfactions are combined. The final proposal embodied in this

model is as follows: that one factor affecting their combination is the degree of overlap between the two domains; to the extent that work and nonwork are perceived as less independent (or, in other words, as more overlapping), it is suggested that work and nonwork satisfaction will be less independent in their relationship to life satisfaction.

Hypotheses

Preliminary Investigation

It is expected that the demographic variables--sex, age, income, marital status, presence of children, job status, job tenure, income, and spouse's employment--will account for significant amounts of variance in the Life Constraint variables. If so, the set of demographic variables will be used as covariates in analyses where appropriate to control for their effects.

Dimensionality of Work/Nonwork Overlap

Research question #1. Overlap is not a unitary construct; in other words, there are several dimensions of work/nonwork overlap which can be conceptually distinguished. With the exception of the addition of the "activities" dimension, these will replicate the dimensions identified in the pilot study (Appendix A)

This prediction is based on the fact that researchers have consistently mentioned several specific forms of overlap which are distinguishable from one another. Strictly speaking, this is

not a hypothesis amenable to statistical inquiry; while factor analysis can be used to determine the nature of the underlying dimensions, it can not unequivocally answer questions of similarity and difference among constructs.

Relationships among Various Dimensions of Overlap

Hypothesis 1. Global overlap will be significantly correlated with all specific dimensions of overlap.

The initial notion with which this investigation began focused on a general sense of work and nonwork as being fused or separate. It is believed that the specific dimensions identified contribute to the understanding of this general sense of how much work and nonwork overlap; in other words, this feeling is not just tied to one or two specific forms of overlap, nor is it completely independent of the specific dimensions on which work and nonwork can converge.

Relationships between Life Constraint Variables and Dimensions of Overlap.

Hypothesis 2. Work demands and constraints will be significantly related to overlap on each of the specific dimensions and to general overlap.

This hypothesis has received much support in the literature; this addresses the idea of "occupational determinateness", or the extent to which characteristics of one's job are related to the ways in which one arranges one's life.

Hypothesis 3. Nonwork demands and constraints will be significantly related to overlap on each of the specific dimensions and to general overlap.

It is hypothesized that characteristics of the nonwork environment will also show a relationship to life space structures--many elements of the nonwork domain (spouse, children, aspects of the home environment, friends, other commitments, etc.) are potentially related to the ways in which work and nonwork are arranged.

Hypothesis 4. Personal preferences for overlap on each specific and general dimension will be positively and significantly related to actual overlap on the dimension.

This hypothesis suggests that there are individual characteristics and other unmeasured variables that lead individuals to value one type of life structure over another, and that these preferences are related to actual structures, either in the sense of affecting choices, or in the sense that people change their ideals and expectations to conform to reality.

Relative Contribution of Life Constraint Variable Sets to Overlap Dimensions

Research question #2. The unique contribution of each set of Life Constraint variables to each overlap dimension will be assessed, as will the joint contribution of the three sets, in an attempt to understand the extent to which the three groups of

variables give nonredundant information about the degree of overlap reported by individuals.

Relationships of Overlap Dimensions to Outcome Variables

General and specific types of overlap are predicted to be related to life satisfaction, job satisfaction, nonwork satisfaction and work/nonwork conflict in several different ways.

Hypothesis 5. Outcomes will be unrelated to degree of overlap on specific and general dimensions.

Hypothesis 6. Congruence of personal preference for overlap with actual degree of overlap across all factors will be positively related to life, job and nonwork satisfaction, and negatively related to work/nonwork conflict.

The extent to which individuals perceive their lives as being ideally arranged should be predictive of satisfaction--none of the lifestyle arrangements described by the dimensions of overlap are proposed, in and of themselves, to be intrinsically good (thus Hypothesis 5). Their effects, rather, should come from how well they suit the particular needs of each individual (Hypothesis 6).

Hypothesis 7. The structure of life satisfaction will vary, depending on the degree of work/nonwork overlap, such that:

(a) Job satisfaction and nonwork satisfaction will be more independent in their relationship to life satisfaction for individuals with lower degrees of work/nonwork overlap and

(b) individuals who show more overlap will display (i) a stronger job satisfaction/life satisfaction relationship and (ii) a weaker nonwork satisfaction/life satisfaction relationship than will those with less overlap.

This hypothesis springs from the idea that there are characteristic differences among individuals with high and low degrees of overlap in how they perceive the two domains. Those for whom the domains are highly overlapped should be less able to separate them in evaluating satisfaction, while those who keep them structurally separate should be more likely to keep them cognitively separate as well.

Furthermore, in keeping with the conceptualization of overlap as an expression of job involvement suggested in the literature reviewed above, part (b) of this hypothesis suggests that overlap may be a behavioral reflection of job involvement, and that it may show a moderator effect on the job satisfaction/life satisfaction relationship similar to that found by Steiner and Truxillo (1987). The converse relationship, that overlap shows low nonwork involvement and that this may moderate the nonwork satisfaction/life satisfaction relationship, is also proposed.

Summary of Hypotheses

1. Global overlap will be significantly correlated with all specific dimensions of overlap.
2. Work demands and constraints will be significantly related to overlap on each of the specific dimensions and to global overlap.

3. Nonwork demands and constraints will be significantly related to overlap on each of the specific dimensions and to global overlap.
4. Personal preferences for overlap on each specific and general dimension will be positively and significantly related to actual overlap on the dimension.
5. Outcomes will be unrelated to degree of overlap on specific and general dimensions.
6. Congruence of personal preference for overlap with actual degree of overlap across all factors will be positively related to life, job and nonwork satisfaction, and negatively related to work/nonwork conflict.
7. The structure of life satisfaction will vary, depending on the degree of work/nonwork overlap, such that:
 - (a) Job satisfaction and nonwork satisfaction will be more independent in their relationship to life satisfaction for individuals with lower degrees of work/nonwork overlap and
 - (b) individuals who show more overlap will display (i) a stronger job satisfaction/life satisfaction relationship and (ii) a weaker nonwork satisfaction/life satisfaction relationship than will those with less overlap.

CHAPTER III

METHODOLOGY

Participants

The participants in this study were working adults from several local organizations. The occupations represented were chosen to include professions with varying degrees of personal freedom in working hours and portability of work, and an attempt was made to locate occupations which would include both male and female incumbents. Besides the requirement of full-time employment, an additional restriction, that respondents must be married/living with a partner and/or have at least one child living in the home, was placed on the sample, in order to assure that all respondents had a domain of "family" to which they could refer. A brief description of each organization follows, with information about the number of respondents, response rate, and method of data collection for each.

The first group comprised 150 teachers employed by a county school system. Names were obtained from the director of the system and surveys were mailed to the home addresses of these individuals. Each survey included a cover letter (see Appendix B for a sample cover letter) and a postage-paid return envelope.

The second group comprised 150 individuals employed in a variety of business organizations. These names were obtained by

contacting the Rhea County, Tennessee, Chamber of Commerce, who provided the name of one contact person at each member business organization (generally the owner and/or manager). Surveys were mailed to the business address of each individual, and included a cover letter and a postage-paid return envelope.

The third group comprised 225 employees in two divisions at the Oak Ridge National Laboratory. The director of personnel was contacted and provided names of 75 employees in the personnel department and 150 employees in the environmental sciences division. A cover letter, survey, and postage-paid return envelope were sent via inter-office mail to these individuals.

The fourth group comprised 200 employees at the University of Tennessee Medical Center. The director of personnel was contacted and provided names of persons in a variety of positions including staff physicians, nurses, pharmacists and department heads. Surveys, including a cover letter and a campus mail envelope for return, were distributed through the campus mail system of the University of Tennessee.

The fifth and sixth groups comprised employees of the University of Tennessee. The director of personnel was contacted and provided the names of 100 clerical employees and 100 professors (at all levels), randomly selected from all such employees with the restriction that the departments of Management and Psychology be excluded. Surveys, including a cover letter and campus mail envelope for return, were

distributed through the University of Tennessee campus mail system.

A total of 338 usable surveys were obtained from the sources described above, yielding an overall response rate of 36.5%. Response rates by organization and total number of respondents from each organization are displayed in Table 1. A breakdown of the sample on demographic characteristics showed that 1) 137 of the respondents (40.7%) were male, 200 (59.3%) female (with one respondent declining to answer this question), 2) the mean age was 40.72, 3) the median educational level was a college degree, with 8% holding a high school degree, 26.7% having some college or a two-year degree, 20.8% a four-year college degree, 22% some graduate school or a Master's degree, and 22.3% a Ph.D., 4) mean number of hours and days worked were 44.96 and 5.03, respectively, 5) 307 (91.1%) were married or living with a partner, 6) 24.7% had one child, 24.1% had two children, and 7.7% had three or more children, and 18.2% reported having a dependent person, other than a child under 18, in the household, and 7) mean occupational prestige was 57.44 on a scale with mean 50 and s.d. 10 (N.O.R.C., 1965) and 8) median household income of \$40-50,000 (77.3% of respondents had a spouse who also worked). Table 2 shows the distribution of respondents by occupational category.

Table 1. Breakdown of Response Rates by Group

Group	# Sent	# Returned	% Response	% of Total Sample
Chamber of Commerce	150	33	22	10
Primary/Secondary Teachers	150	36	24	11
U. of Tenn. Hospital	200	75	38	22
Oak Ridge National Lab	225	101	45	30
U. of Tenn. Professors	100	41	41	12
U. of Tenn. Clerical	100	52	52	15
Total	925	338	37	100

Table 2. Breakdown of Respondents by Occupational Category

Occupational Category ^a	Number of Respondents	% of Sample
Professional/Technical	199	59
Managers/Administrators	46	14
Clerical and Related	86	25
Other	7	2
All	338	100

Procedure

Data were collected by means of a survey questionnaire. The questionnaire, which took approximately 30-45 minutes to complete, was distributed to employees of the organizations described above. Respondents returned the surveys in postage-paid or campus mail envelopes to the author at her university address. Participation in the study was voluntary, confidentiality was assured through anonymity, and a summary of findings was offered to any respondent who requested it.

The questionnaire was designed to measure the following variables: Work and Nonwork Demands/Constraints, Personal Preferences for Work/Nonwork Overlap, Overlap of Work and Nonwork on specific and global dimensions, Work/Nonwork Conflict and Nonwork, Job and Life Satisfaction. A number of demographic variables were also included. Existing measures with known validity and reliability were used where possible, and a number of measures were developed specifically for this research. The entire questionnaire is presented in Appendix B, along with a sample cover letter.

Measures

Life Constraint Variables

Work demands/constraints. The various factors identified in the literature review as being potentially related to overlap were measured by a scale developed specifically for this study. Three autonomy items were adapted from Hackman & Lawler (1971). Three items assessing subjective quantitative work load were adapted from Caplan (1971). Eleven additional items were developed by the author, addressing 1) the degree of control over hours and days worked (two items), 2) expectations in terms of business-related entertaining, travel, workload and taking work home (six items), and 3) limitations and constraints on taking work home due to portability and confidentiality (three items). The entire scale is presented in Appendix B. Respondents indicated the extent to which they agreed that each statement was true about their job using a seven-point Likert-type format with anchors as follows: 1-Strongly Disagree, 2-Disagree, 3-Tend to Disagree, 4-Neutral, 5-Tend to Agree, 6-Agree, 7-Strongly Agree.

Nonwork demands/constraints. The extent to which expectations and constraints in the nonwork sphere affect the relationship between the two domains was measured by a scale developed for this study. Six items written by the author addressed the conduciveness of the home environment to getting

work done (two items), expectations and responsibilities requiring limiting or strictly scheduling work time (two items), necessity of taking time away from work (one item), and degree of control over time at home (one item). An additional item asked whether family members work at the same place or in the same field as the respondent. While a number of more specific items addressing particular forms of constraint related to family relationships, organizational memberships, etc. could have been included, it was felt that a set of fairly general items would be more universally applicable. The entire scale is presented in Appendix B. The extent of agreement with each statement as a descriptor of nonwork life was indicated using the seven-point Strongly Disagree/Strongly Agree format described above. The dimensionality of this scale and the preceding one were investigated as part of the preliminary analysis and presented in Chapter IV.

Personal preferences concerning work/nonwork overlap. The degree to which the respondent's ideal lifestyle would be arranged to have work and nonwork overlapped/separated on the specific and global dimensions addressed in this study was assessed by a scale developed for the purposes of this study. Twenty items describing possible ways of arranging the work/nonwork boundary with respect to the dimensions earlier hypothesized were formulated by the author, and are displayed in Appendix B. As

above, the extent of agreement with each statement was indicated using the seven-point Strongly Disagree/Strongly Agree format.

Involvement in Work and Nonwork.

Two parallel seven-item scales were developed to measure the extent to which respondents were involved in the domains of work and nonwork. Items for the work involvement scale were adapted from Lodahl and Kejner (1965), incorporating items tapping both involvement as a central life interest and involvement as crucial to self-esteem. Deliberately excluded were items measuring work involvement as a willingness to put extra time in on the job, as one of the problems with previous research in this area was identified as being the untested assumption that overlap is a manifestation of job involvement. A nonwork involvement scale was then developed by rewording the work involvement items to refer to off-the-job activities. The two scales are presented in Appendix B. Respondents were asked to indicate the degree to which they felt each of the items was true about them using a seven-point format with the Strongly Disagree/Strongly Agree anchors described above.

Work/Nonwork Overlap

Specific dimensions of overlap. The degree to which the domains of work and nonwork were perceived as overlapping on the various dimensions identified in the literature review was measured on a scale developed for this study. Based on pilot work

(described in Appendix A), eight dimensions were identified. The dimension of Schedule Variability was assessed by five items addressing the extent to which the respondent perceived his/her work schedule as being variable, including such sources of variability as being on call and receiving work phone calls at home. The dimension of Socializing with Co-Workers was assessed by four items addressing the frequency with which the respondent perceived him/herself as taking part in social and entertainment activities with people from work. The dimension of Activity Similarity was tapped by four items regarding the degree to which work activities and nonwork activities were perceived as similar. The dimension of Family Involvement was addressed by three items regarding the frequency with which the respondent discussed work with members of his or her family. The dimension of Thinking about Work comprised four items regarding the frequency with which the respondent had thoughts about work when not at work. The dimension of Nonwork in the Workplace included five items which addressing the frequency with which nonwork (e.g. family, friends) is present on the workplace, either in terms of thoughts or actual presence. The dimension of Travel comprised three items asking about the frequency with which the respondent traveled on work-related business. The dimension of Workspace at Home included three items assessing the extent to which work was done in the home environment. The dimension of Mental Transition included two items regarding the frequency with which commuting time to and

from work was used to make a mental transition between the domains of work and nonwork. With the exception of two items from the Workspace at Home subscale, all of the items were designed to be rated on a 5-point Likert-type format with anchors as follows: 1-Never 2-Rarely 3-Sometimes 4-Frequently 5-Always. The entire scale is presented in Appendix B. The dimension factor structure obtained in this investigation was, as previously mentioned, hypothesized to follow that outlined above.

Global overlap. The overall degree to which the domains of work and nonwork were perceived to overlap was measured by a three-item scale developed for this study by the author. The three items addressed the degree to which the respondent saw him/herself as keeping the two domains separate, without reference to any particular dimension or set of dimensions. In the pilot study, described in Appendix A, the internal consistency reliability of this scale (using Cronbach's alpha) was computed to be .74. The scale is presented in Appendix B.

Potential Outcomes of Work/Nonwork Overlap

Work/nonwork conflict. Five items assessing the degree to which the respondent perceived the domains of work and nonwork to be in conflict with one another (making incompatible demands or interfering with one another) were adapted from Thompson (1985). The seven-point Strongly Disagree/Strongly

Agree format described under "Work Demands/Constraints" above was used for these items. Coefficient alpha for this scale was .77. This scale is presented in Appendix B.

Nonwork satisfaction. Satisfaction with a number of specific aspects of life was measured using a seventeen-item scale adapted from Andrews & Withey (1976). Each item addressed a specific aspect of the nonwork domain (e.g., "Your children", "The amount of relaxation in your life", "Groups or organizations you belong to"). For each item, respondents were asked to indicate the adjective which best described how they felt about that aspect of their life using a 7-point response format with the following anchors: "1--Extremely Unhappy",..."2--Unhappy", "3--Mostly Unhappy", "4--Mixed", "5--Mostly Pleased", "6--Pleased", and "7--Extremely Pleased". An alternative response, "NA--Not Applicable", was provided although instructions requested respondents to use this choice only if absolutely necessary. The entire scale is presented in Appendix B.

Job satisfaction. Seven items from Andrews and Withey (1976) were used to assess job satisfaction. Six of these items mentioned specific aspects of the job (e.g., "Your co-workers", "The supervision you receive") while the final item asked about "Your job as a whole". The seven-point response format described under Nonwork Satisfaction was used. The entire scale is presented in Appendix B.

Life satisfaction. Global life satisfaction was tapped by two items: the final item in the Nonwork Satisfaction scale, which read "Overall, how satisfied are you with your life as a whole", and a 7-point semantic differential scale with anchors "satisfying" and "dissatisfying". Responses to these items were standardized and summed.

Demographic Information

Respondents were asked to indicate their age, sex, marital status, highest level of education completed (coded into one of seven categories ranging from "some grade school" to "Ph.D. or equivalent professional degree"; see Appendix B for all categories used), working status of spouse, and whether or not they had children under 18 in the home. Also collected was job-related information including job title, which was used to determine occupational status as defined by the N.O.R.C. rating scale (National Data Program for the Social Sciences, 1972), tenure, and total family income (coded into one of 12 categories ranging from "below \$5,000" to "\$70,000 or more"; see Appendix B for all categories used).

CHAPTER IV

RESULTS

Analyses

Prior to hypothesis testing, factor analytic techniques using SAS PROC FACTOR (SAS Institute, 1982) were utilized to determine the dimensionality of several of the measures used. Hypothesis testing principally employed hierarchical multiple regression analyses (Cohen & Cohen, 1975) which were performed using SPSS/PC+ (Norusis, 1986). The default alpha level used was .05, with one-tailed and two-tailed tests used as appropriate depending on the specificity of the hypotheses. To determine the statistical power (i.e. ability to reject the null hypothesis when it is in fact false) achieved in the analyses, power analyses were computed for four different classes of analyses using the techniques described by Cohen (1977). In each case a small to medium effect size was estimated and an alpha level of .05 was set. For bivariate relationships, using a two-tailed alpha and $r=.20$, the sample size ($n=338$) is adequate to provide a power of approximately .94. For multiple regression analyses, the first case, with one set of nine variables and f^2 estimated at .05, has power of approximately .81. The second case, with two sets of nine variables entered hierarchically and f^2 for variance contributed by the second set estimated at .05, also has power estimated at .81. The third case, with three sets of two variables

each entered hierarchically and f^2 estimated at .05, has power of at least .96. It should be noted, however, that the power estimates addressing multiple regression analyses, while valid for each set of variables entered, may not accurately represent the power of the analyses for the individual independent variables in cases of high multicollinearity among the measures.

Factorial Composition of Measures

The first stage of the analysis involved the determination of the factorial composition of several of the newly-developed measures. In each case, the factor analysis method chosen was Image analysis with Harris-Kaiser rotation. Image analysis (Harman, 1976) considers only the variability in each variable which can be accounted for by the other variables in the analysis (i.e. the squared multiple correlation of each variable with all others is used as the communality estimate, thus excluding unique and error variance). The Harris-Kaiser rotation (Harris & Kaiser, 1964) is a method of oblique rotation designed specifically to identify clusters of variables in which (ideally) each variable loads approximately 1.0 on one factor and all other entries are zero. Since the rotation is not constrained to orthogonality, the factors are allowed to be correlated.

The approximate number of factors in each case was determined on the basis of theory and an inspection of the eigenvalues (using variance accounted for and a scree plot), while the final solution was chosen on the basis of interpretability and

meaningfulness of the factors given the constraints established in the first step. In general, a criterion of .40 was used as the minimum acceptable factor pattern coefficient.

Factorial Structure of Overlap Dimensions

The thirty-four items comprising the Specific Dimensions of Overlap scale were factor analyzed using the above-described procedure. Nine factors were identified, and are summarized in Table 3. The factor pattern matrix is shown, along with the initial and final communalities and the percentage of common variance accounted for by each of the factors (both partial and part correlations). Because of factor intercorrelations (which are presented under Research Issue #1 below), it is not possible to identify the unique proportion of variance accounted for by each factor. Collectively, the 9 factors explain 61.8% of the variance in the initial correlation matrix.

Factor 1 had seven items with coefficients $>.40$. These items all addressed nonwork elements present in the workplace (e.g. "When I am working, I take time to talk to family members."). Thus, this factor appeared, as in the pilot study, to measure the presence of nonwork in the workplace in a variety of forms and was termed "Nonwork in the Workplace". This was the only factor involving the overlap of nonwork thoughts and activities to the work milieu, with each of the other factors reflecting a specific aspect of the overlap of work outside the workplace. Internal consistency reliability as measured by coefficient alpha

Table 3. Rotated Factor Pattern Matrix for Work/Nonwork Overlap Items

Item	Initial		Factor Pattern Coefficients								
	h ²	h ² Final	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
When I am working, I take time to talk to family members.	.37	.53	.69	.15	-.13	-.10	-.03	-.03	.13	-.06	-.05
When I am working, I take time to talk to friends.	.31	.48	.68	.07	-.10	-.02	.13	-.13	-.09	.07	-.06
I switch back and forth from working to doing other (nonwork) things.	.36	.49	.62	-.16	.10	.14	-.11	.06	-.04	.04	.11
I take time away from work to do nonwork-related activities.	.27	.39	.52	-.23	.28	-.21	-.00	.17	.00	-.09	.04
Friends or family...stop by my place of employment to see me.	.30	.41	.52	.31	.00	-.05	.06	.12	-.07	-.08	-.05
When I am at work, I think about home and family.	.26	.40	.50	-.18	-.41	.23	-.20	-.09	.17	.07	.10
I get phone calls at work that are primarily related to nonwork.	.23	.26	.49	-.08	.02	-.07	.08	-.07	.04	.07	-.04
I am "on call" for my job.	.44	.76	.09	.84	-.07	.17	-.02	-.00	-.09	.02	-.02
I carry a "beeper" when I am away from the office.	.28	.51	-.14	.74	.05	-.24	-.04	.04	.09	-.05	.02
I work at my home.	.58	.73	-.03	-.02	.88	-.01	-.04	.01	-.00	.04	-.03
I don't distinguish between work space and living space.	.35	.38	.04	-.22	-.52	-.01	.02	.08	-.03	.09	-.09
I do most of my work at home.	.60	.76	.03	.11	-.75	-.21	.02	.11	-.01	-.00	-.07

Table 3. (Continued)

Item	Initial		Factor Pattern Coefficients								
	h^2	Final h^2	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
When I am not at work, I think about work.	.58	.72	-.07	-.01	.05	.81	-.01	-.04	.11	-.08	.05
When I am not working, I come up with a work-related thought or idea.	.56	.64	.10	.05	.12	.62	.06	.06	-.10	.06	.05
I stop thinking about work completely when I am at home.	.46	.55	.04	-.03	-.03	-.68	-.06	-.04	-.10	-.01	.17
I socialize off the job with people related to my work.	.61	.87	-.01	-.03	.09	-.11	.92	-.08	.13	.00	-.00
I take part in recreational activities with people from work.	.51	.69	-.00	-.06	-.14	.15	.86	-.03	-.10	.01	-.03
I eat meals away from home...with people from work.	.35	.39	.06	.07	-.01	.08	.54	.10	-.11	.05	-.02
I entertain business associates off the job.	.47	.54	-.03	.15	-.01	.05	.48	.02	-.08	-.00	.32
I use commuting time on the way home to "wrap up" work for the day.	.64	.87	-.06	.05	.08	-.17	-.04	.95	.11	-.03	-.02
I use commuting time on the way to work to prepare for work.	.66	.89	.05	-.02	-.14	.21	-.03	.90	-.09	.02	.05
My family and I discuss what goes on in my job.	.68	.86	.04	-.00	-.04	.09	-.03	-.01	.87	.02	.07
I discuss my work with my spouse.	.61	.73	.02	-.11	.06	.02	.05	.05	.84	-.04	-.04
I discuss my work with other family members.	.46	.53	-.07	.06	-.07	-.01	-.01	.08	.73	-.01	-.13
When I am at a party or social event, I talk about work-related matters.	.55	.57	.10	.18	.12	.11	.05	-.10	.43	.13	.11

Table 3. (Continued)

Item	Initial		Factor Pattern Coefficients								
	h ²	Final h ²	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9
My work activities and my leisure activities have a lot in common.	.72	.87	-.06	.05	.03	-.08	.03	-.07	.07	.92	.06
Things that I do when I'm not working are like the work I do on my job.	.69	.84	.05	-.04	.13	-.20	.10	.12	-.04	.90	-.05
The kinds of things I do on my job are also the kinds of things I like to do off the job.	.62	.75	.05	-.11	-.05	.21	-.08	-.07	-.07	.86	-.03
The skills and abilities I use on my job are also used for things that I do off the job.	.43	.52	-.07	.15	-.25	.16	-.05	.04	.07	.67	.00
I travel for work-related reasons.	.80	.95	-.03	.04	.11	-.05	-.05	-.02	.06	-.02	.95
I spend nights away from home on work-related trips.	.73	.83	.02	-.01	-.16	.08	.06	.01	-.14	.02	.93
I'm "on the road" as part of my job.	.55	.61	.02	-.11	.10	-.08	-.02	.08	.08	-.03	.76
Percent of variance accounted for by each factor:											
Part (Unique variance only)			6.4%	4.2%	2.9%	2.5%	5.2%	4.6%	4.8%	5.4%	5.3%
Partial (Includes shared variance)			9.2%	9.5%	15.2%	15.6%	10.6%	9.1%	10.9%	15.1%	13.1%
Total Variance Accounted for=61.8%											

(Cronbach, 1951) was .67, slightly below the .70 guideline suggested by Nunnally (1977) as adequate for exploratory research on a measure.

Factor 2 had two items with coefficients $>.40$. These items described being on call and carrying a beeper, both of which are theoretically related to the unpredictability of work schedule overlap into nonwork time; this factor was thus entitled "Schedule Unpredictability". This factor was directly comparable to one of the pilot factors, although in that analysis several other items addressing schedule variability were grouped with these two. The difference may be attributable to the larger proportion of pilot subjects on shiftwork or other variable schedules. Coefficient alpha was .58, which is unacceptably low, probably due in part to the small number of items making up this factor.

Factor 3 had three items with primary coefficients $>.40$, all addressing the extent to which work is carried out in the home space. (An additional item with a secondary coefficient of $-.40$ was not included as it did not contribute to internal consistency). This factor also had a counterpart in the pilot study, and was termed "Work Space in the Home". Coefficient alpha was .77.

Factor 4 contained three items with pattern coefficients $>.40$. All of the items clearly addressed the prevalence of work thoughts while not at work, with one item worded in terms of "turning off" work thoughts loading negatively, so this factor was named "Work Thoughts off the Job". It also corresponded to a pilot

factor, and was determined to have internal consistency reliability of .78.

Factor 5 comprised four items. Each of these dealt with some aspect of social life off the job which involved people associated with work--e.g., "I socialize off the job with people related to my work" and "I take part in recreational activities with people from work". This factor, as in the pilot study, was titled "Socializing with Co-workers". Coefficient alpha was .77.

Factor 6, identical to one of the eight pilot factors, incorporated two items directly addressing the use of commuting time on the way to and from work to prepare for work and to wrap up work for the day--in effect, using this time to make a mental transition between the two spheres. This factor was named "Commuting as a Mental Transition", and showed a coefficient alpha of .87.

Factor 7 had four items with $>.40$ coefficients; the three highest-loading items all addressed the extent to which the respondent discussed work with spouse and family, while the fourth read "When I am at a party or social event, I talk about work-related matters". This factor also reflected one of the pilot factors, and was named "Discussing Work with Family". Coefficient alpha for this scale was .81.

Factor 8 included each of the four items added to the scale after the pilot investigation. Each of these items addressed the similarity of work and leisure activities (both in general terms and in terms of skills and abilities used). This factor was titled

"Similarity of Work and Nonwork Activities". Coefficient alpha was computed to be .86.

Finally, Factor 9 incorporated three items, tapping business-related travel (both general and overnight). This factor was also found in the pilot study, and was named "Business Travel". It showed an alpha of .87.

As expected, these factors corresponded to those identified in the pilot study with the addition of the Activity Similarity factor.

Factorial Structure of Global Overlap

The four items addressing Global Overlap/Separation were analyzed separately. As in the pilot study, three of these items comprised one factor, which explained 50.4% of the variance in the original matrix. This factor was termed "Global Overlap", and coefficient alpha was determined to be .75.

Factorial Structure of Work Demands/Constraints

Seventeen items were factor analyzed using the technique described above. Five factors were extracted using the procedure described above. The factor pattern matrix, initial and final communalities, and percent of variance accounted for are presented in Table 4.

The first factor contained the three items from Hackman and Lawler's (1971) Autonomy/Control scale, addressing the degree of

Table 4. Rotated Factor Pattern Matrix for Work Demand Items

Item	Initial h ²	Final h ²	Factor Pattern Coefficients				
			Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
I have the freedom to do pretty much what I want on my job.	.39	.67	.80	-.09	-.02	-.03	.10
I have a lot of autonomy on my job--I am "on my own".	.35	.61	.79	-.06	.03	.00	-.02
My job gives me the opportunity for independent thought and action.	.38	.60	.73	.14	.07	-.05	-.02
My job is one in which I am expected to do a lot of work.	.44	.71	-.12	.91	-.05	-.12	.01
There are a lot of things I need to do on my job.	.34	.54	.04	.79	-.06	-.17	.03
I have a lot of projects or assignments on my job.	.28	.38	.05	.63	-.04	-.03	-.09
People in my position are expected to work more than 40 hours per week.	.63	.70	.14	.60	.10	.23	.04
On my job, there is a lot of paperwork or other work that could be done away from my workplace.	.55	.77	.03	.05	.86	-.00	-.13
People in my job are expected to take work home.	.72	.86	-.11	.40	.58	.24	.01
I do work that is high security or confidential--I can't talk about it with friends or family.	.13	.21	.10	.17	-.52	.04	-.04
The kind of work I do can't physically be taken anywhere--it wouldn't be possible for me to work at home.	.43	.67	-.09	.16	-.85	.16	-.10
People in my position are expected to do business-related entertaining at home.	.70	.90	-.10	-.10	-.03	1.02	-.01
People in my position are expected to do business-related entertaining away from home.	.72	.89	.01	-.07	-.06	.97	.04
People in my position are expected to travel a lot.	.51	.58	.18	.09	.08	.58	.04
People in my position are expected to belong to certain clubs or mix in particular social circles.	.25	.27	.13	.26	-.09	.37	-.12
I have control over the hours I work.	.67	.93	.03	-.01	.11	-.00	.93
I have control over the days I work.	.63	.85	.02	.02	-.13	.03	.92
Percent of variance accounted for:							
Part (Unique variance only)			8.1%	11.9%	9.4%	11.5%	8.4%
Partial (Includes shared variance)			17.6%	19.9%	18.7%	21.5%	14.4%
Total variance accounted for=65.4%							

autonomy the individual experienced on the job. It was therefore titled "Autonomy". Coefficient alpha for this scale was .71.

The second factor included the three items from Caplan's (1971) Quantitative Work Load Scale, plus one item reading "People in my position are expected to work more than 40 hours per week". In addition, the item "People in my position are expected to take work home" had a secondary coefficient of .40 on this factor, but this item did not contribute to internal consistency reliability and therefore was excluded. This factor was termed "Workload", with coefficient alpha computed to be .70.

The third factor included four items which have in common the degree to which one's work is such that one could physically take it away from the workplace and/or discuss it with other people. This factor was termed "Work Portability". Coefficient alpha for this scale was .72.

The fourth factor had three items with coefficients of $>.40$, tapping the extent to which the respondent was expected to do business-related entertaining and traveling, and one item with a coefficient of .37, retained on the basis of its contribution to internal consistency, which read "People in my position are expected to belong to certain clubs or organizations, or to mix in particular social circles." This factor was titled "Off-the-Job Expectations". Coefficient alpha was determined to be .79.

The fifth factor included two items assessing the degree of control the individual had over his/her work hours and days. This

was titled "Schedule Control". Coefficient alpha for this scale was .87.

Factorial Structure of Nonwork Demands/Constraints

Seven items developed for this study were analyzed using the procedure described above. As discussed in the development of the model, the nonwork domain contains a variety of elements which vary across persons, thus the limitations imposed in this domain must be stated in very general terms so as to apply to all individuals. The two factors which emerged in this analysis reflect this deliberate generality; the first included three items bearing on the presence or absence of limitations imposed by the home environment regarding work overlap (family reactions, degree of control over how time at home is spent) and was titled "Unfavorable Home Environment". Coefficient alpha for this scale was computed to be .62, which is somewhat lower than desired.

The second factor included three items which asked about responsibilities/expectations in the nonwork domain requiring limitations on work time or accommodation in the work schedule. This was termed "Nonwork Demands". Coefficient alpha for this scale was .71.

The seventh item, "Members of my family work at the same place or in the same field as I do", did not load on either of the factors but was considered theoretically important and thus was retained and labeled "Family Member in Similar Work", although there is no means of estimating the reliability of this one-item

measure. The factor pattern matrix and other relevant statistics are presented in Table 5.

Personal Preference Dimensions

One general and nine specific personal preference dimensions were constructed on a rational basis to correspond to the overlap dimensions outlined above. The items comprising each dimension are as follows, with item numbers referring to the Personal Preference scale in Appendix A: Nonwork in the Workplace: Items 3, 5 and 8; Work Space in the Home, 1 and 17; Work Thoughts off the Job, 7 and 10 (reversed); Socializing with Co-Workers, 2 and 18; Discussing Work with Family, 4 and 13; Activity Similarity, 12 and 15; Business Travel, 9 and 19; Schedule Unpredictability, 6 and 16; Commuting as a Transition, 20; and Global Overlap, 11 and 14 (reversed). Two of the personal preference dimensions, Desired Activity Similarity and Desired Schedule Flexibility, had unacceptably low reliabilities (.49 and .27, respectively), with the others ranging from .81 to .86.

Descriptive Statistics on Study Variables

Because the overlap factor of Schedule Unpredictability had extremely low reliabilities for both actual and preferred overlap, it was decided to exclude this dimension from further analyses. All other variables were retained, with the proviso that results involving the factor "Personal Preference--Activity Similarity" be interpreted with extra caution due to its low reliability.

Table 5. Rotated Factor Pattern Matrix for Nonwork Demand Items

Item	Initial h ²	Final h ²	Factor Pattern Coefficients	
			Factor 1	Factor 2
Whether or not I actually do work at home, my home is an environment in which I <u>could</u> get work done.	.21	.59	.79	.07
I have a good deal of control over how time at home is spent.	.18	.48	.68	-.05
My bringing work home upsets or would upset my family.	.24	.62	-.77	.05
I have responsibilities or expectations at home or elsewhere that require me to leave work by a certain time each day.	.40	.78	.05	.90
I have responsibilities or expectations at home or elsewhere that require me to limit my working hours.	.41	.77	-.03	.87
I have responsibilities or expectations at home or elsewhere that sometimes make it necessary to take time away from work.	.19	.34	-.13	.53
Members of my family work at the same place or in the same field as I do.	.01	.03	.17	.11
Percent of variance accounted for:				
Part (Unique variance only)			22.0%	23.7%
Partial (Includes shared variance)			27.8%	29.6%
Total variance accounted for=51.6%				

Descriptive statistics for all the variables used in the study, along with internal consistency estimates of reliability (coefficient alpha) for each measure, are presented in Table 6. With exceptions as noted above, the reliabilities are acceptable for exploratory work. The several reliabilities below .70 are disappointing, and are undoubtedly related to inadequate numbers of items and lack of clarity in existing items of these measures. It should be noted that the low reliabilities will render findings involving them less trustworthy, as unreliability may serve either to increase or to decrease observed partial relationships (Cohen & Cohen, 1975), which are a primary focus of this investigation.

Intercorrelations among all the measures used in this study are presented in Appendix C.

Hypothesis Testing

Preliminary Investigation

Preliminary to the testing of the major hypotheses, the relationship of the demographic variables to the several sets of variables identified as potential antecedents of overlap was investigated. To simplify terminology, the variables addressing work demands, nonwork demands and personal preferences will be referred to as Life Constraint variables, since they constitute a collection of the various forms of constraint operating with relation to lifestyle choice.. As a means of verifying the expected relationships between the background variables and these

Table 6. Descriptive Statistics and Reliability Estimates for Study Variables

Measure (number of items)	Mean	Standard Deviation	Actual Score Range	Alpha ^a
Demographic Variables				
Age	40.73	9.56	22-70	NC
Education	4.97	1.64	1-7	NC
Income	8.47	2.67	2-12	NC
Job Status ^b	57.44	12.67	14-82	NC
Tenure	8.93	8.14	1-38	NC
Sex ^c	1.59	.49	1-2	NC
Marital Status ^d	1.09	.29	1-2	NC
Spouse Working ^e	1.29	.46	1-2	NC
Children At Home ^e	1.43	.50	1-2	NC
Antecedents of Work/Nonwork Overlap				
<u>Work Demands/Constraints</u>				
Autonomy (3)	4.97	1.22	1-7	.71
Work Load (4)	5.21	1.09	1.2-7	.70
Schedule Control (2)	3.36	1.77	1-7	.87
Off-Job Expectations (4)	2.64	1.24	1-7	.79
Work Portability (4)	4.44	1.41	1.2-7	.72
Job Involvement (6)	3.77	1.00	1.2-7	.80
<u>Nonwork Demands/Constraints</u>				
Unfavorable Home Environment (3)	5.10	1.14	1.7-7	.62
Nonwork Demands (3)	3.56	1.39	1-7	.71
Family in Field (1)	2.73	2.22	1-7	NC
Nonwork Involvement(6)	4.49	.98	1-7	.78
<u>Personal Preferences</u>				
Socializing with Co-Workers (2)	3.85	1.28	1-6.5	.81
Activity Similarity (2)	4.08	1.43	1-7	.49
Discussing Work with Family (2)	4.37	1.35	1-7	.82
Thinking about Work Off the Job(2)	3.46	1.50	1-7	.79
Nonwork in the Workplace (3)	4.20	1.10	1-7	.67
Business Travel (2)	3.83	1.60	1-7	.86
Work Space in the Home (2)	3.08	1.43	1-7	.64
Commuting as a Mental Transition (1)	4.19	1.66	1-7	NC
Global Overlap(2)	3.94	1.34	1-7	.63

Table 6. (Continued)

Measure (number of items)	Mean	Standard Deviation	Actual Score Range	Alpha ^a
Work/Nonwork Overlap				
<u>Specific Dimensions</u>				
Socializing with Co-Workers(4)	2.12	.71	1-4.5	.77
Activity Similarity (4)	2.35	.84	1-5	.86
Discussing Work with Family (4)	2.95	.80	1-5	.81
Thinking about Work Off the Job (3)	3.31	.90	1-5	.78
Nonwork in the Workplace (7)	2.52	.47	1.1-4.4	.67
Business Travel (3)	2.08	.99	1-5	.87
Work Space in the Home (3)	2.99	.82	1.7-4.5	.77
Commuting as a Mental Transition (2)	2.17	1.06	1-5	.87
<u>Global Overlap</u> (3)	3.75	1.31	1-7	.75
Outcomes of Work/Nonwork Overlap				
Work/Nonwork Conflict (5)	3.17	1.14	1-6.4	.77
Job Satisfaction (7)	5.04	.88	1.9-7	.79
Nonwork Satisfaction (17)	5.27	.67	2-7	.77
Life Satisfaction (2)	-.00	1.70	-5.7-2.7	.72

^a It is not possible to compute Cronbach's alpha for one-item measures. NC designates such measures.

^b Based on N.O.R.C. rating scale. Source: National Data Program For the Social Sciences (1972). Codebook for the Spring 1972 General Social Survey, Appendix F. (pp. 88-102). Chicago: University of Chicago National Opinion Research Center.

^c 1=male, 2=female

^d 1=married, 2=single

^e 1=yes, 2=no

variables, Pearson bivariate correlations were computed between the two sets. The results are displayed in Table 7. As expected, a large number of these relationships were significant.

To clarify the issue of variance accounted for by the demographic variable set, multiple regression analysis was used to determine the amount of variability in each of the Life Constraint variables attributable to, collectively, the nine demographic/background variables. Table 7 also shows the results of these analyses, including the percent of variance accounted for and the variables which contributed significantly to each equation. It should be noted that, due to the aforementioned multicollinearity among the predictors, the weights of these variables should be interpreted cautiously.

Overall, the amount of variability in the Life Constraint variables attributable to the demographic variables was quite high. The amount of variability in work demands accounted for ranged from 10% (Schedule Control) to 36% (Work Portability), with gender, education and job status the primary unique predictors. Nonwork demands showed moderate levels of predictability ($r^2=.15$ to $.17$), with sex and presence of children as two major unique predictors. Personal preferences were less strongly related to the demographic variables, with Commuting as a Mental Transition showing the lowest variance accounted for (5%) and Desired Work Thoughts off the Job and Global Overlap the highest (13%). Based on these results, it was determined that the set of demographic variables should be controlled for (included as

Table 7. Multiple Regression Analyses: Variance in Life Constraint Variables Attributable to Demographic Variables

Variables	beta ^a	r ^b	R ²	F
<u>Dependent Variable: Off-the-Job Work Expectations</u>				
Income	.13*	.33***		
Children	.05	.04		
Spouse Working	.08	.17**		
Job Tenure	.16**	.26***		
Sex	-.23***	-.43***		
Marital Status	.01	-.03		
Job Status	.04	.40***		
Age	-.09	.14**		
Education	.21**	.45***	.29	15.24***
<u>Dependent Variable: Workload</u>				
Income	.08	.27***		
Children	-.03	-.05		
Spouse Working	-.01	.12*		
Job Tenure	.11	.21***		
Sex	-.00	-.25***		
Marital Status	.09	.04		
Job Status	.21**	.44***		
Age	-.03	.11*		
Education	.22**	.44***	.24	11.31***
<u>Dependent Variable: Work Portability</u>				
Income	-.02	.27***		
Children	.03	-.01		
Spouse Working	.04	.13*		
Job Tenure	.03	.12*		
Sex	-.07	-.36***		
Marital Status	-.02	-.07		
Job Status	.07	.46***		
Age	-.06	.03		
Education	.51***	.59***	.36	20.74***
<u>Dependent Variable: Autonomy</u>				
Income	-.04	.15**		
Children	.07	.06		
Spouse Working	.05	.08		
Job Tenure	.04	.11*		
Sex	-.11	-.26***		
Marital Status	-.12	-.12*		
Job Status	.13	.28***		
Age	-.01	.08		
Education	.14	.30***	.13	5.39***

Table 7. (Continued)

Variables	beta ^a	r ^b	R ²	F
<u>Dependent Variable: Schedule Control</u>				
Income	.03	.16**		
Children	.05	.05		
Spouse Working	.07	.09		
Job Tenure	.01	.12*		
Sex	-.15*	-.25***		
Marital Status	-.11	.11*		
Job Status	.18*	.22***		
Age	.06	.15**		
Education	-.08	.17**	.10	3.93***
<u>Dependent Variable: Nonwork Demands</u>				
Income	-.01	-.01		
Children	-.28***	-.30***		
Spouse Working	.08	-.02		
Job Tenure	-.02	-.13*		
Sex	.23***	.12*		
Marital Status	-.12	-.04		
Job Status	.08	.08		
Age	-.10	-.20***		
Education	.10	.07	.15	6.54***
<u>Dependent Variable: Unfavorable Home Environment</u>				
Income	-.01	-.03		
Children	-.33***	-.34***		
Spouse Working	.05	-.18***		
Job Tenure	.07	-.27***		
Sex	.13*	-.33***		
Marital Status	-.14*	-.07		
Job Status	.07	-.00		
Age	-.19**	-.24***		
Education	-.04	-.03	.17	7.56***
<u>Dependent Variable: Family Member in Similar Work</u>				
Income	.10	.13*		
Children	.05	.06		
Spouse Working	-.25***	-.17**		
Job Tenure	-.00	.03		
Sex	-.07	-.02		
Marital Status	.14*	-.01		
Job Status	.08	.06		
Age	.02	.02		
Education	-.06	.07	.06	2.37*

Table 7. (Continued)

Variables	beta ^a	r ^b	R ²	F
<u>Dependent Variable: Personal Preference for Work Thoughts off the Job</u>				
Income	.05	.09		
Children	-.02	.02		
Spouse Working	-.07	.12*		
Job Tenure	.02	.08		
Sex	-.27***	-.33***		
Marital Status	-.06	-.07		
Job Status	.16*	.25***		
Age	-.08	.04		
Education	-.01	.23***	.13	5.50***
<u>Dependent Variable: Personal Preference for Discussing Work with Family</u>				
Income	-.01	.12*		
Children	.08	.04		
Spouse Working	-.02	-.01		
Job Tenure	.02	.00		
Sex	.05	-.08		
Marital Status	-.03	-.06		
Job Status	.16*	.25***		
Age	-.13	-.09		
Education	.19*	.27***	.10	4.23***
<u>Dependent Variable: Personal Preference for Socializing with Co-Workers</u>				
Income	.07	.04		
Children	.02	-.03		
Spouse Working	-.06	.02		
Job Tenure	-.05	-.09		
Sex	.04	-.06		
Marital Status	-.08	-.07		
Job Status	.18*	.20***		
Age	-.16*	-.16**		
Education	.13	.21***	.10	3.83***
<u>Dependent Variable: Personal Preference for Business Travel</u>				
Income	-.12	.06		
Children	.14*	.10		
Spouse Working	-.07	-.02		
Job Tenure	-.09	-.03		
Sex	-.19**	-.17**		
Marital Status	.09	-.01		
Job Status	.00	.13*		
Age	-.01	-.02		
Education	.19*	.20***	.09	3.47***

Table 7. (Continued)

Variables	beta ^a	r ^b	R ²	F
<u>Dependent Variable: Personal Preference for Nonwork in the Workplace</u>				
Income	.04	.14*		
Children	-.01	-.05		
Spouse Working	.11	-.03		
Job Tenure	.06	-.04		
Sex	-.01	-.06		
Marital Status	-.05	-.08		
Job Status	.08	.14**		
Age	-.24***	-.17**		
Education	.03	.15**	.07	2.79**
<u>Dependent Variable: Personal Preference for Work/Nonwork Activity Similarity</u>				
Income	-.03	-.08		
Children	.10	.08		
Spouse Working	-.06	-.10		
Job Tenure	-.13	-.18***		
Sex	.03	.10		
Marital Status	-.05	-.07		
Job Status	-.05	-.10		
Age	-.06	-.16**		
Education	.06	-.06	.06	2.21*
<u>Dependent Variable: Personal Preference for Work Space in the Home</u>				
Income	-.00	.08		
Children	.08	.02		
Spouse Working	-.03	.04		
Job Tenure	-.01	-.02		
Sex	-.14*	-.17**		
Marital Status	.04	-.00		
Job Status	.19*	.21***		
Age	-.17*	-.09		
Education	.01	.19***	.08	3.21***
<u>Dependent Variable: Personal Preference for Use of Commuting Time as a Mental Transition</u>				
Income	-.04	.02		
Children	-.06	-.07		
Spouse Working	-.01	.00		
Job Tenure	-.21**	-.14**		
Sex	.04	.00		
Marital Status	.07	.03		
Job Status	-.05	.04		
Age	.11	-.04		
Education	.20*	.10	.05	1.88

Table 7. (Continued)

Variables	beta ^a	r ^b	R ²	F
Dependent Variable: Personal Preference for Global Overlap				
Income	-.04	.11*		
Children	.11*	.08		
Spouse Working	-.08	.06		
Job Tenure	-.01	.07		
Sex	-.09	-.21***		
Marital Status	.07	.01		
Job Status	.11	.28***		
Age	-.02	.03		
Education	.26**	.32***	.13	5.38***

^a betas are partial, representing the effects of each variable controlling for all others in the model

^b simple correlations between each independent variable and the indicated dependent variable

* $p < .05$

** $p < .01$

*** $p < .001$

covariates) in any analyses which included the Life Constraint variables.

Research Question #1

Research Question #1 states that the overlap between work and nonwork is multidimensional; that it is not a unitary construct. This question, as noted, is more conceptual than statistical--there is no universally acceptable point, short of a perfect correlation, at which can one say that two constructs are sufficiently similar to call them the same. Likewise, it is difficult to completely specify the conditions under which two correlated variables will be considered to be measuring distinct constructs.

Because the factor analysis technique used allows the existence of oblique (correlated) factors, it is first important to determine the extent to which the factors are in fact intercorrelated. The correlation matrix of dimension scores, presented in Table 8, suggests that many of the zero-order correlations among the dimensions are significantly different from zero. These correlations are based on the unit-weighted scores computed for this investigation rather than the factor scores which would result from the factor pattern coefficients. All correlations are positive, indicating that individuals exhibiting a high degree of overlap on one dimension are more likely to also exhibit high overlap on other factors.

Table 8. Intercorrelations among Specific and General Overlap Dimensions

Dimension	1	2	3	4	5	6	7	8	9
1 Activity Similarity	-								
2 Business Travel	.34***	-							
3 Discuss Work with Family	.38***	.20***	-						
4 Work Space in the Home	.46***	.44***	.26***	-					
5 Socializing with Co-Workers	.34***	.45***	.24***	.25***	-				
6 Nonwork in the Workplace	.11	.16**	.27***	.08	.22***	-			
7 Commuting as a Transition	.28***	.23***	.24***	.22***	.16**	.11	-		
8 Work Thoughts Off the Job	.50***	.35***	.49***	.50***	.30***	.12*	.34***	-	
9 Global Overlap	.53***	.29***	.42***	.46***	.24***	.05	.18**	.61***	-

***: $p < .001$

** : $p < .01$

* : $p < .05$

The factor which is the most independent among the nine specific overlap dimensions appears to be Nonwork in the Workplace, which has a median correlation of .12 with the other factors. The least independent factor appears to be Work Thoughts off the Job, for which the median correlation with the other factors is .34. The two highest correlations ($r=.50$) are between Work Thoughts off the Job and the dimensions of 1) Activity Similarity and 2) Work Space at Home. To determine the "true" degree of overlap between these pairs, the two correlations were corrected for attenuation due to unreliability in the measures using the formula provided by Nunnally (1977). The corrected correlation for the first pair is .61 and for the second is .65, leading to estimated true shared variance (R^2) of 37% and 42% respectively.

Exploration of the first research question, then, generally supports the prediction of a number of stable, conceptually distinguishable factors which do replicate the structure identified in pilot research. It should be reiterated, however, that this is only partially verified through statistical argument, being largely a conceptual issue.

Hypothesis 1

Hypothesis 1 predicts that the specific dimensions of work/nonwork overlap will be related to the variable which represents a general sense of overlap. As shown in Table 8, each of the eight specific dimensions is strongly ($p<.001$) correlated

with Global Overlap, with the exception of Nonwork in the Workplace. Given the above-mentioned multicollinearity among the measures it is possible, however, that the fact that each correlates significantly is due to the presence of some common factor in each of the dimensions. To rule out this explanation, the dimensions were entered in a multiple regression analysis to investigate the number of specific dimensions which would contribute significant unique variance to that accounted for in Global Overlap. As can be seen in Table 9, 4 of the 8 dimensions added uniquely to the predictability of Global Overlap, with a multiple R^2 of .47 and an F of 36.73 ($p < .001$) for the model. The dimensions of Think and Similar were the two strongest predictors in this equation (betas=.37 and .26, respectively, $p < .001$), with Discussing Work with Family and Work Space at Home (betas=.14, $p < .01$) explaining additional unique portions of the variance.

To summarize, seven of the eight dimensions were found to be individually related to Global Overlap, with four of them showing unique relationships when all of the dimensions are taken into account. This would appear to suggest that individuals who report that their work and the rest of their life overlap are taking a variety of things into account in drawing this conclusion, or perhaps that there are a variety of structural patterns which can be perceived, in general terms, as blurring the work/nonwork boundary. However it is clear that there is some degree of redundancy among the overlap dimensions, since several

Table 9. Multiple Regression Analysis: Global Overlap on Specific Dimensions of Overlap

Variable	beta ^a	r ^b	R ²	F _{equ} ^c
<u>Dependent Variable=Global Overlap</u>				
Nonwork in the Workplace	-.06	.06		
Work Space in the Home	.14**	.47***		
Commuting as a Transition	-.08	.19***		
Socializing with Co-Workers	-.01	.24***		
Discussing Work with Family	.14**	.43***		
Activity Similarity	.26***	.54***		
Business Travel	.02	.28***		
Work Thoughts Off the Job	.37***	.61***	.47	36.73***

^a betas are partial, representing the effects of each variable controlling for all others in the model

^b simple correlations between each independent variable and the dependent variable

^c overall F statistic for the equation

* $p < .05$

** $p < .01$

*** $p < .001$

dimensions which show individually significant correlations with Global Overlap fail to contribute unique variance.

Hypothesis 2

Hierarchical multiple regression analysis was used to investigate the hypothesized relationship between the Life Constraint variables concerning work demands and opportunities and each of the specific and general overlap dimensions. The demographic variables were entered first, then the work-related variables were entered as a block. Following the procedure suggested by Cohen & Cohen (1975, p. 163) for protecting against large experimentwise Type 1 error rates, the beta weights for the individual variables in the set were only interpreted if the overall F for the increment in R^2 was significant. As mentioned above, however, multicollinearity among the measures may reduce the trustworthiness of the individual beta weights; they must therefore be interpreted with caution. The results of these regression analyses are presented in Table 10 and discussed below; the simple correlations are presented beside the partial betas for comparison purposes.

Activity similarity. The set of covariates entered in the initial step accounted for 13% of the variability in Activity Similarity. The work-related variables, as a group, accounted for a further 18%. When the entire set of variables is taken into account, individuals whose work is more portable were more

Table 10. Hierarchical Multiple Regression Analyses: Overlap Dimensions on Demographic and Work-Related Variables

Set of Variables Entered	beta ^a	r ^b	R ²	F _{eq} ^c	R ² change	F changed
Dependent Variable=Activity Similarity						
Demographic Variables						
Work-Related Variables						
Off the Job Expectations			.13	5.40***		
Workload	.09	.31***	.31	9.69***	.18	14.17***
Work Portability	.04	.29***				
Autonomy	.24***	.43***				
Schedule Control	.07	.26***				
Job Involvement	-.05	.11*				
	.30***	.43***				
Dependent Variable=Business Travel						
Demographics						
Work-Related Variables						
Off the Job Expectations			.38	22.31***		
Workload	.44***	.69***	.60	31.84***	.22	29.00***
Work Portability	.06	.44***				
Autonomy	.11*	.50***				
Schedule Control	.09*	.39***				
Job Involvement	.05	.29***				
	.05	.40***				
Dependent Variable=Discussing Work with Family						
Demographic Variables						
Work-Related Variables						
Off the Job Expectations			.12	4.98***		
Workload	.09	.19***	.20	5.25***	.08	5.10***
Work Portability	.10	.23***				
Autonomy	.16*	.27***				
Schedule Control	.08	.15**				
Job Involvement	-.13*	-.04				
	.10	.19***				

Table 10. (Continued)

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equi} ^c	R ² change	F change ^d
<u>Dependent Variable=Work Space in the Home</u>						
Demographic Variables			.24	11.74***		
Work-Related Variables			.49	20.75***	.25	26.16***
Off the Job Expectations						
Workload	.06	.39***				
Work Portability	.12*	.43***				
Autonomy	.50***	.66***				
Schedule Control	.05	.30***				
Job Involvement	-.03	.16**				
	.12*	.41***				
<u>Dependent Variable=Socializing with Co-Workers</u>						
Demographic Variables			.12	5.16***		
Work-Related Variables			.24	6.67***	.11	7.96***
Off the Job Expectations						
Workload	.32***	.41***				
Work Portability	.02	.25***				
Autonomy	-.04	.22***				
Schedule Control	.00	.16**				
Job Involvement	-.03	.09				
	.16**	.29***				
<u>Dependent Variable=Nonwork in the Workplace</u>						
Demographic Variables			.09	3.43***		
Work-Related Variables			.16	4.20***	.08	4.97***
Off the Job Expectations						
Workload	.13*	.16**				
Work Portability	-.12	-.01				
Autonomy	.00	.07				
Schedule Control	.16*	.21***				
Job Involvement	.13*	.22***				
	-.19**	-.02				

Table 10. (Continued)

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ} ^c	R ² change	F change
<u>Dependent Variable=Commuting as a Transition</u>						
Demographic Variables			.09	3.55***		
Work-Related Variables			.23	6.47***	.14	9.97***
Off the Job Expectations						
Workload	.11	.27***				
Work Portability	.22***	.32***				
Autonomy	.04	.23***				
Schedule Control	.05	.22***				
Job Involvement	.13*	.21***				
	.15*	.27***				
<u>Dependent Variable=Work Thoughts off the Job</u>						
Demographic Variables			.17	7.33***		
Work-Related Variables			.42	15.47***	.25	23.22***
Off the Job Expectations						
Workload	.03	.34***				
Work Portability	.16**	.41***				
Autonomy	.28***	.49***				
Schedule Control	.05	.28***				
Job Involvement	-.07	.10				
	.34***	.50***				
<u>Dependent Variable=Global Overlap</u>						
Demographic Variables			.14	5.95***		
Work-Related Variables			.32	10.32***	.18	14.64***
Off-the Job Expectations						
Workload	.05	.30***				
Work Portability	.11*	.34***				
Autonomy	.14*	.36***				
Schedule Control	.11	.28***				
Job Involvement	-.13*	.06				
	.32***	.50***				

Table 10. (Continued)

- a betas are partial, representing the effects of each variable controlling for all others in the model
 - b simple correlations between each independent variable and the dependent variable
 - c overall F statistic for the equation
 - d F statistic for the increment in R² attributable to the set of variables entered
- * $p < .05$
** $p < .01$
*** $p < .001$

likely to see their work and nonwork activities as similar ($\beta=.24$, $p<.001$), as were highly job-involved individuals ($\beta=.30$, $p<.001$).

Business travel. The covariate set accounted for 38% of the variance in the amount of travel engaged in, with the work-related variables predicting an additional 22%. Not surprisingly, the variable exhibiting the strongest relationship ($\beta=.44$, $p<.001$) is the degree of extra-work activity (including travel) expected on the job. Also showing significant unique relationships were the portability of work and the degree of autonomy experienced on the job ($\beta=.11$ and $.09$ respectively, $p<.05$).

Discussing work with family. The covariate set accounted for 12% of the variance in the extent to which work is discussed with family members. The set of work-related variables accounted for an additional 8% of the variance, with two variables making significant unique contributions: the portability of work (which includes the extent to which work is not confidential as well as the extent to which it can physically be carried home) was positively related to this type of overlap ($\beta=.16$, $p<.05$), and the degree of control over hours and days worked was negatively related ($\beta=-.13$, $p<.05$), perhaps suggesting that lack of control over one's schedule would require one to negotiate schedule conflicts with family members.

Work space in the home. Twenty-four percent of the variance in the extent to which work space overlaps with home space was accounted for by the covariate set. Controlling for these variables, the work-related variables accounted for an additional 25% of the variance. Three variables made individually significant unique contributions: Portability of Work was positively related to home space used for work ($\beta=.50$, $p<.001$), as were Workload and Job Involvement ($\beta=.12$, $p<.05$).

Socializing with co-workers. After entering the demographic variables, which accounted for 13% of the variance in the extent to which individuals engage in social/recreational activities with persons also part of the work environment, the work-related variables were entered as a block, accounting for an additional 11%. Off-the-Job Expectations were positively and uniquely related ($\beta=.32$, $p<.001$), as was Job Involvement ($\beta=.16$, $p<.01$), suggesting that this type of overlap is related to both external demands and centrality of work to one's life.

Nonwork in the workplace. Nine percent of the variability in nonwork presence in the workplace was accounted for by the demographic covariates. An additional 8% was accounted for by the set of work-related variables. Autonomy on the job, Off-the-Job Expectations and Schedule Control all showed positive relationships ($\beta=.16$, $.13$ and $.13$ respectively, $p<.05$), while Job Involvement was negatively related ($\beta=-.18$, $p<.01$). This would appear to indicate that the importance of the nonwork

domain coupled with the freedom to include nonwork thoughts, activities or individuals in the working day increase the likelihood that this form of overlap will take place.

Commuting as a mental transition. Nine percent of the variance in the extent to which commuting time was used to prepare for and wrap up work was attributable to the demographic variables entered in the first step. An additional 14% was contributed by the work-related variables, with Workload (beta=.22, $p<.001$), Schedule Control (beta=.13, $p<.05$) and Job Involvement (beta=.15, $p<.05$) all showing significant positive relationships.

Work thoughts off the job. The covariate set accounted for 17% of the variance in the extent to which thoughts about work are present in the nonwork environment. An additional 25% of the variance was accounted for by the work-related variables, with Job Involvement, Work Portability and Workload all contributing significant unique variance to the prevalence of work thoughts off the job (betas=.34, .28 and .16 respectively, $p<.001$, .001 and .01 respectively).

Global overlap. Finally, the set of demographic variables was found to account for 14% of the variance in Global Overlap. Controlling for these variables, the set of work-related variables accounted for a further 18%, with Job Involvement (beta=.32, $p<.001$) making the strongest unique contribution and Workload,

Work Portability and Schedule Control (betas=.11, .14 and -.13, respectively, $p<.05$) also showing significant partial relationships.

Summary. Hypothesis 2 was supported for each of the 8 specific dimensions; in each case the set of work-related demands and constraints was significantly related to the degree of overlap on the dimension. Work Space in the Home and Work Thoughts Off the Job showed the strongest relationships to the work demands, with an increase in 25% of the variance in the dependent variable achieved in each case.

Hypothesis 3

Hypothesis 3 addresses the relationship of the nonwork-related variables to the specific and global overlap dimensions. The results of this set of analyses are presented in Table 11. In each case, the set of demographic variables was entered first, then the four nonwork-related variables were entered as a block. For each of the eight overlap dimensions, the set of nonwork-related variables produced significant increments in variance accounted for, supporting Hypothesis 3. Investigations of the contributions of individual variables in each equation reveal that overlap on all but one of the dimensions (Business Travel) is negatively related to the Unfavorable Home Environment factor. This suggests that the feeling that home, for whatever reason, is not a good setting in which to work acts to restrain all forms of

Table 11. Hierarchical Multiple Regression Analyses: Overlap Dimensions on Demographic and Nonwork-Related Variables

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ} ^c	R ² change	F changed
Dependent Variable=Activity Similarity						
Demographics			.13	5.40***		
Nonwork-Related			.22	6.83***	.09	8.88***
Nonwork Demands	.03	-.03				
Unfavorable Home Env.	-.22***	-.22***				
Family in Similar Work	.06	.09				
Nonwork Involvement	-.22***	-.24***				
Dependent Variable=Business Travel						
Demographics			.38	22.31***		
Nonwork-Related			.41	17.49***	.03	4.51**
Nonwork Demands	.04	-.04				
Unfavorable Home Env.	-.08	-.15**				
Family in Similar Work	.03	.08				
Nonwork Involvement	-.17***	-.25***				
Dependent Variable=Discussing Work with Family						
Demographics			.12	4.98***		
Nonwork-Related			.16	4.60***	.04	3.40**
Nonwork Demands	.04	.06				
Unfavorable Home Env.	-.13*	-.09				
Family in Similar Work	.14**	.16**				
Nonwork Involvement	-.05	-.04				

Table 11. (Continued)

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ} ^c	R ² change	F change ^d
<u>Dependent Variable=Workspace in the Home</u>						
Demographics			.24	11.74***		
Nonwork-Related			.37	14.77***	.13	16.57***
Nonwork Demands	.02	-.05				
Unfavorable Home Env.	-.29***	-.26***				
Family in Similar Work	.05	.08				
Nonwork Involvement	-.25***	-.33***				
<u>Dependent Variable=Socializing with Co-Workers</u>						
Demographics			.12	5.16***		
Nonwork-Related			.16	4.61***	.03	3.08*
Nonwork Demands	.01	-.02				
Unfavorable Home Env.	-.16**	-.14**				
Family in Similar Work	-.03	.01				
Nonwork Involvement	-.11	-.12*				
<u>Dependent Variable=Nonwork in the Workplace</u>						
Demographics			.09	3.43***		
Nonwork-Related			.14	4.05***	.05	5.07***
Nonwork Demands	.16**	.11*				
Unfavorable Home Env.	-.18**	-.12*				
Family in Similar Work	.04	.06				
Nonwork Involvement	.10	.09				

Table 11. (Continued)

Set of Variables Entered	beta ^a	r ^b	R ²	F _{eqv} ^c	R ² change	F change ^d
<u>Dependent Variable=Commuting as a Transition</u>						
Demographics			.09	3.55***		
Nonwork-Related			.14	4.00***	.05	4.52***
Nonwork Demands	.01	-.03				
Unfavorable Home Env.	-.13*	-.11*				
Family in Similar Work	.04	.08				
Nonwork Involvement	-.19**	-.17**				
<u>Dependent Variable=Work Thoughts Off the Job</u>						
Demographics			.17	7.33***		
Nonwork-Related			.30	10.52***	.13	14.92***
Nonwork Demands	.02	-.04				
Unfavorable Home Env.	-.22***	-.19***				
Family in Similar Work	.04	.08				
Nonwork Involvement	-.32***	-.34***				
<u>Dependent Variable=Global Overlap</u>						
Demographics			.14	5.95***		
Nonwork-Related			.27	9.35***	.13	14.76***
Nonwork Demands	.05	-.05				
Unfavorable Home Env.	-.15**	-.16**				
Family in Similar Work	.04	.07				
Nonwork Involvement	-.36***	-.40***				

Table 11. (Continued)

a betas are partial, representing the effects of each variable controlling for all others in the model
 b simple correlations between each independent variable and the indicated dependent variable
 c overall F statistic for the equation

d F statistic for the increment in R^2 attributable to the set of variables entered

* $p < .05$

** $p < .01$

*** $p < .001$

overlap except that which clearly takes place outside the home. Overlap on all but two of the dimensions (Discussing Work with Family and Nonwork in the Workplace) is negatively related to Nonwork Involvement, suggesting that most forms of overlap may involve a deliberate choice of work over nonwork. Discussing work with family may, in contrast, be an attempt to express involvement with both domains simultaneously. The Nonwork Demands factor is, not surprisingly, positively related to Nonwork in the Workplace, indicating that individuals who perceive their nonwork commitments to require adjustments in the workday also perceive nonwork to be more present in the workplace. Finally, having a family member in the same field of work is positively related to Discussing Work with Family. Overall, the nonwork variables were most strongly related to Work Thoughts off the Job (with an increase in R^2 of .13), and least strongly related to Socializing with Co-Workers and to Business Travel (with increases in R^2 of .03 in each case).

Hypothesis 4

The significant relationship of personal preference for overlap on each specific and global overlap dimension to actual overlap on the corresponding dimension is predicted by Hypothesis 4. As with the tests of Hypotheses 2 and 3, the contribution of personal preferences to overlap on the various dimensions was investigated by performing a series of hierarchical multiple regression analyses, in each case entering the demographic set

first and then testing the significance of the additional contribution of the relevant personal preference measure. The difference here is that instead of entering the entire set of personal preference variables in each equation, only the one corresponding to the dependent variable is entered. The results are summarized in Table 12. With one exception, personal preferences do predict a significant amount of the variance ($p < .001$ in all cases) in dimension overlap, with the exception being Similarity of Work and Nonwork Activities, the dimension for which the personal preference score showed a low reliability. The increment in predicted variance is quite large for two of the dimensions, Socializing with Co-Workers and Discussing Work with Family (increases in R^2 of .21 and .24 respectively), with somewhat smaller increases in the case of Nonwork in the Workplace (.13), Work Thoughts off the Job (.07), Business Travel (.06) and Commuting as a Mental Transition (.04).

Research Question #2

The second research question addressed the extent to which the three sets of Life Constraint variables (work-related, nonwork-related and personal preference) make unique contributions to dimension overlap and, collectively, the amount of variability in dimension overlap attributable to them. The unique variance contributed by each set was determined by controlling for the other two sets (after covarying the demographics), then entering the set to be tested. The results of

Table 12. Hierarchical Multiple Regression Analyses: Overlap Dimensions on Demographic and Personal Preference Variables

Set of Variables Entered ^a	betab	rc	R ²	F _{equ} ^d	R ² change	F change ^e
<u>Dependent Variable=Activity Similarity</u>						
Demographics			.13	5.40***		
Personal Preference	.04	.36***	.13	4.92***	.00	.58(n.s.)
<u>Dependent Variable=Business Travel</u>						
Demographics			.38	22.31***		
Personal Preference	.25***	.37***	.44	25.55***	.06	34.36***
<u>Dependent Variable=Discussing Work with Family</u>						
Demographics			.12	4.98***		
Personal Preference	.52***	.58***	.36	18.77***	.24	125.78***
<u>Dependent Variable=Work Space in the Home</u>						
Demographics			.24	11.74***		
Personal Preference	.26***	.34***	.31	14.42***	.06	29.37***
<u>Dependent Variable=Socializing with Co-Workers</u>						
Demographics			.12	5.16***		
Personal Preference	.48***	.51***	.34	16.53***	.21	104.24***
<u>Dependent Variable=Nonwork in the Workplace</u>						
Demographics			.09	3.43***		
Personal Preference	.37***	.40***	.21	8.82***	.13	52.52***

Table 12. (Continued)

Set of Variables Entered ^a	betab	r ^c	R ²	F _{equ} ^d	R ² change	F change ^e
<u>Dependent Variable=Commuting as a Transition</u>						
Demographics			.09	3.55***		
Personal Preference	.20***	.24***	.13	4.7***	.04	14.07***
<u>Dependent Variable=Work Thoughts off the Job</u>						
Demographics			.17	7.33***		
Personal Preference	.29***	.36***	.24	10.27***	.07	30.77***
<u>Dependent Variable=Global Overlap</u>						
Demographics			.14	5.95***		
Personal Preference	.28***	.37***	.21	8.73***	.07	29.16***

a in each case, "personal preference" represents the particular personal preference variable associated with the dependent variable

b betas are partial, representing the effects of each variable controlling for all others in the model

c simple correlations between each independent variable and the indicated dependent variable

d overall F statistic for the equation

e F statistic for the increment in R² attributable to the personal preference variable entered

*p<.05

**p<.01

***p<.001

these analyses are presented in Table 13. Personal preferences accounted for significant amounts of unique variance on all dimensions except Activity Similarity, with a high of 26% for the dimension of Socializing with Co-Workers and the Discussing Work with Family showing a gain of 18%. The nonwork-related variables accounted for unique variance in overlap on only one specific dimension (Work Space in the Home) and on Global Overlap, while the work-related variables accounted for significant unique portions of variance in all overlap dimensions with the exception of Discussing Work with Family (which was very nearly significant, $p=.051$).

The total amount of variance in dimension overlap accounted for by, collectively, demographic, work-related, nonwork-related and personal preference variables ranged from 26% (Commuting as a Mental Transition) to 62% (Business Travel), with a mean multiple R^2 of almost .40.

Hypothesis 5

Hypothesis 5 suggests that no significant relationship will be found between the four outcome variables and the set of overlap dimensions. For each of the four outcome variables, a hierarchical multiple regression analysis was performed in which the demographic variables were entered and the specific overlap dimensions were entered as a block, with the contribution of individual variables assessed only if the overall F achieved

Table 13. Sets of Hierarchical Multiple Regression Analyses: Unique Variance in Overlap Dimensions Accounted for by Each Life Constraint Variable Set

Equation	Set(s) of Variables Entered	R ²	F _{equ} ^a	R ² change	F change ^b
Dependent Variable=Activity Similarity					
1.	Demographics, Work Demands, Nonwork Demands	.33	8.16***		
	Personal Preference-Activity Similarity	.33	7.79***	.00	.87
2.	Demographics, Work Demands, Personal Preference	.31	9.14***		
	Nonwork Demands	same as above		.02	1.94
3.	Demographics, Nonwork Demands, Personal Preference	.22	6.44***		
	Work Demands	same as above		.11	8.76***
Dependent Variable=Business Travel					
1.	Demographics, Work Demands, Nonwork Demands	.60	25.00***		
	Personal Preference-Business Travel	.62	25.51***	.02	14.70***
2.	Demographics, Work Demands, Personal Preference	.79	.62	32.11***	
	Nonwork Demands	same as above		.00	.27
3.	Demographics, Nonwork Demands, Personal Preference	.46	19.64***		
	Work Demands	same as above		.16	21.63***
Dependent Variable=Discussing Work with Family					
1.	Demographics, Work Demands, Nonwork Demands	.22	4.80***		
	Personal Preference-Discuss Work w/Family	.40	10.55***	.18	93.31***
2.	Demographics, Work Demands, Personal Preference	.63	.39	12.96***	
	Nonwork Demands	same as above		.01	.95
3.	Demographics, Nonwork Demands, Personal Preference	.38	13.88***		
	Work Demands	same as above		.02	2.12

Table 13. (Continued)

Equation	Set(s) of Variables Entered	R ²	F _{equ} ^a	R ² change	F change ^b
<u>Dependent Variable=Work Space in the Home</u>					
1.	Demographics, Work Demands, Nonwork Demands Personal Preference-Work Space in the Home	.52 .53	18.29*** 18.17***	.01	8.131**
2.	Demographics, Work Demands, Personal Preference Nonwork Demands	.71 same as above	.51 20.50***	.02	4.88***
3.	Demographics, Nonwork Demands, Personal Preference Work Demands	.41 same as above	16.07***	.12	14.01***
<u>Dependent Variable=Socializing with Co-Workers</u>					
1.	Demographics, Work Demands, Nonwork Demands Personal Preference-Socialize w/Co-Workers	.27 .43	6.05*** 11.96***	.26	91.57***
2.	Demographics, Work Demands, Personal Preference Nonwork Demands	.64 same as above	.41 14.21***	.02	2.15
3.	Demographics, Nonwork Demands, Personal Preference Work Demands	.36 same as above	12.83***	.07	6.73***
<u>Dependent Variable=Nonwork in the Workplace</u>					
1.	Demographics, Work Demands, Nonwork Demands Personal Preference-Nonwork in the Workplace	.20 .28	4.15*** 6.24***	.08	37.11***
2.	Demographics, Work Demands, Personal Preference Nonwork Demands	.52 same as above	.27 7.31***	.01	1.70
3.	Demographics, Nonwork Demands, Personal Preference Work Demands	.24 same as above	7.11***	.04	3.46**

Table 13. (Continued)

Equation	Set(s) of Variables Entered	R ²	F _{equ} ^a	R ² change	F change ^b
<u>Dependent Variable=Commuting as a Transition</u>					
1.	Demographics, Work Demands, Nonwork Demands	.24	5.15***		
	Personal Preference-Commuting as a Transition	.26	5.59***	.02	10.90**
2.	Demographics, Work Demands, Personal Preference	.51	.26	6.97***	
	Nonwork Demands	same as above		.00	.31
3.	Demographics, Nonwork Demands, Personal Preference	.17	4.68***		
	Work Demands	same as above		.09	6.58***
<u>Dependent Variable=Work Thoughts off the Job</u>					
1.	Demographics, Work Demands, Nonwork Demands	.43	12.77***		
	Personal Preference-Work Thoughts off the Job	.45	12.87***	.02	8.76**
2.	Demographics, Work Demands, Personal Preference	.66	.44	15.70***	
	Nonwork Demands	same as above		.01	1.29
3.	Demographics, Nonwork Demands, Personal Preference	.33	11.34***		
	Work Demands	same as above		.12	11.33***
<u>Dependent Variable=Global Overlap</u>					
1.	Demographics, Work Demands, Nonwork Demands	.35	9.05***		
	Personal Preference-Global Overlap	.38	9.76***	.03	15.42***
2.	Demographics, Work Demands, Personal Preference	.60	.36	11.26***	
	Nonwork Demands	same as above		.02	2.78*
3.	Demographics, Nonwork Demands, Personal Preference	.32	10.62***		
	Work Demands	same as above		.06	5.62***

a overall F statistic for the equation

b F statistic for the increment in R² attributable to the variable or variable set entered

*p<.05

**p<.01

***p<.001

significance. The results of these analyses are presented in Table 14 and are summarized below.

Conflict. The set of overlap dimensions increased the predictability of work/nonwork conflict by 8% after entering the demographic variables. Three overlap dimensions contributed significantly to the prediction of perceived work/nonwork conflict: Discussing Work with Family showed the largest relationship ($\beta=.18$, $p<.01$). Work Thoughts off the Job also showed a positive relationship, indicating that individuals who think about work more off the job reported more conflict ($\beta=.16$, $p<.05$), and the degree of Work Space in the Home was negatively related to conflict ($\beta=-.14$, $p<.05$).

Life satisfaction. Eight percent of the variance in satisfaction with life as a whole, after controlling for demographic variables, is accounted for by the overlap dimensions. Two individual dimensions show significant relationships--Similarity of Work and Nonwork Activities and the use of Commuting as a Transition both showed positive unique relationships to Life Satisfaction ($\beta=.24$ and $.14$, $p<.001$ and $p<.05$ respectively).

Nonwork satisfaction. After controlling for the demographic variables, predicted variability in satisfaction with nonwork is increased by 6%. Only one specific dimension shows a significant

Table 14. Hierarchical Regression Analyses: Outcome Variables on Overlap Dimensions, Controlling for Demographic Variables

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equi} ^c	R ² change	F changed
Dependent Variable=Work/Nonwork Conflict						
Demographics						
Overlap Dimensions			.12	5.10***		
Commuting as a Transition	.04	.11*	.20	4.60***	.08	3.66***
Nonwork in the Workplace	.03	.09				
Activity Similarity	.03	.11*				
Socializing with Co-Workers	-.07	.03				
Work Thoughts off the Job	.16*	.22***				
Discussing Work with Family	.18**	.29***				
Work Space in the Home	-.14*	.04				
Business Travel	-.01	.02				
Dependent Variable=Life Satisfaction						
Demographics						
Overlap Dimensions			.05	1.75		
Commuting as a Transition	.14*	.13*	.13	2.72***	.08	3.69***
Nonwork in the Workplace	.02	.06				
Activity Similarity	.24***	.21***				
Socializing with Co-Workers	.06	.13*				
Work Thoughts off the Job	-.13	.04				
Discussing Work with Family	-.01	.07				
Work Space in the Home	-.05	.07				
Business Travel	.11	.15**				

Table 14. (Continued)

Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ} ^c	R ² change	F changed
Demographics						
Overlap Variables						
Commuting as a Transition	.11	.06	.12	4.91***		
Nonwork in the Workplace	.07	.08	.17	3.98***	.05	2.70**
Activity Similarity	.11	.05				
Socializing with Co-Workers	.08	.09				
Work Thoughts off the Job	-.22**	-.13*				
Discussing Work with Family	-.06	-.09				
Work Space in the Home	-.02	.01				
Business Travel	.07	.12*				
Demographics						
Overlap Dimensions						
Commuting as a Transition	.03	.06	.03	1.01		
Nonwork in the Workplace	.03	.08	.14	2.79***	.11	4.48***
Activity Similarity	.20**	.19***				
Socializing with Co-Workers	.01	.14**				
Work Thoughts off the Job	-.10	.05				
Discussing Work with Family	-.07	.01				
Work Space in the Home	.03	.12*				
Business Travel	.31***	.27***				

^a betas are partial, representing the effects of each variable controlling for all others in the model

^b simple correlations between each independent variable and the indicated dependent variable

^c overall F statistic for the equation

^d F statistic for the increment in R² attributable to the set of variables entered

*p<.05

**p<.01

***p<.001

relationship, with nonwork satisfaction negatively related to Work Thoughts off the Job ($\beta = -.22$, $p < .01$).

Job satisfaction. After entering the covariate set, the overlap dimensions accounted for 11% of the variance in Job Satisfaction. Controlling for demographic characteristics, individuals who report more Business Travel, and those noting greater Work/Nonwork Activity Similarity report greater satisfaction with their jobs ($\beta = .31$, and $.20$, $p < .001$, and $p < .01$ respectively).

In general, then, Hypothesis 5 was not supported; life satisfaction and the other outcome measures do appear to be related to overlap on one or more dimensions, although the relationships are fairly weak and implicate only a few of the specific dimensions.

Hypothesis 6.

The congruence of personal preferences and actual overlap, predicted by Hypothesis 6 to be related to the four outcome measures, was conceptualized as a fit between an individual's profile of overlap on the eight dimensions and the profile described as ideal by that person. Using the D^2 measure for calculating profile similarity suggested by Nunnally (1978), the sum of the squared deviations (actual minus desired overlap) over all dimensions was calculated for each individual. (Because the two sets of variables were measured on scales with different

numbers of anchors, a linear transformation of the actual overlap scores was performed to make the scales comparable). For the D² index, it should be noted, higher scores represent lower degrees of congruence. Correlations between this measure and the four outcome measures are displayed in Table 15. Each of these is significant in the predicted direction, providing strong support for Hypothesis 6. Life Satisfaction ($r = -.20$, $p < .001$), Nonwork Satisfaction ($r = -.17$, $p < .01$) and Job Satisfaction ($r = -.19$, $p < .001$) are all positively related to congruence (negatively related to lack of congruence), while Work/Nonwork Conflict shows a negative relationship to congruence ($r = .11$, $p < .05$).

Hypothesis 7

Hypothesis 7a. This hypothesis, that Job Satisfaction and Nonwork Satisfaction will be more independent in their relationship to Life Satisfaction for individuals with lower degrees of overlap, was tested as follows: using Life Satisfaction as the dependent variable, Nonwork Satisfaction was entered. Then Job Satisfaction and Global Overlap were entered. Finally, the interaction between Job Satisfaction and Global Overlap was entered to determine whether the degree of integration should be taken into account in understanding the relationship between Job Satisfaction and the portion of Life Satisfaction not predicted by Nonwork Satisfaction. As indicated in Table 16, this relationship was significant in the direction predicted ($\beta = -.10$, $p < .05$), although the total increment in variance accounted for by the

Table 15. Pearson Correlation Coefficients between D² (Measure of Difference between Desired and Actual Overlap) and Outcome Measures

Outcome Measure	Correlation between Outcome Measure and D ²
Job Satisfaction	-.19***
Nonwork Satisfaction	-.17**
Life Satisfaction	-.20***
Work/Nonwork Conflict	.11*

* $p < .05$

** $p < .01$

*** $p < .001$

Table 16. Hierarchical Regression Analysis: Moderating Effects of Overlap on the Relationship between Job Satisfaction and Life Satisfaction, Controlling for Nonwork Satisfaction

Step	Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ} ^c	R ² change	F changed ^d
Dependent Variable=Life Satisfaction							
1.	Nonwork Satisfaction	.56***	.64***				
	Job Satisfaction	.27**	.44***				
	Global Overlap	.12***	.08	.48	102.10***		
2.	Job Satisfaction * Global Overlap	-.46*	.24***	.48	78.05***	.01	3.56*

^a betas are partial, representing the effects of each variable controlling for all others in the model

^b simple correlations between each independent variable and the indicated dependent variable

^c overall F statistic for the equation

^d F statistic for the increment in R² attributable to the variable or set of variables entered

*p<.05

**p<.01

***p<.001

interaction term is only 1% which calls into question the practical significance of this result. To illustrate this interaction more clearly, extreme groups were formed by taking individuals one-half of one standard deviation or more above ($n=82$; "integrators") and below ($n=118$; "segmenters") the mean on Global Overlap, and determining, for each group, the partial correlation between Job Satisfaction and Life Satisfaction controlling for Nonwork Satisfaction. The partial r for "segmenters" was .38, while that for "integrators" was .14, suggesting that for individuals with high degrees of work/nonwork overlap, satisfaction with the nonwork domain does not add as much to the predictability of Life Satisfaction as it does for those with less overlap once Job Satisfaction is taken into account.

Hypothesis 7b. Part (i) of this hypothesis predicts that individuals showing high degrees of overlap will show a stronger job satisfaction/life satisfaction relationship than those with a more segmented pattern. This hypothesis was tested by means of a regression analysis using Life Satisfaction as the dependent variable, then entering Job Satisfaction, Global Overlap, and finally a variable representing the interaction between Job Satisfaction and Global Overlap. It is this last variable which is of particular interest, as its significance would establish a relationship between degree of integration and the strength of the

life satisfaction/job satisfaction relationship. As can be seen in Table 17, this interaction is not significant.

Hypothesis 7b(ii), that individuals who show more extreme degrees of overlap will show a weaker relationship between nonwork satisfaction and life satisfaction, was tested in analogous fashion. Here, too, it was not possible to reject the null hypothesis.

Conclusion

In summary, the model was only partially supported. The strongest confirmation was found for the proposed antecedents of overlap dimensions (Hypotheses 2, 3 and 4 and Research Question #2). In addition, the links between demographic variables and life demands and constraints were confirmed (Preliminary Investigation) and the dimensionality of overlap of work and nonwork was verified (Hypothesis 1 and Research Question #1). Somewhat weaker support was found for the proposed consequences of overlap. Contrary to predictions, links between types of overlap and various outcomes were found (Hypothesis 5). The outcome measures did show moderate relationships to the degree of congruence between preferred and actual overlap (Hypothesis 6). The last hypothesis (Hypothesis 7), regarding the differential partial relationship between domain satisfactions and Life Satisfaction received only weak support, and the proposed moderating effects of overlap on the Job Satisfaction/

Table 17. Hierarchical Regression Analyses: Moderating Effects of Overlap on the Relationship between Job and Nonwork Satisfaction and Life Satisfaction

Step	Set of Variables Entered	beta ^a	r ^b	R ²	F _{equ^c}	R ² change	F changed
<u>Dependent Variable=Life Satisfaction</u>							
1.	Job Satisfaction	.44***	.44***				
	Global Overlap	.06	.08	.20	41.49***		
2.	Job Satisfaction * Global Overlap	-.44*	.24***	.20	28.46***	.01	2.12
<u>Dependent Variable=Life Satisfaction</u>							
1.	Nonwork Satisfaction	.64***	.64***				
	Global Overlap	.14**	-.09	.41	116.68***		
2.	Nonwork Satisfaction * Global Overlap	-.15	.28***	.41	78.03***	.00	.84

^a betas are partial, representing the effects of each variable controlling for all others in the model

^b simple correlations between each independent variable and the indicated dependent variable

^c overall F statistic for the equation

^d F statistic for the increment in R² attributable to the variable or set of variables entered

*p<.05

**p<.01

***p<.001

Life Satisfaction and Nonwork Satisfaction/Life Satisfaction relationships were unsupported.

CHAPTER V

DISCUSSION

The goals of this study were twofold. The first purpose was to investigate the dimensionality of the boundary between work and nonwork in light of previous research and theory on the topic. After dimensions were identified, it was the aim of this investigation to link the overlap of work/nonwork to various situational and individual variables which may be related to overlap in the form of antecedents or outcomes.

In discussing the results of the current research, the first section will focus on flaws in the study potentially limiting the interpretability and generalizability of the results. Following this, the success with which the two goals have been met will be assessed. Concluding remarks will focus on theoretical and practical implications of this research and on ways in which the current line of inquiry might be extended.

Limitations of The Study

Before any discussion of the outcomes of this research, it is crucial to understand the ways in which the methods used impose limitations on the results obtained.

The data were collected by means of a questionnaire; this introduces several problems. First, all data are self-reports; they represent individual interpretations of items and response formats and portray each respondent's subjective opinion

regarding his or her life and work. While in one sense this is exactly what is desired, it limits our ability to tie findings into objectively verifiable reality. It would be particularly useful for future investigations to focus on objective cross-checks of important constructs in this model, which could be approached via diaries, direct observation, reports of significant others, archival records, etc. Secondly, because many questions were asked in similar ways, the questionnaire format also introduces the possibility that common-method variance spuriously inflates or otherwise distorts the findings.

It should also be noted that many of the measures used were developed for the present study and thus do not have available data to substantiate their reliability and their construct validity. Although where possible the internal consistency reliability of these measures was assessed and, with several exceptions, found to be acceptable, there are a number of cases in which measures could be improved through refinement of wording, addition of items, etc. The temporal stability of the measures is a further concern; one wonders how stable the work/nonwork patterns described here are over time. There may, for example, be periods in some jobs in which overlap is present and others in which it is not (accountants near tax time, for instance.) In addition, future research using these measures would benefit from further work to establish their construct validity.

Two other flaws render the current study less than ideal for investigating the questions proposed herein. The first is that

while the model implies causal relationships among the variables, the collection of the data at one point in time prohibits such inferences, limiting conclusions to the showing of associations among variables. Longitudinal research to investigate the temporal effects is a minimum requirement for further testing of the relationships identified in the results. The second is that, while the model includes a large number of variables, it is exploratory research and certainly does not include all relevant variables, both due to survey limitations and to failure to identify all important variables relating to the work/nonwork boundary. These unmeasured variables include a variety of personal characteristics, such as intelligence and locus of control, which may produce spurious relationships among study variables through their effects on more than one "stage" of the model, and other variables, such as coping mechanisms, which may moderate observed relationships to an important degree.

Finally, it is necessary to qualify the results of the present investigation in terms of their generalizability. The sample was subject to two restrictions: that respondents be a) working adults and b) married (or living with a partner) and/or with one or more children. Results are obviously limited to these sectors of the population. But other limitations exist as well. Although an attempt was made to find a representative cross-section of professional occupations, the actual degree of representativeness of the subjects is open to question for two reasons: the professions selected may be unrepresentative, and the survey

recipients who did not return the instrument may differ in important ways from those who did. Respondents, for instance, may have been those with more free time or those who have more interest in work/nonwork issues. This respondent/nonrespondent question is a particularly important one in view of the somewhat low response rate. While the sample obtained does appear to be fairly diverse in terms of most of the measures used, this is no guarantee that the results can be generalized beyond the present group. On the other hand, the results were quite similar, both in terms of demographic characteristics of respondents and of the pattern of responses (e.g. means and standard deviations; factor structure obtained, etc.), to those obtained in the pilot investigation in which a 72% response rate was achieved.

One further caution: it should be stated that the number of subjects relative to the amount of data collected from each subject is somewhat smaller than ideally desirable. Future research could address this problem by increasing the number of responses obtained or limiting investigation to a few of the areas studied herein.

Dimensionality of Measures

Work/Nonwork Overlap

The first phase of the investigation focused on the identification of factors spanning the work/nonwork boundary space. Perhaps the most important result of this research is the

conclusion that there are several distinct factors, which have been replicated across samples, characterizing the overlap of the two domains.

In examining the factor structure obtained, one notable characteristic is that overlap of work into nonwork appears to be quite separate from overlap of nonwork into work. A single factor contained all the items addressing the presence of nonwork in the workplace across all dimensions, while the eight additional factors addressed the presence of work outside the workplace, with each factor representing a separate structural dimension. While the observed asymmetry may well be a result of the specific items used, it also appears to support the hypothesis of differentially permeable boundaries. Individuals seem capable of reliably differentiating among the various ways in which work extends beyond the physical work environment with no corresponding differentiation regarding the ways in which nonwork extends in the opposite direction. This might indicate that the latter is more unusual, i.e., that it is much more common for work to extend outside its physical boundaries than for nonwork to cross into the work sphere. It may, however, represent a failure of the present model to include relevant variables which would represent nonwork-to-work overlap in a multidimensional fashion.

Numerous dimensions of "work into nonwork" overlap were suggested by Staines (1977), Kanungo and Misra (1986), and others. Several of the factors identified in the present analysis clearly correspond to those discussed in this context.

The "time" dimension is most directly addressed by the Schedule Unpredictability factor, which reflects the irregularity/unpredictability of the work schedule. While a number of the other factors also imply an overlap on the dimension of time, this factor appears to most clearly isolate the time element. It does not, however, specifically include the definition of schedule variability used by Sundstrom et al., (1987) which pertains to shift work and the resultant "moving around" of working hours. This is most likely due to the professional jobs sampled; very few of the respondents were on rotating shifts or, for that matter, on shiftwork at all.. Unfortunately, it was necessary to eliminate this factor from analyses due to a low reliability; further work is needed to clarify the aspects of the time boundary important for a thorough understanding of work/nonwork overlap.

The dimension of "place" mentioned by several authors is addressed by the Work Space in the Home factor, which directly focuses on the extent to which home space is utilized for work activities. This should be distinguished from the topic of "working at home" or "flex-place" as an organizational adaptation to individual needs which is receiving a great deal of attention lately (e.g., Shamir & Salomon, 1985). The present Work Space in the Home dimension includes any type of formal or informal performance of work activities in the home environment, of which "flex-place" is merely one specific form.

The "people" dimension suggested by Staines (1977) is measured most directly by the Socializing with Co-Workers

factor, which addresses a variety of forms of social interaction off the job with work-related individuals (who could be co-workers, clients, employees, etc.)

The last dimension suggested by Staines, that of "activities", appears to be best represented by the Similarity of Work and Nonwork Activities factor, which addresses general and specific perceptions of ways in which the two sets of activities converge. As previously mentioned, this type of work/nonwork relationship has received a great deal of attention in the past, and has often been treated as the only important form of overlap.

Kanungo and Misra (1984) add to the list of dimensions that of thinking about work outside the work environment. The Work Thoughts Off the Job factor directly corresponds to this, reflecting the frequency/pervasiveness of work thoughts off the job. This is by far the most common form of overlap and, as will be seen, the most problematic.

Family involvement, mentioned by Kanter (1977) as an important form of impact that work has on extra-work life, is reflected in the Discussing Work with Family factor. The factor centers on the extent to which individuals talk about work with family members and does not directly include behavioral expectations of family members held by the organization, an aspect of "absorptiveness" focused on by Kanter. Further research is needed to determine in what way these two aspects of family involvement are related.

The two remaining factors correspond less closely to dimensions suggested in previous literature, dealing instead with relatively specific types of overlap. One of these concerns Business Travel, which clearly involves overlap of work-related activities into nonwork time, but may also include participation in social or recreational activities with work-related individuals as part of the expected set of activities. The other specifically targets the use of Commuting as a Mental Transition. This appears to have two aspects--one is the utilization of "neutral" time for work thinking, which would appear to be akin to the "thoughts" dimension. The other is allowing that time to function as a transitional zone, which would function to cognitively separate the two domains. Unfortunately, the composite nature of these two factors makes them somewhat more difficult to interpret, and makes the interpretation of their linkages with other variables considerably more complex.

The several factors show a moderately high degree of intercorrelation. While this indicates a substantial degree of shared meaning, it is also not surprising, since it is hard to imagine perceiving activities as similar or doing work in the home environment without some work thoughts being involved. On the other hand, it is possible to imagine work thoughts in the absence of physical workspace or perceived similarity of activities. Thus even the most closely associated factors are, perhaps, sufficiently distinguishable to be considered conceptually separate constructs.

In addition to the fact that each of these dimensions is descriptive of a different aspect of the work/nonwork boundary, it is interesting to discover that a large number of the dimensions appear to make contributions to an overall perception of work and nonwork as overlapping in one's life. The Global Overlap measure acts as a summary of overlap dimensions in similar fashion to the way that Life Satisfaction appears to represent a summary of satisfactions with various specific life domains. As such, it may prove to be a useful indicator of overlap which could be used in investigating research questions more general than those explored here.

The multidimensionality of work/nonwork overlap has a number of implications. There has been no previous empirical confirmation of the overlap dimensions suggested in the literature--the current data generally support those dimensions. Identification of these factors will, it is hoped, allow future researchers to more explicitly define their questions regarding the overlap of work and nonwork domains.

Work Demands/Constraints

The second group of variables for which the factor structure was of interest was that of demands or constraints in the work domain. It was expected that the dimensionality of these items would reflect the constituent subscales, and this proved to be the case. The items tapping Autonomy/Control (Hackman & Lawler, 1971) loaded on a single factor, as did the items assessing

Quantitative Work Load (Caplan, 1971). Three other factors were easily interpretable as measuring the portability of work (which was a consideration mentioned frequently in pilot interviews), the extra-work expectations held by work role senders (an important component of organizational determinateness) and the degree of control over hours and days worked, which is related to but not identical with work-role autonomy. In short, there were no surprises in this analysis, and all of the important dimensions of the job identified as potential contributors to overlap were included.

Nonwork Demands/Constraints

Because the nonwork domain comprises any number of more specific domains which vary from person to person, it is difficult to look at the demands and constraints in this area in as much detail as that of the work domain. Consequently the items in this section were much more general and fewer in number, and the dimensions identified are equally general. Two factors were identified here, with the first a general indication of the extent to which the home environment, an important nonwork setting, is inimical to the accomplishment of work activities and the second a reflection of responsibilities and expectations outside the work domain that would require bounding or otherwise limiting work time . Not surprisingly, the single item asking about family work similarity, included in response to a number of comments in presurvey interviews, did not load strongly on either of these

factors. Once again, nothing surprising surfaced in this analysis, which is reassuring in view of the exploratory nature of the research. However, in retrospect, it appears that the small number and deliberately general nature of the nonwork demand/constraint items led to a dissatisfyingly vague characterization of this domain.

Hypotheses and Research Questions

Relationships among Demographic Variables and Antecedents of Overlap

It was expected that there would be a large number of relationships between demographic variables and the three groups of variables proposed as antecedents of overlap. This expectation was confirmed, with several specific findings deserving of attention.

Work demand/constraint variables. As expected, job status, income and education (themselves intercorrelated to a high degree) were strongly related to the behavioral and psychological demands made on individuals as well as to the degree of perceived autonomy and control. One or more of these were the strongest predictors of each of the work demand/constraint variables. Sex differences were also found on all variables, doubtless partially a function of the fact that, despite efforts to obtain a balanced sample, females were predominant among the lower-status jobs of those surveyed while males predominated among the higher-

status jobs. In only two instances did sex emerge as a significant unique predictor--all other things being equal, females were less likely to perceive high levels of extra-work demands, and females were slightly less likely to report control over hours and days worked.

Nonwork demand/constraint variables. Respondents' age was negatively related and the presence of children in the home positively related to two variables: the necessity of limiting work and the lack of receptiveness of the home environment to work activities. These findings are in line with results of previous investigations and with common sense. In addition, women were more likely to perceive the need to limit work even when presence of children was taken into account, and the home environment was perceived as more receptive to work activities by males and single persons. These results, too, are consistent with sex-role stereotypes and with previous findings.

Personal preferences. Little variability in personal preferences was accounted for by demographic variables; the strongest relationship was found between sex and the desire to think about work off the job (with males preferring a higher frequency of work thoughts off the job); this may reflect the aforementioned job status/gender relationship. The overall lack of relationship between personal preferences and individual characteristics could represent inadequacy of the measures involved, (although most of these scales had acceptable

reliabilities), but another explanation is that such preferences are determined by any number of idiosyncratic factors not strongly related to the demographic measures included here. Particularly interesting is the fact that job status and other variables which were strongly related to the work and nonwork demands were not, in general, predictive of personal preferences for life arrangements. This would suggest that individuals do not totally adjust their preferences (accommodate) to the demands of their environment, but rather are able to visualize an ideal lifestyle which may differ from reality.

Interrelationship of Overlap Factors

The various overlap factors were found to be intercorrelated at a moderately high level, although it was concluded that they each retain enough uniqueness to be considered as conceptually distinct dimensions. In general, the pattern of relationships among these dimensions is consonant with an understanding of the ways in which the various structural dimensions interact in the real world. The strongest degree of overlap in this investigation, for instance, was found between work thoughts off the job and two other dimensions: similarity of activities and work space at home, reflecting the fact that it is difficult (if not impossible!) to perceive nonwork activities as similar to work, or to work at home, without thinking about work. Nonwork at work was much less strongly related to the other overlap dimensions than they were to each other. It showed the strongest association with

family involvement in work. Once again, these results appear to differentiate the nonwork overlap into work from the other dimensions.

Antecedents of Overlap Dimensions

Two questions were important in determining the relationship of the Life Constraint variables to the overlap dimensions. The first was the extent to which each group of variables predicted overlap (and, within each group, which variables bore the strongest relationship), the second was the extent to which each group of variables uniquely predicted overlap. As previously noted, each of the relationships discussed below is a partial relationship, in which the effects of demographic variables have been statistically controlled for.

Collectively, the work-related variables were significantly related to each of the overlap dimensions, as were the nonwork-related variables. In all cases but one (that of work/nonwork similarity), the appropriate personal preference score was also related. This appears to suggest that work/nonwork overlap is related to a variety of constraints--those imposed by work, by nonwork, and by personal preference. Although the contribution of individual variables in each set must be interpreted cautiously due to multicollinearity, it does appear that differing patterns characterize the various dimensions, contributing substantial support to the construct definitions suggested by each.

Work demands/constraints. Several relationships between the work-related variables and the overlap dimensions were found. Individuals who perceive that their jobs make high demands on their behavior outside the work situation, for instance, are much more likely to report the associated forms of overlap--business travel and off-the-job socializing--but no more likely to report any other form of overlap. Portable work, the definition of which also includes such elements as lack of restrictions (e.g., confidentiality) on discussion of work, is much more likely to be physically brought home, but it is also more likely to be mentally taken away from the job and to be perceived as similar to nonwork activities. Furthermore, it was found to be strongly related to educational level. It is unclear what these findings reflect; it could be that more portable work characteristically involves the sort of mental activity that resembles the nonwork pursuits of individuals who have sought higher education.

The amount of job autonomy reported showed little association with degree of work/nonwork overlap, although individuals who had higher levels of autonomy reported somewhat more business travel as well as more nonwork in the workplace; neither of these findings is surprising. The perceived level of workload, similarly, is related to only a few dimensions although to a somewhat greater degree--individuals with heavy workloads are more likely to carry work thoughts away from the job and

slightly more likely to physically bring work home (one would expect this to be constrained by work portability). .

Two other work-related variables showed interpretable patterns of relationship with overlap. Degree of control over hours and days worked showed a weak negative relationship to the discussion of work with family members, perhaps reflecting a higher need to negotiate work/family boundary issues among individuals with less control. It also showed weak positive relationships to nonwork at work and to commuting time as a transition. Explanations for these are somewhat more tentative. It is likely that jobs with flexibility at the boundaries may have more flexibility throughout the work day, allowing individuals to intersperse nonwork activities. Much more speculatively, it may be that some individuals who are able to control their working hours take advantage of this to keep home and work more separate, using the commuting time as a boundary.

The remaining work-related variable included was job involvement, which was the only clearly attitudinal variable included. It showed extremely strong links to work thoughts off the job and similarity of work/nonwork activities, a moderately strong relationship to socializing with people from work, and weak relationships to work space at home and commuting as a transition. Job involvement also showed a negative relationship to the presence of nonwork in the workplace. Perhaps the most interesting of these results is that job involvement does not contribute a great deal of predictability to the amount of home

space used for work which appears, rather, to be related primarily to work portability (as well as to workload). The negative relationship with nonwork at work is supportive of Naylor et al.'s (1980) resource allocation model; those individuals who are more highly job involved are likely to perceive a greater payoff for additional work time spent actually working and less likely to choose to allocate that time to nonwork.

Nonwork demands/constraints. Among the nonwork variables, the one showing the greatest degree of relationship to the various overlap dimensions was the extent to which the home environment is the sort in which work could be done. This variable was related to all aspects of overlap with the exception of business travel, the one dimension which would be expected to show no relationship. It showed particularly strong relationships with those dimensions directly addressing the physical or psychological presence of work at home--Work Space in the Home, Work Thoughts Off the Job, and Similarity of Work and Nonwork Activities.

The need to limit or interrupt working hours to fulfill other commitments showed only one significant partial relationship. Individuals who have such commitments (which could include children, other organizations, etc.) reported a greater amount of nonwork overlap into work, suggesting that the external commitments are in fact reflected in perceived presence of nonwork in the workplace. It is easy to see that this type of

demand coupled with a work situation lacking in the ability to meet it (which, above, was linked to autonomy among other things), would lead to almost inevitable conflict stemming from the inability to reconcile the two sets of demands.

The item reflecting a family member in the same workplace or field was related to only one dimension--the extent to which one discusses work with family members. This is an unsurprising but very important association; it is not trivial to confirm that individuals who have a work bond in common with a family member are more likely to discuss work with them, since it is just this sort of information that may help individuals better understand their communication patterns in the process of trying to improve family relationships.

The final variable in this set is that of nonwork involvement which, in many respects, appears to show a relationship opposite to that of job involvement. This would suggest that the tradeoff model of involvement (e.g., Mannheim, 1975) is correct. On the other hand, there are several dimensions of overlap which show a relationship to involvement in one domain but not to involvement in the other domain. While these results must be interpreted with caution, it is very interesting to discover that while socializing with work individuals was strongly and positively related to job involvement, it showed only a weak a negative relationship to nonwork involvement. This might be interpreted to mean that individuals who are involved in their work use socializing as a way to include work as a large segment of their lives while still

managing to respect a high level of interest in nonwork.

Similarly, the presence of nonwork in the workplace showed a negative partial relationship to job involvement but was unrelated to nonwork involvement. This may show that while the presence of nonwork at work is linked to the demandingness of elements of the nonwork domain, without respect to one's level of nonwork involvement, the extent to which it is actually permitted to intrude into the workplace is partially a function of job involvement (as well as of job constraints). The third dimension showing an asymmetrical pattern is that of travel, which is unrelated to job involvement but is negatively related to nonwork involvement. This may indicate that while it is job demands that control the amount of travel undertaken, a high degree of nonwork involvement may induce individuals to find ways to limit travel.

In summary, the nonwork variables, for reasons discussed at some length below, do not make a large contribution to the understanding of the overlap dimensions. Nonetheless the relationships found are consistent with what is known about various aspects of the nonwork domain. When taken together with the findings regarding work (particularly with regard to involvement in each of the domains), these results add to our understanding of the dynamic relationship between the two major life domains investigated.

Personal preferences. With respect to the third group of variables, it is interesting, although not surprising, to find that personal preferences for overlap on dimensions are in fact related to overlap on those dimensions. This may merely reflect the fact that individuals accommodate to the lifestyles they have, with their "preferred" lifestyles being shaped by reality, or it may show that individuals have been able to take their preferences and shape their lifestyles accordingly. If accommodation to reality were the dominant process, however, one might expect to find stronger relationships between demographic variables and personal preferences, since the demographic variables appear to have a strong relationship to the work and nonwork demands which constitute "reality". The demographic/personal preference relationships were not strong, however, suggesting that personal preferences are tied to other things than mere practicality. Most likely, the ideal/real fit comes about through a reciprocal process, with lifestyle shaped as much as possible to fit one's ideals, with accommodation taking place where reality is intractable. Further research on the ideals which people hold for their lives, and the ways in which these are shaped and modified, is clearly indicated.

The one dimension for which preferences and perceived reality were unrelated is the similarity of activities. One explanation for this lack of relationship is that the variables are flawed; that they are not measuring the same construct or that

one or more of the measures is weak. This, given the low reliability of the personal preference factor addressing activity similarity, is by far the most likely explanation. A more interesting but purely speculative explanation, in line with the shaping/accommodation approach outlined above, would be that while most of the other overlap dimensions (e.g., the amount of work done at home) are somewhat changeable, negotiable over the course of several months or years, the similarity of work activities to nonwork interests is a state which often can only be achieved by changing fields of employment, and therefore that many individuals have not been able to accommodate life to personal preference, having instead had to mold themselves to the exigencies of the job market and the constraints imposed by family and other commitments while keeping their dreams intact. The large number of salient role models in fields which many people perceive as nonwork-for-pay (e.g., professional sports and the arts) may contribute to the vividness of the image of an ideal level of activity similarity between work and nonwork which almost necessarily differs from reality.

In summary, the personal preference variables did show relationships to the dimensions of overlap, although the reasons for these relationships are at best speculative.

Unique and joint contributions of work, nonwork, and personal preference variables. In looking at the unique effect of each group of variables on dimensions of overlap, it appears that

nonwork demands were in general the least unique source of variance, only adding to the predictability of one specific dimension, workspace at home. Since the effects of nonwork variables on work behavior have received much support in previous literature (e.g., Crouter, 1984), the most likely explanation for this is that the measures did not adequately capture the nature of nonwork demands and constraints. It is also important to realize that many of the sources of nonwork constraint were included in the set of demographic variables (e.g., children, marital status, working spouse), and that this source of information had already been taken into account before the contribution of the nonwork variable set is assessed. Alternatively, but less likely, it could be that nonwork demands are in fact less strongly connected to life arrangements compared to work demands and personal preferences.

When tested against one another as predictors of overlap, work demands were found to contribute uniquely to all overlap dimensions but one, the discussion of work with family, with the largest unique relationship to the dimension of travel. Personal preferences, too, proved strong predictors, adding to the variance accounted for on all dimensions excepting work/nonwork similarity. Two dimensions, Discussing Work with Family and Socializing with Co-Workers, appear to be particularly strongly related to personal preference, while the Nonwork in the Workplace dimension also showed a large personal preference component. The extent to which the different life constraints

showed links to different types of overlap fits well with a model which suggests that work is strongly tied to lifespace design, with nonwork bearing a weaker relationship which often takes the form of constraints or limitations. Personal preference, in this view, primarily focuses on the extent to which the different interpersonal spheres (work, family, and friends) overlap with the individual and with each other.

When the joint contributions of the three life constraint variable sets and the demographic variables were assessed, it became clear that an extremely large portion of the variability in specific forms of overlap between work and nonwork had been explained, particularly on the dimensions of Business Travel and Work Space in the Home. In each of these cases over half the variance was explained by the four sets of variables collectively, and in no case was less than one-quarter of the variance explained. Overall, it would appear that the proposed model has identified a number of the critical elements affecting life space arrangements.

Relationship of Outcome Measures to Specific and General Overlap

The final stage of the model proposed several relationships between specific and general overlap dimensions and the four outcome measures: Life Satisfaction, Job Satisfaction, Nonwork Satisfaction and Work/Nonwork Conflict. In general, this stage of the model received the least support, although partial confirmation was found for several hypotheses.

Relationships between overlap dimensions and outcomes.

The total amount of variability in the outcome measures attributable to the overlap dimensions was generally low though statistically significant. The perceived similarity of work and nonwork activities shows a relationship to several of the investigated outcomes, being positively related to both life satisfaction and job satisfaction, but not to nonwork satisfaction. One conclusion which could be drawn from this relates to the earlier-discussed suggestion that the work domain is relatively more constrained than other life domains. It may be the case that in the lesser-constrained domains (i.e. those constituting nonwork), people are more able to express their "true selves"; to the extent that they are also able to do this in the workplace (represented, perhaps, by the perceived extent to which the domains are similar), satisfaction with job and life are increased, while satisfaction with the already unconstrained nonwork domain remains unaffected. This explanation, however, is inconsistent with a viewpoint that suggests that people are able to express one side of themselves at work and another in the nonwork sphere; rather, it would tend to support the wholistic view, which maintains that it is healthier to integrate the self and maintain consistency across settings.

Other dimensions found to be related to the outcome measures included Work Thoughts Off the Job, which showed a negative relationship to Nonwork Satisfaction. One reason for this may be found in the fact that this form of overlap is also

positively related to Work/Nonwork Conflict. A high frequency of thinking about work off the job, for whatever reason, may interfere with the ability one has to fully enjoy all aspects of the nonwork domain, perhaps by way of conflict between the two life spheres. Alternatively, those individuals who are less satisfied with nonwork may deal with this by thinking more about work.

Two other dimensions of overlap showed relationships to Work/Nonwork Conflict: Discussing Work with Family was positively related to conflict, and Work Space in the Home was negatively related to conflict. The first of these may imply that discussing work with family members is problematic, either because work discussions stand in the way of paying attention to nonwork issues or because one spouse is interested in discussing his or her work while the other is less interested with conflict as the result. Conversely, it may be due to a higher need to discuss work with family members in situations where work and nonwork conflict for other reasons. The finding regarding Work Space in the Home suggests that the ability to accomplish part of one's work at home (which was earlier shown to be related to the portability of work) is linked to the sort of flexibility in timing which helps alleviate common conflicts such as schedule overlaps, child care responsibilities, and other related issues.

Finally, the dimension of Business Travel was shown to be associated with Job Satisfaction. It may simply be that in this sample the jobs entailing travel were also more satisfying, although there is no particular reason to believe that this is the

case. It may be that there is something about business travel that makes a job particularly enjoyable, such as the autonomy gained, the chance to get out of one's usual setting and the opportunity to meet new people. One would suspect that extremely high levels of travel would begin to affect satisfaction with other life domains. This raises the more general question, of course, of curvilinear relationships in the data. At this stage, such relationships have not been explored though their presence is definitely possible and potentially quite interesting.

Clearly, these findings regarding the overlap/outcome relationship are not strong ones. They do provide some indication, however, that further research on the links between work/nonwork overlap and outcomes such as satisfaction may be fruitful.

Relationships between congruence of actual and ideal overlap and outcome measures. As predicted, the congruence between actual and desired levels of overlap was positively related to Life, Job and Nonwork Satisfaction and negatively related to Work/Nonwork Conflict. As with the direct relationships of the overlap dimensions to the outcome measures, the total amount of variance accounted for was not high. Nonetheless, it would appear that to some extent individuals judge subjective well being in terms of the overall match between their desired lifestyle and their actual one. This raises a number of interesting questions touched on earlier: How do individuals

form images of a satisfying lifestyle? Under what conditions will they work to change their lives to bring them closer to their ideals, and under what circumstances will they change their ideals (and, perhaps, lower their standards)?

Moderating effects of overlap on interrelationships between job, nonwork and life satisfaction. The degree of Global Overlap reported by an individual proved to be related (though weakly) to the extent to which Job Satisfaction and Nonwork Satisfaction provided redundant information about Life Satisfaction. While it was disappointing to not find a stronger relationship, the finding is interesting enough to warrant further study. It may be that unreliability of measurement obscured a stronger actual relationship, or it may be that there are particular dimensions of overlap (such as Activity Similarity) which may be more accurate moderators of this relationship. In any case, Global Overlap does appear to be reflected in the cognitive structure of individuals regarding their judgments of work, nonwork and life satisfaction.

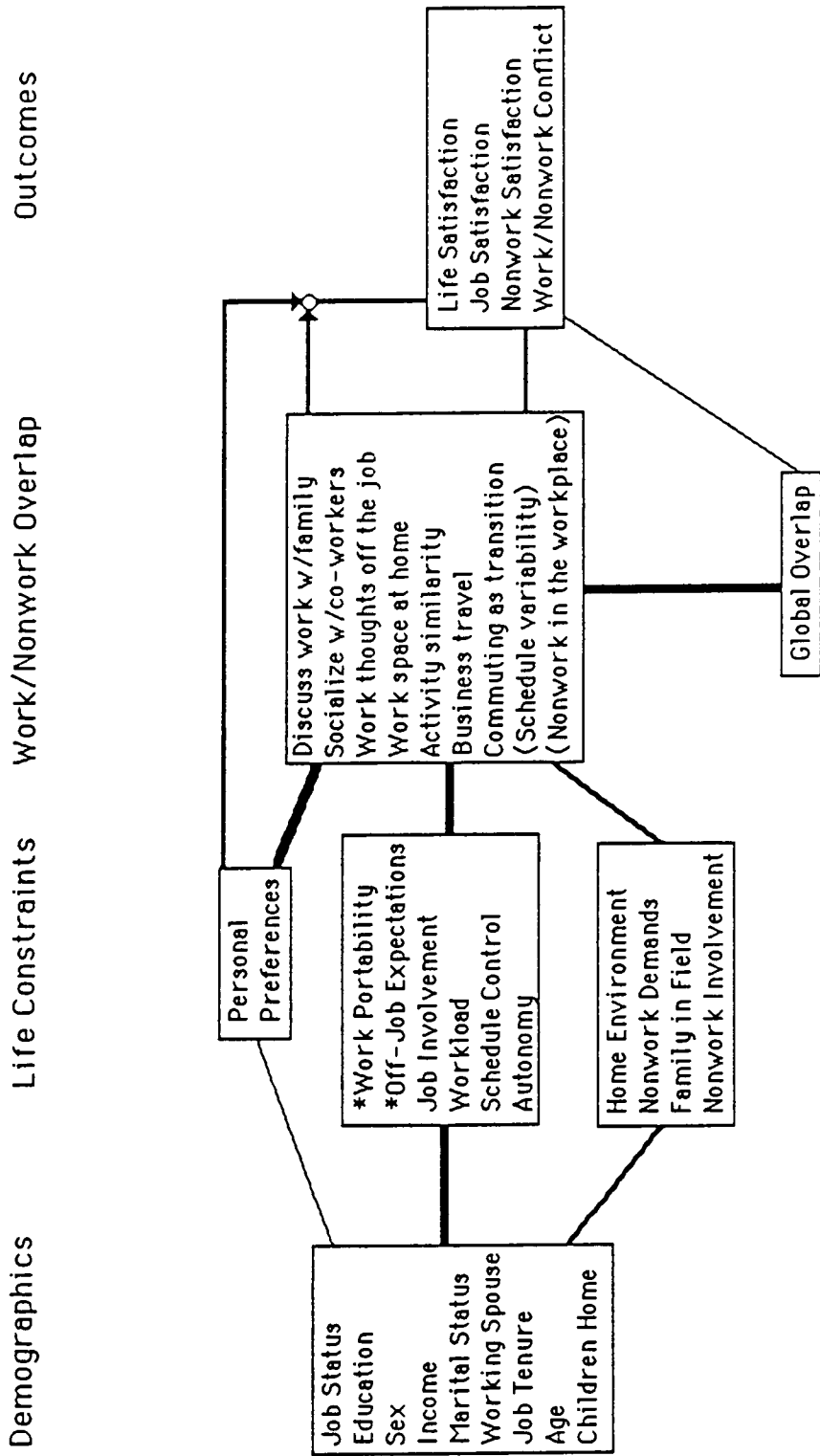
The second aspect of this relationship, that Global Overlap would moderate the Job Satisfaction/Life Satisfaction and Nonwork Satisfaction/Life Satisfaction correlations was not supported. This has several possible implications. If, as Steiner and Truxillo (1987) suggest, job importance is in fact a moderator of the Job Satisfaction/Life Satisfaction relationship, then it may be that Global Overlap is reflecting something other than the importance of the job (or the lack of importance of nonwork), even

though much of the previous literature has assumed it to be identical with Job Involvement. A distinction between these two constructs would fit with a number of the present findings, including the fact that, although job involvement was found to be related to many of the overlap dimensions investigated, a large number of demand and constraint factors also showed strong relationships to overlap. Common sense, too, suggests that such a distinction is necessary. One would, for example, imagine that it is possible for an individual to be highly involved in both work and nonwork and keep a strong boundary between them, thereby exhibiting low overlap. Past research positing the overlap/involvement link has focused on very few dimensions of overlap, generally those concerned with taking work home or thinking about work off the job; it is impossible to draw general conclusions about the nature of this relationship without further research, but in general the present findings do not support the identification of work/nonwork overlap with job involvement.

In summary, then, the major findings of this study include the identification and clarification of various forms of work/nonwork overlap which correspond remarkably well to those previously identified but not empirically verified, the linking of overlap on these dimensions to factors in the work, nonwork and personal domains, and, to a lesser extent, to several important life outcomes.

Presentation of a Revised Model

A revised version of the theoretical model is presented in Figure 2. This revision is intended to summarize the major findings of this investigation in simple form. Heavy lines indicate strong relationships, with medium lines representing moderate degrees of association, and dashed lines representing weak relationships. As can be seen, the links between the demographic variables and the work constraints are quite strong, with those involving the nonwork constraints less strong and those relating to the personal preferences weaker yet. The dimensions of Nonwork in the Workplace and that of Schedule Variability have been bracketed, since further research is needed on each of these. The links between two sets of the Life Constraint variables and the remaining overlap dimensions are all strong, with personal preferences particularly relevant to the dimensions of Discussing Work with Family and Socializing with Co-Workers and the work demands/constraints showing links to virtually all of the work-into-nonwork overlap factors. The variables representing Portability of Work and Off-the-Job Expectations showed particularly strong results, so these are highlighted. Nonwork demands/constraints showed only moderate links to a number of the overlap dimensions; this is so indicated. A heavy line indicates that the various specific forms of overlap showed moderate to high correlations with Global Overlap. Moving to the final section of the diagram, the overlap dimensions show



moderate links to the outcome measures, both in terms of their direct relationship and in terms of the congruence between personal preferences and actual overlap. Finally, the relationship of Global Overlap to the interrelationship of the satisfaction variables was present but very weak; hence it is represented by a dashed line.

Theoretical Implications

Results of this study suggest that "occupational determinateness" (or the extent to which one's work and one's lifestyle are associated) is great, at least among the individuals studied. The results appear to indicate that these work-related demands are more strongly linked to lifestyle than constraints imposed by the nonwork sphere. However, the results also suggest that personal preference appears to play a strong role in some aspects of the work-nonwork interface, particularly the extent to which individuals choose to involve the same people in various aspects of their lives (for instance, sharing work with family members and incorporating many of the same people in work and leisure activities). Future investigations of the effect of work on lifespace design should clearly include all three of these sources of influence.

Results also have implications for the relationship between job involvement and the overlap of life domains. Consistent with Noe's (1971) argument that executives and blue collar workers have separate spheres of autonomy, with executives finding their

autonomy within the work situation and "blue-collarites" finding theirs off the job, this study found that job involvement was related, on the one hand, to job status and other indices of higher-status work (e.g., higher income) and, on the other, to a number of forms of work/nonwork overlap, most notably perceived activity similarity and thinking about work off the job, appearing to indicate that highly job-involved individuals do in fact find much of their autonomy or perceived leisure within the work sphere (which may, in turn, increase the "involving potential" of the job). The relationship between job involvement and physically taking work home, however, was somewhat weaker, apparently being constrained by the portability of work. Measures of job involvement, therefore, which include implicit assumptions about its relationship to working at home should be used in conjunction with assessment of the factors limiting work portability. Furthermore, it was found that job involvement was not uniquely related to discussing work with family members, suggesting that job involvement does not necessarily predict overlap on all dimensions.

With respect to the question of whether job involvement and nonwork involvement are inversely related, this study is equivocal. While the two scales were highly negatively correlated, they also exhibited differential patterns of relationship with several of the overlap domains, suggesting that in the areas where resources such as time and energy must be allocated (e.g., bringing work home, thinking about work off the

job, nonwork in the workplace), the two are in fact competing for these resources, but that for forms of overlap which allow one to simultaneously achieve outcomes related to both domains (e.g., socializing with co-workers, discussing work with family), involvement in the two spheres is not mutually exclusive.

Findings of the present study also have implications regarding the suggested asymmetrical permeability of the boundaries of work and nonwork (Pleck, 1977). Pleck contends that this differential permeability is gender-related. The current research generally supports this in the finding that females perceive greater levels of constraint in the nonwork sphere (which were found to be negatively related to various forms of overlap and positively related to the presence of nonwork in the workplace) than do males, even when job status, a potential confound in this study, is taken into account. On the other hand, males were not more likely to perceive constraints in the work sphere with the exception of off-the-job expectations (e.g., business entertaining, travel), although each of the work-related constraints was linked to one or more forms of overlap. This would suggest that although the boundary is asymmetrically permeable as proposed, the forces causing this are predominantly in the nonwork sphere and are very strongly related to sex-role expectations. The one perceived work demand showing strong gender differences was that of behavioral expectations off-the-job. Given that females do not perceive fewer demands in other areas of their jobs, one might draw two conclusions. One is that

gender-role expectations regarding off-the-job behavior are built into many jobs (or at least perceived to be by the respondents in this study), potentially limiting entry by women into jobs which are perceived as having high levels of such demands. One might then ask whether these sorts of off-the-job behaviors are truly related to performance on the job, or whether they should be reexamined in the light of other information. The other is that females will, as a result of higher total demands, be more likely to perceive conflict between the two domains, which in fact many studies suggest they do, with adverse effects on physical and mental well-being.

Finally, this study showed tentative support for the idea that individuals with varying forms of work/nonwork linkages show different patterns with regard to their evaluation of life satisfaction. If this finding is substantiated by further research, it will potentially have implications for the way life satisfaction is measured and studied, and for theory regarding the cognitive structure of life domains.

Practical Implications

Practical implications of this research can be drawn for individuals as well as for organizations. From the individual's point of view, several things are clear. The first is that tradeoffs between the domains of work and nonwork are very real and probably inevitable. With few exceptions, involvement in one domain must come at the expense of involvement with the other

domain. While this may sound like an unduly negative conclusion, it may not be, in the sense that since one's assessment of various life outcomes appear to depend partially on a fit between ideals and reality, a clear understanding of the limitations that exist in the world regarding possible lifestyles may help people cast their ideals in more realistic terms. But, too, the research suggests that there are several ways in which individuals can attempt to mesh the domains, primarily by finding ways of sharing work interests with family and/or by finding ways to make one's nonwork companions the same people that one works with. This sort of strategy may have professional effects as well, according to Hirsch and David (1983), who suggest that the choice to socialize off the job with co-workers may be related to professional empowerment. Recent court decisions regarding desegregation of all-male clubs on the grounds that exclusion of females limits their opportunities for business networking would appear to be following this line of reasoning.

A further implication of these results for individuals is that the prevalence of work thoughts off the job shows a negative relationship to satisfaction and is positively related to conflict. This might suggest that, although most forms of overlap are benign, the ability to make a psychological break from work occasionally may be beneficial to mental health. Further research clearly needs to be done in this area, specifically regarding the potential effects of being able to compartmentalize work and nonwork roles when desired (a strategy often suggested for stress

reduction) and the strategies which individuals use to make such mental "breaks".

A final implication from the individual point of view is the realization that choice of occupation is critical to the lifestyle which one will potentially lead. Observation of numerous individuals in the process of planning their future lives has led the author to conclude that few people take this concept into account at all in choice of occupation or of job within occupation. A better understanding of the impact of job on lifestyle might help individuals choose more wisely and, ultimately, to enjoy more satisfying lives.

Practical implications for organizations include several issues already identified, including the need to assess job demands in terms of their relationship to performance. Also, since organizations benefit in the long run from satisfied employees through lowered turnover, absenteeism and health complaints, results of this study may imply that flexible scheduling options and other innovations allowing individuals more control over the ways in which they arrange their lives (e.g., corporate day care, permanent part-time work) may pay off.

In addition, since many organizations have found "realistic job previews" to be helpful in lowering turnover among new hires, it might also be helpful to offer "realistic lifespace previews", which would allow individuals to understand the full effect of the job on their lifestyle.

Finally, if the above interpretation of Noe's (1971) model is correct, high job involvement and a large degree of structural spillover from work to nonwork should be expected for individuals in high-status jobs. However, organizations would be well-advised to consider the level of demands they place on low-level employees. One prime example of this incongruence of status and demands is that of school teachers, who have demanding jobs without the accompanying status, with the ultimate effect being problems in finding quality people to fill the jobs.

Suggestions for Future Research

Because of the exploratory nature of this research, there are many areas which could be refined and extended by future investigations. A number of these issues have been identified throughout this discussion, including the clarification of the factors describing nonwork-into-work overlap and the dimension of time overlap/schedule variability, the investigation of the formation of lifestyle preferences and the clarification of the moderating effect of global overlap on the job/nonwork-->life satisfaction relationship. Other possibilities exist as well: surveying a broader spectrum of occupational classes, for instance, would allow a better understanding of the generalizability of these results and of the true range of overlap vs. compartmentalization. Research within particular jobs, too, would be helpful in clarifying some of the observed relationships by allowing job demands to be held constant. As mentioned

earlier the area of mental transitions, too, is a potentially fruitful one. Finally, as mentioned previously, the present research is cross-sectional and thus does not allow causal inferences to be made. Future research should address this issue as well as the issue of the extent to which untested moderator and curvilinear effects exist within this model.

In summary, further work on the issues addressed here has a great deal of potential to influence theory and practice regarding the ways in which individuals define the place of the various domains in their lives. The benefits of such research have the potential to help us better understand not only the place of work in the life of the individual, but also the ways in which individuals can act to improve the quality of their lives by better understanding the links between work and nonwork domains.

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APPENDIXES

APPENDIX A

SUMMARY OF PILOT STUDY

PILOT STUDY

Introduction

The literature on the relationship between the domains of work and nonwork suggests a number of dimensions on which these two aspects of life might overlap or, conversely, be kept separate. Because there existed no measure of general or specific forms of overlap prior to the present investigation, a pilot study was undertaken to test such a measure prior to its use in the present research. The aim of this study was twofold: to test the individual items in terms of their usefulness and clarity, and to gain a preliminary understanding of the overlap dimensions which might emerge from such an instrument.

Method

Participants

Participants were 187 working adults chosen to include a broad range of occupations. A further restriction, that those surveyed be part of a family (with either a spouse/partner or children or both), was placed on the sample. Subjects were contacted by the researcher or by one of several assistants who aided in this phase of data collection and asked to complete a questionnaire. Usable responses were received from 134 individuals, producing a response rate of approximately 72%.

Sixty-five of the respondents were female, 69 male, with a mean age of 40.6, a median household income of \$35,000-35,999 (since 106 of the respondents had working spouses this figure represents many 2-income families), and a median educational level of 2 to 4 years of college. Median job status (on a scale with mean=50 and s.d.=10) was 51.24, with occupations falling into the following categories: professional/technical 44.8%, managerial/administrative 28.3%, clerical 14.9%, and other categories 12.3%.

Procedure

Data were collected by means of a survey questionnaire. The questionnaire, which took approximately 30-45 minutes to complete, was distributed to individuals as described above, and returned to a University of Tennessee address either in person or using stamped, addressed envelopes provided with the survey. Respondents were invited to comment on the wording, interpretability, and any other aspects of the various items. Additionally, several of these individuals were interviewed at greater length to gain further insight into the measures of interest. Participation in the study was completely voluntary, and confidentiality was assured through anonymity.

Measures

The survey questionnaire used included a number of scales, similar to those reported in the body of this work. Two are of

particular interest here: the Work/Nonwork Specific Overlap and General Overlap scales. Containing 29 and 4 items respectively, these scales were developed by the author for the purposes of this study. In the item generation process, an attempt was made to incorporate items addressing the various forms of overlap mentioned in the literature. The Specific Overlap Scale comprised a series of items describing ways in which elements of work and of nonwork might be present simultaneously, while the General Overlap Scale comprised items asking about the extent to which work and nonwork were perceived as being separable/inseparable in the respondent's life as a whole.

Results

Factorial Composition of Measures

Image analysis with Harris-Kaiser rotation (Harris & Kaiser, 1964) using SAS PROC FACTOR (SAS Institute, 1982) was used to determine the dimensionality of the data. Using inspection of a scree plot and interpretability as criteria for number of factors, an eight-factor solution was extracted for the Specific Overlap Scale, while one factor was sufficient to describe the General Overlap Scale. The rotated factor pattern matrix for the first analysis is presented in Table 18.

The first factor identified appears to represent schedule variability, with five items showing coefficients greater than .40.

Table 18. Rotated Factor Pattern Matrix for Work/Nonwork Overlap Items from Pilot Study

Item	Factor Pattern Coefficients							
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
I am "on call" for my job.	.74	-.02	-.18	-.03	.00	.12	.07	-.01
I carry a "beeper" when away from office.	.67	-.15	-.16	.01	.02	-.05	-.14	.01
My work schedule varies from day to day.	.59	-.18	.21	.31	-.03	-.12	.20	-.00
Friends or family...stop by my workplace.	.52	.12	.41	-.26	-.03	.01	-.20	.04
I get work-related phone calls at home.	.47	.20	-.13	.17	.23	.09	-.05	-.04
I discuss my work with family members.	-.03	.85	-.11	-.06	.02	.00	-.03	.05
I discuss my work with my spouse.	-.05	.84	.03	.08	-.03	.02	-.02	-.07
When working, I talk to friends.	-.25	-.21	.84	.08	.06	.23	-.07	-.04
When working, I talk to family members.	.09	.10	.83	-.03	-.10	-.09	.06	-.01
When working, I think about home/family.	.09	.08	.51	-.02	-.14	-.30	-.09	.10
I switch back and forth from working to doing other (nonwork) things.	.03	-.24	.42	.04	.38	.06	.19	.02
When I am not at work, I think about work.	.02	-.05	-.00	.86	-.02	-.01	.06	.03
I stop work thoughts completely at home.	-.05	-.07	-.03	-.71	-.06	-.01	.03	.10
When not working, I come up with a thought or idea relating to my work.	-.05	.25	.16	.67	.10	-.14	.23	.04
When at a social event, I talk about work.	-.06	.26	.05	.43	-.10	.33	-.03	.09
I take time away from work for other things.	-.08	.25	.14	-.64	.18	.03	.34	.05
I work at home.	.05	-.01	-.03	-.09	.92	-.08	.03	-.03
I do most of my work at home.	.00	.06	.00	.06	.87	.04	-.12	-.01
I don't distinguish between work space and living space.	-.11	-.13	-.09	.08	.61	.02	-.04	.13

Table 18. (Continued)

Item	Factor Pattern Coefficients							
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
I socialize off the job with people from work.	.01	.08	.09	-.03	-.01	.93	-.15	-.00
I take part in recreational activities with people from work.	.01	-.09	.02	-.02	-.06	.83	.05	-.06
I entertain business associates off the job.	.03	-.01	-.09	-.02	.02	.63	.19	.00
I eat meals away from home with work people.	.09	-.01	-.16	.02	-.01	.40	.29	.12
I spend nights away from home on business.	-.07	-.02	-.08	.03	.00	-.13	.89	.04
I travel for work-related reasons.	.08	-.04	.06	.00	-.10	.08	.87	-.03
I use commuting time on the way to work to prepare for work.	.08	.01	-.02	-.00	-.05	-.00	.01	.96
I use commuting time on the way home to "wrap up" my work for the day.	-.08	-.02	.01	-.01	.05	-.03	.00	.94
I get phone calls at work that are primarily related to nonwork things.	.31	.31	.18	-.32	.03	-.04	.18	-.06
The work that I do on my job is similar to things I do when I'm not working.	-.13	.14	.17	-.01	.22	.25	.07	.17
Percent of variance accounted for:								
Part (Unique variance only)	6.1%	6.0%	6.8%	7.3%	6.7%	7.4%	5.6%	5.6%
Partial (Includes shared variance)	9.2%	8.1%	9.2%	10.5%	10.4%	10.7%	10.4%	8.8%
Total variance accounted for=61.9%								

The second factor, with two items, addresses the discussion of work matters with family members.

The third factor, with four items, appears to incorporate various aspects of the presence of nonwork in the workplace; interacting with family or friends while at work and interspersing other activities with work are the major elements here.

The fourth factor, with five items, clearly represents the prevalence of work thoughts off the job.

The fifth factor, with three items, addresses the extent of work activities conducted in the home space.

The sixth factor represents the degree of socializing off the job with individuals associated with the work setting.

The seventh factor includes two items tapping the amount of travel undertaken in conjunction with the job.

The eighth factor includes two items reflecting the use of commuting time to make a mental transition between work and nonwork.

Two items did not load on any of the above factors. The first, regarding nonwork phone calls at work, had moderate loadings on several factors, not clearly representing any one of them. The second, regarding the similarity of work and nonwork activities, does not show a great deal of association with any of the factors, perhaps suggesting that it is a separate aspect of overlap not adequately tapped by the items included here.

For the General Overlap Scale, the three items addressing general overlap/segmentation loaded on one factor, all showing pattern coefficients of $>.40$, with the fourth item, asking about variability in degree of overlap experienced, failing to show a high coefficient. Thus this factor appears to measure perceived global overlap or segmentation between work and nonwork.

Internal consistency reliability coefficients (Cronbach's alpha) were computed for each of the factors listed above. They are as follows: Factor 1, .62; Factor 2, .72; Factor 3, .63; Factor 4, .73; Factor 5, .74; Factor 6, .76; Factor 7, .78; Factor 8, .89; Global Overlap, .76. While most of these are acceptable, several indicate that internal consistency could be higher. The scale was revised somewhat in an attempt to increase reliabilities.

In addition, comments offered by respondents were compiled--minor wording changes were made to clarify several items on the basis of these comments.

Discussion

Based on the results obtained above and the interviews conducted with a number of respondents concerning the notion of work/nonwork overlap, it was concluded that this construct appears to be one which has meaning for individuals in thinking about their lives. Furthermore, it would appear that there are several specific forms of overlap which can be differentiated from one another as well as a more general sense of work/nonwork overlap. These factors do appear to follow in

general those mentioned in the literature as possible forms of work/nonwork overlap.

One flaw in this investigation would appear to be the inadequate representation of work/nonwork activity similarity, a dimension of work/nonwork relationships which has, it should be noted, received a great deal of attention in the literature. It was therefore determined that items regarding this dimension should be added to the scale for its use in further data collection.

In summary, the pilot investigation of these two measures led to the conclusion that they would, with minor changes, be useful for their intended purpose: investigation of the forms of work/nonwork overlap and the circumstances in which they are found to exist.

APPENDIX B

SAMPLE SURVEY INSTRUMENT AND COVER LETTER

THE UNIVERSITY OF TENNESSEE
KNOXVILLE



Industrial/
Organizational
Psychology
Program

Dear Faculty Member,

One of the most complex issues confronting the working adult today is the problem of balancing time and energy spent on work with time and energy spent on family and other non-work things. I am conducting a research project in an effort to understand 1) how individuals fit work and nonwork into their lives, 2) the conflicts and benefits that result from various "lifestyle choices", and 3) the effects of such choices on stress and on life satisfaction.

I need to get information from a diverse group of working adults, so I am contacting individuals from several different organizations in a variety of jobs to ask for participation in this survey. Ed Bennett has agreed to cooperate with my efforts at UT and has helped me identify groups of individuals to whom I am distributing surveys. It is very important to me that you fill out the enclosed questionnaire so that my sample can be as representative as possible.

Please understand that all responses are anonymous (note that there is no place on the questionnaire for your name) and that results will only be reported in summary form. I will provide a summary of my findings to the office of the Provost and also to any individual who requests it.

Please take half an hour of your precious summer time to fill out the enclosed survey booklet and return it in the envelope provided by July 14.

Thank you for your participation in this project.

Sincerely,

A handwritten signature in cursive script, reading "Linda L. Hoopes".

Linda L. Hoopes
Industrial/Organizational Psychology
The University of Tennessee

*P.S. I think you'll enjoy it! If you have any questions,
call me at 577-7456.*

An Intercollegiate Program Sponsored by the Departments of Management & Psychology
413 Stokely Management Center / Knoxville, Tennessee 37996-0545 / (615) 974-4843

A STUDY OF WORK AND NONWORK ISSUES

Linda L. Hoopes
The University of Tennessee, Knoxville

This survey is designed to be completed by working adults who are married (or living with a partner), or who have children under 18 at home, or both. If you do not fit these qualifications, please pass this questionnaire on to someone who does. It should take about 30 minutes to complete. Thank you for your participation!!

This questionnaire will be the basis for a doctoral dissertation designed to investigate the extent to which work and nonwork overlap in peoples' lives.

** Work is defined here as your job--what you do for a living.

** Nonwork, as the term is used here, includes everything except your work.

For example, it might include time you spend...

- * just for yourself

- * with your spouse or "significant other"

- * with other family members

- * with friends

- * working around the house

- * doing anything else you can think of that isn't your work

There are several important things to remember.

** This survey is completely anonymous. Please do not put your name on this form. The data from this survey will be analyzed only in terms of groups; no individual data will be reported.

** As you go through this questionnaire, please try to answer every question. Usually the first answer that comes into your head is the best one, and there are, of course, no "right" or "wrong" answers.

** Please make comments if you have something to add, or if you feel that a question is not clear.

** Thank you for taking the time to fill this out!!

** When you have finished, please put the survey in the enclosed postage-paid envelope and mail it to:

Linda L. Hoopes
Department of Psychology
The University of Tennessee
Knoxville, TN 37996

** If you also send me your name and address, either with the survey or on a separate postcard, I will be happy to send you a summary of the results of this survey.

Section I--Life Description

Please indicate the extent to which each of the following statements describes your life at the present time using the following scale.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Often

- ___ 1. I work at my home.
- ___ 2. My work schedule varies from day to day.
- ___ 3. I get phone calls at work that are primarily related to non-work things.
- ___ 4. I get phone calls at home that are primarily related to work things.
- ___ 5. When I am not at work, I think about work.
- ___ 6. When I am at work, I think about home and family.
- ___ 7. The kinds of things I do on my job are also the kinds of things I like to do off the job.
- ___ 8. When I am working, I take time to talk to friends.
- ___ 9. When I am not working, I come up with a thought or idea that relates to my work.
- ___ 10. I switch back and forth from working to doing other (nonwork) things.
- ___ 11. I travel for work-related reasons.
- ___ 12. I spend nights away from home on work-related trips.
- ___ 13. I eat meals away from home before or after work with people from work.
- ___ 14. I take time away from work to do nonwork-related activities (e.g. errands, things with friends or family, things just for myself).
- ___ 15. Friends or family who do not work for the same organization as I do stop by my place of employment to see me.
- ___ 16. I socialize off the job with people related to my work.
- ___ 17. I entertain business associates off the job.
- ___ 18. I take part in recreational activities with people from work.
- ___ 19. I discuss my work with my spouse (or "significant other").
- ___ 20. I discuss my work with other family members.
- ___ 21. I use commuting time on the way to work to prepare for work.
- ___ 22. I use commuting time on the way home to "wrap up" my work for the day.
- ___ 23. Things that I do when I'm not working (e.g. hobbies, leisure activities) are similar to the work that I do on my job.
- ___ 24. I am "on the road" as part of my job.

Life Description--continued

Please indicate the extent to which each of the following statements describes your life at the present time using the following scale.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Often

- ___ 25. I stop thinking about work completely when I am at home.
- ___ 26. I am "on call" for my job.
- ___ 27. My family and I discuss what goes on in my job.
- ___ 28. The skills and abilities I use on my job are also used for things that I do off the job.
- ___ 29. When I am working, I take time to talk to family members.
- ___ 30. When I am at a party or social event, I talk about work-related matters.
- ___ 31. My work activities and my leisure activities have a lot in common.
- ___ 32. I carry a "beeper" when I am away from my office.

For each item below, please circle the answer that best applies to you.

- 1.a. When I work at home, I don't make a distinction between work space and living space.
- b. When I work at home, I have space that is designated for work, but I'm not too strict about it.
- c. When I work at home, I have a particular place (or places) just for work.
- d. I never work at home.
- 2.a. All or almost all of my work is done at home.
- b. I have a workplace away from home, but do a good bit of work at home too (my job allows me to do much of my work at home and/or I run a business out of my home in addition to my "outside" job).
- c. I have my main workplace away from home, and I do work at home almost every day (three or more days a week, on the average).
- d. I have my main workplace away from home, and I do work at home fairly often (one or two days a week, on the average).
- e. I have my main workplace away from home, and I do work at home once in a while (less frequently than once a week, but sometimes).
- f. I never bring work home.
- 3. Not counting vacations and holidays, which of these best describes your scheduled working hours?
 - a. Extremely flexible--I work the hours and days that I feel like it.
 - b. Within certain limits I can work the hours and days that I want.
 - c. I have to work particular days, but I have flexibility in my starting and ending times.
 - d. I have to work particular days and particular hours with little or no flexibility (e.g. 9 to 5).
 - e. I work on a regular shift (if so, which shift?) _____
 - f. I work a rotating shift.
 - g. The hours I work are extremely variable--they depend on such things as the weather, the season, the workload, etc.
 - h. Other (please describe) _____

4. If you do work at home, in which rooms of the house do you work?
(Please circle all that apply)

bedroom	bathroom	living room	porch
office or den	studio	family room	
kitchen	dining room	other _____	

5. Can you think of any other things you do or ways that your life is arranged that have to do with the separation or overlapping of work and nonwork?

Section II--Work/Nonwork Overload and Conflict

Considering your life in general, please indicate how much you agree or disagree with the following statements, using the following scale.

1	2	3	4	5	6	7
Strongly	Disagree	Tend to	Neutral	Tend to	Agree	Strongly
Disagree		Disagree		Agree		Agree

- ___ 1. It often seems like I have too much for one person to do.
- ___ 2. I never have enough time to do everything that is expected of me.
- ___ 3. I often feel rushed to do the things I have to do.
- ___ 4. I usually have enough time to do all the things I have to do.
- ___ 5. I usually have enough time to do all the things I want to do.
- ___ 6. Sometimes I feel like I am working two full-time jobs--one at work and one at home.
- ___ 7. I have a lot of time on my hands.
- ___ 8. I feel a conflict of loyalty between my home and work responsibilities.
- ___ 9. My job interferes with my family life.
- ___ 10. My family or personal life interferes with my job.
- ___ 11. My work schedule interferes with my personal life.
- ___ 12. I have to miss work to see that family responsibilities are met.

Section III--Work Demands/Opportunities

Please indicate the extent to which each of the following statements is true about your job using the following scale.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. I have control over the hours I work.
- ___ 2. I have control over the days I work.
- ___ 3. People in my position are expected to work more than 40 hours per week.
- ___ 4. People in my position are expected to take work home.
- ___ 5. People in my position are expected to do business-related entertaining at home.
- ___ 6. People in my position are expected to do business-related entertaining away from home.
- ___ 7. My job gives me the opportunity for independent thought and action.
- ___ 8. People in my position are expected to belong to certain clubs or organizations, or to mix in particular social circles.
- ___ 9. There are a lot of things that I need to do on my job.
- ___ 10. I have the freedom to do pretty much what I want on my job.
- ___ 11. The kind of work I do can't physically be taken anywhere--it wouldn't be possible for me to work at home.
- ___ 12. I do work that is high security or confidential--I can't talk about it with friends or family.
- ___ 13. I have a lot of autonomy on my job--I am "on my own".
- ___ 14. I have a lot of projects or assignments on my job.
- ___ 15. People in my position are expected to travel a lot.
- ___ 16. My job is one in which I am expected to do a lot of work.
- ___ 17. On my job, there is a lot of paperwork or other work that could be done away from my office or workplace.

Can you think of any other ways in which the work you do or the organization you work for affects the way your life is arranged?

Section IV--Nonwork Demands/Opportunities

Please indicate the extent to which each of the following statements is true about your nonwork life using the following scale.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. I have responsibilities or expectations at home or elsewhere that require me to leave work by a certain time each day.
- ___ 2. I have responsibilities or expectations at home or elsewhere that require me to limit my working hours.
- ___ 3. I have responsibilities or expectations at home or elsewhere that sometimes make it necessary to take time away from work.
- ___ 4. Whether or not I actually do work at home, my home is an environment in which I could get work done.
- ___ 5. My bringing work home upsets or would upset my family.
- ___ 6. Members of my family work at the same place or in the same field as I do.
- ___ 7. I have a good deal of control over how time at home is spent.

Can you think of any other ways in which things about your nonwork life affect the way that work fits into your life?

Section V--Overall Relationship Between Work and Nonwork

Please indicate the extent to which you agree with each of the following statements using the following scale.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. When I think about my work and then about everything else that I do in my life, I feel as though I keep my work more separate from the rest of my life than other people that I know.
- ___ 2. My work and my life are impossible to separate--I couldn't really say which is which.
- ___ 3. My work is very separate from the rest of my life--I turn off one "world" before I enter the other.
- ___ 4. The degree to which my work and the rest of my life are separate varies from time to time.

Section VI--Adjective Checklist

For each of the following pairs of adjectives, decide whether one or the other describes your life, or whether your life is somewhere in between, and check the point on the scale that best fits your life right now. For instance, if you were given the adjective pair: satisfying---dissatisfying and you felt that your life was slightly more satisfying than dissatisfying, you would check the scale as follows:

satisfying : ____ : ____ : ☒ : ____ : ____ : ____ : ____ : dissatisfying

1. rushed : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unhurried
2. balanced : ____ : ____ : ____ : ____ : ____ : ____ : ____ : unbalanced
3. work-centered : ____ : ____ : ____ : ____ : ____ : ____ : ____ : nonwork-centered
4. lighthearted : ____ : ____ : ____ : ____ : ____ : ____ : ____ : serious
5. hard : ____ : ____ : ____ : ____ : ____ : ____ : ____ : easy
6. spontaneous : ____ : ____ : ____ : ____ : ____ : ____ : ____ : scheduled
7. organized : ____ : ____ : ____ : ____ : ____ : ____ : ____ : disorganized
8. satisfying : ____ : ____ : ____ : ____ : ____ : ____ : ____ : dissatisfying

Section VII--Satisfaction with Work

Using the following scale, indicate how you feel about each of these aspects of your work. Please try not to use "NA" unless absolutely necessary.

1	2	3	4	5	6	7	NA
Extremely	Unhappy	Mostly	Mixed	Mostly	Pleased	Extremely	Does Not
Unhappy		Unhappy		Pleased		Pleased	Apply

- ___ 1. Your co-workers.
- ___ 2. The work itself.
- ___ 3. The pay and fringe benefits you get.
- ___ 4. The physical surroundings.
- ___ 5. The supervision you receive.
- ___ 6. Your opportunities for advancement.
- ___ 7. All things considered---YOUR JOB AS A WHOLE.

Section VIII--Satisfaction with Nonwork

Using the scale below, indicate how you feel about each of these aspects of your nonwork. Please try not to use "NA" unless absolutely necessary.

1	2	3	4	5	6	7	NA
Extremely Unhappy	Unhappy	Mostly Unhappy	Mixed	Mostly Pleased	Pleased	Extremely Pleased	Does Not Apply

- ___ 1. Your marriage.
- ___ 2. Your family life.
- ___ 3. Your children.
- ___ 4. The way you spend your spare time--your nonworking activities.
- ___ 5. The amount of free time you have.
- ___ 6. The amount of relaxation in your life.
- ___ 7. The number of good friends you have.
- ___ 8. The people you see socially.
- ___ 9. The religious fulfillment in your life.
- ___ 10. Your house/apartment.
- ___ 11. The neighborhood you live in.
- ___ 12. The community you live in.
- ___ 13. How much you help people or groups in this community.
- ___ 14. Groups or organizations you belong to.
- ___ 15. Outdoor places you can go in your spare time around here.
- ___ 16. Recreation and sports facilities around here.
- ___ 17. The entertainment you get from TV, radio, movies, and local events.
- ___ 18. All things considered, YOUR LIFE AS A WHOLE.

Section IX--Work Involvement

Please indicate the extent to which each of the following statements is true about you using the following scale.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. My job is a major source of satisfaction in my life.
- ___ 2. The most important things that happen to me involve my work.
- ___ 3. I feel depressed when I fail at something connected with my job.
- ___ 4. I have other activities more important than my work.
- ___ 5. Nothing in life is more important than work.
- ___ 6. To me my work is only a small part of who I am.
- ___ 7. I am very much involved in my work.

Section X--Nonwork Involvement

Please indicate the extent to which each of the following statements is true about you using the following scale.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. My activities off the job are a major source of satisfaction in my life.
- ___ 2. The most important things that happen to me involve my nonwork activities.
- ___ 3. I feel depressed when I fail at something connected with my nonwork.
- ___ 4. I consider other activities more important than my nonwork.
- ___ 5. Nothing in life is more important than my nonwork time.
- ___ 6. My nonwork activities and interests are only a small part of who I am.
- ___ 7. I am very much involved in my life outside of work.

Section XI--Personal Preferences Concerning Work and Nonwork

As you look at each of the following items, suppose that you didn't have to take practical considerations into account and think about how the ideal life (for you) would be arranged. Indicate how much you think that each statement agrees with your ideal lifestyle.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Tend to Disagree	Neutral	Tend to Agree	Agree	Strongly Agree

- ___ 1. A lot of my work would be done at home.
- ___ 2. I would socialize with people from work.
- ___ 3. I would have friends and family at my workplace.
- ___ 4. I would talk about my work with my family.
- ___ 5. I would talk about my home and family at work.
- ___ 6. I would work variable hours.
- ___ 7. I would think about my work when not at work.
- ___ 8. I would think about my home and family at work.
- ___ 9. I would travel on my job.
- ___ 10. I would quit thinking about work at the end of the day.
- ___ 11. I would integrate my work and my personal life.
- ___ 12. I would work in an area more similar to some of my hobbies or other nonwork interests.
- ___ 13. I would be involved in work-related discussions with family members.
- ___ 14. I would separate my work from the rest of my life.
- ___ 15. I would not be able to tell if I was working or playing.
- ___ 16. I would be "on call" for my job.
- ___ 17. I would bring work home.
- ___ 18. Many of my social activities would be with people from work.
- ___ 19. I would get out of town on business trips.
- ___ 20. I would use commuting time to start and stop thinking about work.

How else would you structure the way work and nonwork fit together in your life if you could? _____

Section XII--Physical Checklist

At present, how often does each of the following physical conditions happen to you? (Check one answer for each item).

	OFTEN	SOMETIMES	RARELY	NEVER
a. Trouble breathing or shortness of breath	___	___	___	___
b. Pains in my back or spine	___	___	___	___
c. Becoming very tired in a short time	___	___	___	___
d. Having trouble getting to sleep	___	___	___	___
e. Having trouble staying asleep	___	___	___	___
f. Finding it difficult to get up in the morning	___	___	___	___
g. Feeling my heart pounding or racing	___	___	___	___
h. Hands sweating so that they feel damp or clammy	___	___	___	___
i. Feeling nervous or fidgety and tense	___	___	___	___
j. Poor appetite	___	___	___	___
k. Spells of dizziness	___	___	___	___
l. Smoking more than I used to	___	___	___	___
m. Drinking more than I used to	___	___	___	___

Section XIII--Background Information

1. About how many hours do you work each week? _____
2. How many days do you work each week? _____
3. What is your job? (Please describe as specifically as possible.)

4. How long have you worked at this job? _____
5. How many minutes (total) do you spend traveling to and from work each day?
_____ minutes
6. How do you usually get to work (e.g. drive self, carpool, etc.)?

7. How many days of vacation do you get per year? _____
8. Who decides when you take your vacation? _____
9. Are you a. Male b. Female
10. In what year were you born? _____

11. What would you say is your main reason for working at your present job?
(check one)
- ☐ my work defines who I am--it is the center of my life
- ☐ I get a lot of satisfaction from my job
- ☐ my work is the means to an end--it allows me to do things I enjoy
- ☐ I need the job to survive
12. In which category is your annual household income (before taxes)?
- | | | |
|--------------------|--------------------|---------------------|
| a. Below \$5,000 | e. \$20,000-24,999 | i. \$40,000-49,999 |
| b. \$5,000-9,999 | f. \$25,000-29,999 | j. \$50,000-59,999 |
| c. \$10,000-14,999 | g. \$30,000-34,999 | k. \$60,000-69,999 |
| d. \$15,000-19,999 | h. \$35,000-39,999 | l. \$70,000 or more |
13. What is the highest level of education you have completed?
- a. Some grade school
- b. High school diploma or equivalent
- c. Some college, no degree
- d. Two year or technical degree
- e. Four-year college degree
- f. Masters' or equivalent professional degree
- g. Ph.D. or equivalent professional degree
14. What is your marital status?
- a. Married or living with a partner
- b. Single, divorced, separated (skip to number 20)
15. Does your spouse/partner work outside the home?
- a. Yes b. No (skip to number 20)
16. What is his/her job title? _____
17. About how many hours per week does he/she work? _____
18. How much flexibility in working hours does he/she have?
- a. A great deal
- b. Some
- c. Very little or none
19. What is your spouse/partner's main reason for working?
- a. Has to--we need the money
- b. In between
- c. Wants to--gets personal fulfillment from the job
20. Do you have children under 18 living with you? a. Yes b. No
- If yes, how many? _____ What are their ages? _____
21. Do you have any other dependents for whose care you are responsible?
(elderly persons, etc.) a. Yes b. No

Section XIV--Open-ended Questions Regarding Work and Nonwork

1. Please describe any habits, guidelines, or policies that you have about when and where you think about work when you're off the job. (For example, one couple decided that there were to be no computer printouts in the bedroom; a group of friends have a rule that anyone who mentions work when they are out for the evening has to buy the next round of drinks.)

2. Finally, please describe any habits, routines, etc. that you use to make a transition from thinking about work to not thinking about work (or vice versa). (For example: one person I know who works a lot at home takes a bath in the evening when he is getting ready to get started on work again, another person unplugs the phone and reads the newspaper after getting home.)

<<< THANK YOU !!! >>>

APPENDIX C

INTERCORRELATIONS AMONG STUDY VARIABLES

VITA

Linda Louise Hoopes was born in Lompoc, California on May 9, 1959. She was raised and attended public school in Clearwater, Florida, where she participated in a number of activities including the high school debate team and served a one-semester internship with the City Attorney's office. In 1977 she graduated from Clearwater High School and headed for North Carolina to attend Davidson College, to be followed shortly by her two sisters Barbara and Carol and, somewhat later, by her brother John. She majored in psychology at Davidson and pursued her interest in music as an avocation. Spending her junior year in Britain at the University College of North Wales, Bangor, she developed a great love of travel that, after graduation in 1981, led her to drive from Florida to Seattle, Washington and work there for a year as a bartender and waitress before applying to graduate school. She entered the doctoral program in Industrial-Organizational Psychology at the University of Tennessee in the fall of 1982, graduating in August of 1988 with the Ph.D. degree in Industrial-Organizational Psychology minoring in Statistics. She is presently employed as Assistant Professor of Psychology and Administrative Science at Colby College, Waterville, Maine.