

## **The Psychological Context of Residential Mobility and Well-Being**

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*This article examines earlier research on residential mobility and health, and offers a theoretical framework that addresses certain issues neglected in that research. In general, previous analyses have characterized relocation as an acute and short-term life event that imposes considerable strains on the individual at the time of moving. This perspective minimizes the dynamic quality of mobility and ignores the longer-term health consequences of relocation which unfold gradually as the individual adjusts to the diverse life changes associated with moving. Alternatively, the proposed analysis assumes that the health effects of relocation depend not only on the immediate circumstances surrounding a move, but also on the broader context of the individual's residential history, current life situation, and aspirations for the future. Hypotheses concerning several psychological mediators of mobility and health are derived. These hypotheses are assessed in light of the findings from a longitudinal survey of residential experience and health.*

This article examines the relationship between residential relocation and personal well-being. A careful analysis of this research topic and social issue may yield important policy implications in view of current technological, demographic, and economic trends. Recent advances in transportation and telecommunications have promoted increased contact among residents of

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geographically distant places and have encouraged a high mobility rate by making people more aware of residential, employment, and recreational options. Within the United States, for example, demographic data show that, over the past two decades, almost 20% of the national population has moved each year (cf., Fischer, Jackson, Stueve, Gerson, Jones, & Baldassare, 1977; Long, 1976). Recent migrations from the "Snow Belt" to the "Sun Belt," and from urban to suburban and rural regions, reflect the continuing predilection among Americans for residential change (cf., Baldassare, in press; Long & DeAre, 1981).

At the same time, several sociological and epidemiological studies of residential relocation and health have found that moving is often associated with deleterious effects on personal and family well-being (Brett, 1980; Fried, 1963; Kantor, 1965; Rowland, 1977; Syme, Hyman, & Enterline, 1965). The evidence for negative effects of relocation on health, coupled with the substantial rate of mobility in the United States, becomes all the more problematic when viewed in the context of contemporary concerns about skyrocketing costs of health care and an increasingly sluggish national economy (cf., Matarazzo, 1982; Weiss, 1982). All of these factors highlight the practical importance of gaining greater understanding of the relationship between mobility and health, and suggest the possible utility of developing community intervention programs intended to reduce the personally disruptive and societally costly consequences of mobility.

While recognizing the complexity of mobility as a social issue and the advantages of a multidisciplinary perspective (cf., Shumaker & Stokols, 1982), we choose to emphasize psychological aspects of individual relocation and health for a number of reasons. First, although earlier studies found a significant link between residential change and illness, two recent experiments suggest that the adverse effects of moving are mediated by psychological variables—namely, the predictability of the move and the controllability of the new environment (Pastalan, Note 1; Schultz & Hanusa, Note 2). Yet, the empirical evidence for psychological mediators of moving and health remains quite sparse. Moreover, previous theoretical discussions of mobility and well-being have focused primarily on the dimensions of predictability and perceived control (cf., Krantz & Schultz, 1980; Schultz & Brenner, 1977), while neglecting several other psychological and environmental factors that may affect people's reactions to moving. Thus, earlier models offer an incomplete basis for understanding the diverse circumstances under which residential change does or does not lead to health impairment.

The major purpose of this article, therefore, is to provide a theoretical analysis of mobility and well-being that integrates the findings from previous studies and addresses certain issues neglected in that research. In

the following sections, we examine the key assumptions that have guided earlier investigations and suggest an alternative view of mobility and health which emphasizes the psychological context of relocation. Finally, we assess certain hypotheses suggested by our analysis in light of the findings from an ongoing study of mobility and health (Stokols, Shumaker, & Martinez, Note 3).

## PREVIOUS RESEARCH ON MOBILITY AND HEALTH

A predominant paradigm reflected in earlier research on mobility and health portrays relocation as a stressful life event (Holmes & Rahe, 1967). To characterize moving as a stressor is to assume that this experience places demands on individuals which tax or exceed their coping abilities and adaptive resources (cf., Lazarus, 1966; Selye, 1956). According to the stress model, the demands of moving and the psychological state of imbalance that they induce lead to a variety of physiological, affective, and behavioral stress reactions. To the extent that these reactions are sufficiently intense and prolonged, they are expected to provoke illness symptoms and aggravate chronic health problems.

The characterization of residential relocation as a stressful life event is intuitively appealing. People in the throes of moving often complain about the hassles of packing and unpacking personal belongings, the strain of leaving familiar surroundings and of leaving friends and loved ones, and apprehensions about making new friends and establishing roots in an unfamiliar place. Most movers would agree that these demands are indeed disruptive and stressful.

Early investigations of moving and health lent support to the notion that residential change is invariably stressful and promotive of emotional and physical disorders. Fried (1963), for example, documented a syndrome of depression and gastrointestinal problems which persisted several months after relocation among a sample of blue collar workers. Syme et al. (1965) observed an increased rate of coronary heart disease among male employees who had changed residences due to job transfers. More recent studies have found that the wives of relocated employees are vulnerable to prolonged depression subsequent to moving (Brett, 1980; Seidenberg, 1973). Also, an increased rate of mortality has been observed among elderly individuals moving from noninstitutional to institutional settings (Rowland, 1977).

Although the above findings indicate that *some* individuals and groups are adversely affected by moving, they do not confirm the simplistic view that relocation is inevitably harmful to health. Recent demographic data actually suggest that the majority of mobile Americans change

residence voluntarily and without detrimental health consequences (cf., Fischer & Stueve, 1977). In fact, blocked mobility or the inability to improve one's life situation through residential change may be more harmful than relocation (cf., Fairchild & Tucker, 1982; Loo & Mar, 1982). In those instances where relocation is viewed as a desirable strategy for enhancing one's overall life situation, the inconveniences of moving are likely to be offset by important "compensatory" benefits such as improved access to high quality housing, neighborhoods, and jobs (cf., Michelson, 1977; Rossi, 1955; Sabagh, Van Arsdol, & Butler, 1969). And, even in instances where relocation is forced, benefits may accrue to the relocated families (cf., Newman & Owen, 1982).

In support of this more balanced view of mobility and health, research on a variety of stressful life events, including relocation, indicates that undesirable events are significantly related to health impairment while desirable events are not (e.g., Dohrenwend & Dohrenwend, 1974; Ross & Mirowski, 1979; Sarason, Johnson, & Siegel, 1979; Vinokur & Selzer, 1975). For instance, Newcomb, Huba, and Bentler (1981) found, in a survey of adolescent life events and mental health, that residential changes associated with negative experiences were significantly linked to depression whereas moves remembered more positively were not.

In an effort to account for the varying effects of relocation on health, researchers have begun to examine psychological factors that presumably moderate the stressfulness and health impact of moving. As noted earlier, most attention has been paid to the dimensions of predictability and perceived control. In an experimental study of elderly individuals who had moved to a residential care facility, Schultz and Hanusa (Note 2) found that interventions designed to make the new environment more predictable and controllable (i.e., providing information about available activities) significantly enhanced the well-being of new residents. Similarly, Pastalan (Note 1) found that pre-move programs designed to make the process of relocation more predictable (e.g., on-site visits to the future residence and group counseling sessions prior to moving) significantly reduced the risk of mortality among the institutionalized elderly.

The preceding overview of research findings is by no means exhaustive, but it does reveal certain key assumptions that have guided earlier analyses of mobility and health. First, residential relocation has been viewed as a relatively short-term and acute life event which imposes considerable strains on the individual at the time of moving. These strains often lead to psychological and physical disorders during and following the move, although the negative health impacts of relocation are reduced to the extent that circumstances surrounding the move (especially features of the new environment) are predictable and controllable. Taken together, these assumptions suggest a straightforward theoretical model linking the independent

variable, mobility, with the mediating variables of predictability and control and the dependent measures of health status.

We believe that the above-mentioned assumptions and the resulting model of mobility and health are too simplistic. The conceptualization of mobility as an independent variable is inadequate and the model neglects additional complexities inherent in the identification and measurement of relevant mediating and dependent variables. These issues are addressed below.

### **Inadequate Conceptualization of Mobility**

The characterization of relocation in earlier research as a discrete life event minimizes the dynamic quality of mobility and ignores the fact that relocation creates gradual but enduring changes in one's overall life situation. As a complex environmental transition, moving not only changes the location and nature of one's housing but also alters non-residential activities and life domains (e.g., employment, commuting, recreation, peer relations). Wapner (1981) notes that relocation leads to the addition, elimination, or substitution of important behavior settings and activity patterns comprising the individual's daily routine. For instance, the move of a middle-aged couple after their children have left the "nest" may involve the substitution of apartment living for home ownership. Also, if the move is concurrent with retirement, then relocation eliminates certain settings and activities (e.g., full-time employment and daily commuting) but may add others (e.g., greater involvement in recreational and social activities; cf., Hendrick, Wells, & Faletti, 1982). Thus, the personal (and family) changes associated with moving are neither short-term nor confined to the residential domain but, rather, are enduring and affect virtually every facet of the individual's life situation.

A related limitation of earlier studies is their failure to differentiate among the multiple, objective dimensions of residential change. Assuming that relocation involves a transition between at least two residential "anchor points" (Wapner, Kaplan, & Ciottone, 1981), several characteristics of the transition remain to be specified. For example, moves can be indexed in terms of the physical distance separating the previous and current residences; the geographical and sociocultural similarity of the two locations; and the frequency and permanence of residential change (e.g., moving to a summer retreat vs. more permanent relocation). Each of these mobility dimensions may be differentially related to health status.

Accordingly, an important direction for future research is the measurement of different dimensions of residential transitions and the assessment of their independent and interactive relationships with health. It

is also important, however, to look beyond the residential domain by examining health status in relation to the cumulative changes and strains in non-residential areas of activity (e.g., employment, commuting) brought about by moving. Both of these strategies would give greater recognition to the multiple dimensions and dynamic nature of mobility as a person-environment process than is reflected in earlier research.

### **Failure to Delineate the Psychological Context of Relocation**

A well-established finding in research on environmental stressors and life events is that the health consequences of these demands depend largely on the perceived situational context in which they are embedded and experienced (cf., Stokols, 1979). Yet, earlier studies of mobility and health have either ignored the situational context of relocation or have focused narrowly on the dimensions of environmental predictability and controllability. What is needed, we believe, is a more systematic conceptualization of the psychological *context* of mobility—one that encompasses both the spatial and temporal components of relocation.

A broader, contextual analysis of mobility and health has several advantages. First, it recognizes certain complexities inherent in the constructs of predictability and control. For instance, situations that afford novelty and mystery are often more preferred than those that are highly predictable (cf., Kaplan, 1975). Also, reactions to environmental predictability are related to dispositional factors, with individuals differing widely in their propensity to explore new places (Zuckerman, 1979; Stokols et al., Note 3). Furthermore, the controllability of a situation is not always an adequate predictor of people's satisfaction with their surroundings. An environment may be well suited to a person's activities and needs, yet many of its features (even those that are predictable) may be essentially beyond the occupant's personal control. Thus, the overall level of person-environment congruence existing within the new environment may be a more potent moderator of relocation stress than the perceived controllability of specific environmental conditions.

A related point is that subjective assessments of person-environment fit depend not only on conditions within the new environment, but also on the individual's comparative appraisal of previous residential situations and his or her awareness of future environmental options (Speare, 1974). Thus, the psychological context of mobility and health depends as much on temporal comparison processes as on shorter-term evaluations of one's current life situation (Albert, 1977; Stokols, 1982).

Future analyses of mobility and health, therefore, should consider the individual's residential history and his or her expectations about the availability of alternative housing situations, as these retrospective and prospective assessments of residential experience probably mediate the stressfulness of relocation. Moreover, future research should examine a wider range of dispositional and psychosocial mediators of mobility stress, rather than focusing entirely on the predictability or controllability of conditions in the new residence during the period immediately following the move.

### **Oversimplified Analyses of Health Outcomes**

While incorporating a diversity of mental and physical health measures, earlier studies have neglected some important questions concerning the assessment of mobility effects on health. For example, are the health consequences of moving distinguishable in terms of their severity, duration, and disruptive potential? Little, if any, attempt has been made in earlier investigations to address the severity and duration of mobility stress. Some moves may be associated with immediate emotional and physical disorders but few longterm health problems. Others, while inducing few symptoms initially, may create chronic life strains (e.g., separation from loved ones, increased commuting distance, residential crowding) that eventually promote serious illness. The disruptive potential and costliness of these alternative relocation experiences may vary considerably. Moreover, different family or community interventions may be required to alleviate the stressfulness of dissimilar relocation situations.

A broader issue concerns the potentially positive functions of mobility-related illness. Considering that residential change may involve major transitions in the individual's housing, social contacts, and transportation patterns, periods of illness immediately following a move may afford an interlude during which the individual can escape from immediate adaptive demands and take time to reflect on the changes that are occurring in his or her life. On the other hand, health problems that occur long after the move and result from the cumulative life strains brought about by relocation may not serve these adaptive functions. (See Herzlich, 1973, for a provocative analysis of the multiple meanings and positive functions of illness.)

The complexities inherent in measuring mobility stress necessitate the use of repeated health indices over extended periods to gauge the relative severity and persistence of relocation effects. Moreover, an assessment of the adaptive functions of mobility-induced illness requires measures of the

subjective meaning and chronicity of illness episodes in relation to residential change.

## A CONTEXTUAL ANALYSIS OF MOBILITY AND HEALTH

In this section, we propose a contextual analysis of mobility and health that addresses several of the issues mentioned above. A basic assumption of our analysis is that the links between mobility and health depend not only on the immediate circumstances surrounding a move, but also on the broader context of one's residential history, current life situation, and aspirations for the future. Before this general assumption can be translated into operational guidelines for research, it is necessary to develop theoretical terms for representing the spatial and temporal contexts of environmental experience. (See Barker (1977) and Magnusson (1981) for alternative descriptions of the environmental context of behavior.)

Central to our analysis is the concept of *subjective life stages*, defined as "spatially and temporally bounded phases of a person's life that are associated with particular goals and plans" (Stokols, 1982, p. 40). Each life stage encompasses a unique constellation of physical settings and activity patterns that remain psychologically salient for a given period. The individual's perceived lifespan, thus, can be viewed as a sequence of subjectively-differentiated life stages.

The subjective nature of life stages distinguishes them from related theoretical terms such as developmental stage and lifecycle. While the latter terms are defined primarily in relation to age-specific processes, subjective life stage emphasizes idiosyncratic and psychologically salient events. Individuals at the same developmental stage might construe life phases very differently as the result of their dissimilar backgrounds and experiences. Consider, for example, two college graduates, one of whom has been employed since leaving the university while the other has not. The first may view the post-graduate experience as a series of distinct and rewarding phases, each associated with advancement to a new and more challenging job. The unemployed graduate, however, may view the same chronological period as a less differentiated and generally discouraging phase of the life.

Regardless of the perceived boundaries of a subjective life stage, all such stages encompass particular places and time intervals (e.g., college attendance, employment at a certain job). The spatial boundaries of a life stage are reflected in the geographical spread of those settings and activities comprising the individual's life situation during a given period. The length of a life stage is reflected in the duration of salient plans and activities associated with a particular phase of one's life.



Implicit in the concept of subjective life stages is the assumption that environmental experience can be “chunked” according to psychologically meaningful temporal and spatial boundaries; and that the experiences occurring within each chunk are highly integrated and interdependent. It seems reasonable to assume that certain objectively-defined periods of one’s life, such as the time spent at a particular job or residence, may influence the individual’s perception of the boundaries surrounding important life stages—particularly if these periods are associated with recurring and integrated patterns of activity. Our analysis of mobility and health gives particular attention to the *residential periods* of a person’s life, defined by the duration of one’s residence at particular locations. The spatial dimensions of a residential period are reflected in the geographical extent of personal (and/or family) activity patterns that are maintained while residing at a given place.

The residential period is one of several possible criteria for demarcating important life stages. We focus on residential periods in this analysis, however, because they provide a basis for identifying contextual mediators of relocation and health. Assuming that residential periods encompass stable patterns of activity and a set of interconnected settings, the health consequences of relocation can be understood in terms of its potential impact on these important activities and life domains.

The concept of residential period provides an initial descriptive framework for representing the psychological context of mobility and health in terms of past, present, and anticipated life phases. A further prerequisite for our analysis, however, is the development of more specific theoretical terms to identify those aspects of residential periods that are most critical to understanding the links between mobility and health. The following discussion emphasizes a contextual concept that we believe is highly relevant to the issues of mobility and health: namely, *place dependence*, or the strength of an individual’s subjective attachment to specific places. (See Stokols & Shumaker, 1981, for a detailed discussion of place dependence.) *The antecedents of place dependence and its hypothesized links with mobility and health are examined below.*

### **Place Dependence as a Mediator of Mobility and Health**

As a partial basis for predicting the stressfulness and health consequences of relocation, we distinguish between objective and subjective forms of association with places. The term, *place specificity*, refers to the regular and observable association between a person’s activities and certain locations, whereas *place dependence* describes the individual’s perception of

being strongly attached to those places (cf., Stokols & Shumaker, 1981). When one's activities are specific to a place, and he or she feels strongly attached to that location, the situation is presumably unstressful. But in those instances where place specificity and place dependence are discrepant (e.g., prolonged exposure to undesirable places or separation from places with which one feels personal or cultural ties), chronic life strains and health problems are more likely to occur.

What factors affect people's assessments of place dependence, and how do these assessments moderate the health consequences of relocation? To address these questions, it is necessary to consider the multiple residential periods of a person's life. The antecedents of place dependence can be organized in terms of the occupant's assessment of two components: (1) the quality of the current residential situation, and (2) the relative quality of alternative (e.g., past or anticipated) residential situations. We assume that moves culminating in lower levels of person-environment fit relative to earlier residential periods will promote greater stress and health impairment than those resulting in higher levels of fit. Also, the perceived availability of attractive residential options should reduce the stressfulness of an undesirable current residence.

Rather than considering all of the residential experiences of a person's life, our analysis of mobility, place dependence, and health focuses on three periods that presumably exert most influence on people's reactions to moving (because of their temporal proximity to the move): (1) the *current residential period* initiated by the individual's most recent move; (2) the *pre-relocation residential period* preceding the most recent move; and (3) the *anticipated residential period* which would commence with the individual's next move.

In the following sections, we discuss factors that affect the perceived quality or congruence of the current situation and then consider the processes by which people appraise the relative quality of their current, previous, and anticipated residential periods.

### **Person-Environment Congruence Within the Current Residential Period**

We have suggested that people's adjustment to their most recent move will depend on how strongly they become attached to the current residential situation. We also suggest that a necessary condition for becoming subjectively attached to a place is the perception of *person-environment congruence*, or the belief that one's important goals and activities are accommodated by existing environmental conditions (cf., Michelson, 1976; Stokols, 1979).

Earlier analyses have defined congruence in terms of the fit between a single personal need (e.g., an employee's desire for a challenging job) and a corresponding environmental condition within a single setting (e.g., actual complexity of one's job; cf., French, Rodgers, & Cobb, 1974; Harrison, 1978). The present discussion, however, emphasizes the *multidimensional* and *cross-situational* determinants of congruence. That is, we assume that the level of congruence associated with one's current residential period depends on several circumstances both within and outside the residence. Various features of the residential setting, such as the amount and arrangement of interior space, proximity to shopping areas and schools, and other neighborhood amenities, are relevant to personal goals and activities (e.g., regulation of privacy in the home, access to local services, social relations with neighbors). The overall quality of the residence is jointly determined by the degree to which diverse personal needs are supported or constrained by relevant features of the environment. Also, the relative importance of the goals that are met within the residential setting influences the perception of congruence, with the achievement of highly valued goals producing stronger feelings of congruence than the attainment of minor ones. Similarly, the frustration of important goals will be more upsetting than the hindrance of minor ones (cf., Stokols, 1979; Wortman & Brehm, 1975).

In addition to emphasizing the multiple determinants of congruence within the residential setting, we consider the perceived congruence of non-residential domains (such as employment, commuting, and child care facilities outside the home) that are encompassed by the individual's current pattern of activities. This cross-setting perspective assumes that one's commitment to the current residential situation and longterm adjustment to relocation depends not only on the congruence of the specific residential setting but also on the perceived quality of other major life domains incorporated within the current residential period.

Recent research on environmental stress suggests the value of a cross-situational analysis of congruence and health. For instance, Greenberger, Steinberg, and Vaux (in press) found that low levels of congruence within each of three life domains (home, work, and peer relationships) were associated with health and behavioral disorders among adolescents. Klassen (Note 4) observed that low levels of congruence within the same three domains were interactively linked to violent behavior among adult psychiatric patients. And, research on commuting stress indicates that the health consequences of travel constraints (e.g., routine exposure to traffic congestion) depend not only on the physical distance of the commute, but also on the commuter's perceptions of residential and work environments (e.g., level of choice in deciding where to live; degree of involvement in one's job; cf., Stokols, Novaco, Stokols, & Campbell, 1978). These

findings suggest that the experiences associated with multiple life domains are interdependent, and that people's reactions to relocation may be jointly influenced by the perceived congruence of both non-residential and residential settings.

We have discussed the link between congruence and health in relation to the multiple settings and activity patterns of one's current residential situation. We have not, however, considered the role of temporal factors in mediating the relationship between congruence and health. We assume, for example, that the duration of the current residential period influences adjustment to relocation, with the greater stress arising where one experiences low levels of environmental congruence for prolonged periods following the move. Thus, our analysis predicts that the health consequences of mobility are interactively affected by the perceived congruence of multiple environmental domains, and the duration of one's exposure to those domain following relocation.

### **Comparative Appraisal of Previous, Current, and Anticipated Residential Periods**

The perceived congruence of the current residential period offers only a partial basis for predicting the individual's commitment to that situation. A number of other variables, including temporal and dispositional factors, are likely to affect one's commitment to the present situation. Consider, for example, the index of personal mobility rate, or the number of times a person has moved within his or her lifetime. Presumably, frequent relocation would be associated with cumulative and stressful "aftereffects" (cf., Cohen, 1980) since, even under the best of circumstances, moving is a rather taxing experience. Yet, some individuals characteristically enjoy exploring new places, especially when relocation leads to successively improved situations (Stokols et al., Note 3). Thus, we expect the relationship between mobility rate and health to be moderated by the degree of choice associated with the most recent move, subsequent levels of environmental congruence, and personal tendencies to explore new places.

Mobility rate exemplifies an objective index of one's residential history. Subjective representations of earlier residential experiences also affect people's reactions to their present situation. One's commitment to and dependence on the current situation is not simply a function of the immediate level of congruence, but also depends on the relative quality of the current environment as compared with previously experienced situations (cf., Thibaut & Kelley's [1959] concept of comparison level). Therefore, we expect that individuals who find their current residential period to be less

desirable than the preceding one will experience greater stress and health impairment than those who judge the present situation to be an improvement over the last.

Perceptions of future residential periods also influence the strength of one's commitment to the current situation. Thibaut and Kelley's (1959) concept of comparison level for alternatives ( $CL_{alt}$ ), or the perceived quality of one's best alternative situation, is quite relevant to our analysis of the temporal dimensions of mobility and health. Specifically, when one's environmental  $CL_{alt}$  is high—that is, attractive residential options are thought to be available—the level of dependence on the current situation should be diminished (even in those instances where the present period is viewed as more desirable than previous residential situations). The implications of perceived residential options for health may depend on the overall quality of the current situation. To the extent that one's most recent move has resulted in an unfavorable situation, the availability of options may reduce the potentially negative consequences of low environmental congruence by encouraging a sense of optimism about the future. But when relocation leads to a relatively favorable situation, the perception of attractive options may place the individual in a state of conflict where stress arises from having to decide among several favorable alternatives.

To this point, our analysis has emphasized factors that promote (or inhibit) adaptation and commitment to the current residential situation. Yet, leaving the present residence may serve as an important coping strategy for alleviating the strains imposed by prior relocation, particularly when the current situation is undesirable and attractive residential options are available. Thus, we would expect low environmental congruence and perceived residential options to predict future relocation. Furthermore, moving should be associated with enhanced well-being when one's aspirations for improving the current situation are in fact realized during the subsequent residential period.

### **EMPIRICAL EVIDENCE RELEVANT TO THE PROPOSED ANALYSIS OF MOBILITY AND HEALTH**

The preceding analysis suggests that mobility is a contextually-mediated phenomenon whose effects on health unfold gradually as the individual adjusts to the diverse life changes associated with moving (cf., Pearlin, Menaghan, Lieberman, & Mullan's [1981] discussion of the "stress process"). Various personal and situational factors are expected to moderate the adjustment process, including one's prior residential experience, perceptions of current environmental congruence, tendencies to explore new places, and anticipated access to attractive housing options.

Our analysis posits several hypotheses pertaining to different aspects of the relocation-adjustment process. These hypotheses can be organized in relation to the previous, current, and anticipated residential periods outlined earlier. The first set of propositions focuses on factors within the current residential period that influence adjustment to relocation:

1. The perceived congruence of the current residence will be inversely related to health problems, with low levels of congruence promoting greatest health impairment.
2. The perceived congruence of the current residence and the amount of time spent at that location will have interactive effects on health. Among low-congruence residents, increased length of residence at the current location will be associated with greater health impairment.
3. The effects of low environmental congruence across different life domains will be more detrimental to health than low congruence within the residential setting, alone.

The remaining propositions pertain to the interactive influence of previous, current, and anticipated residential periods on the individual's adjustment to relocation:

4. The effects of personal mobility rate on health will be mediated by dispositional tendencies to explore new environments. Among persons characterized by a high rate of mobility, those inclined to explore new places will manifest less health impairment than those who are less exploratory.
5. The relationship between mobility rate and health will depend on the degree of residential choice associated with the most recent move. High mobility individuals expressing low residential choice will exhibit greater health impairment than those who exercised a high degree of choice in moving to their current location.
6. The effects of personal mobility rate also will be qualified by the perceived congruence of the current residence. High mobility persons expressing low residential congruence will manifest greater health problems than those reporting high levels of congruence.
7. Comparative appraisals of the current and most recent residential periods will be associated with health status. Health problems will be greater to the extent that the present environment is judged to be less favorable than the previous one. Minimal health impairment is expected when the current residence is evaluated more favorably than the last one.
8. Among those persons rating their current residence less favorably than the last, the perceived availability of attractive residential options will be associated with reduced health impairment.

9. Individuals reporting low congruence in their current residence and the availability of attractive residential options will be more likely to move in the future than those reporting high congruence and no residential options.

To assess these hypotheses, we recently conducted a longitudinal survey of 242 employed, male and female adults. During the initial phase of the study, respondents completed an inventory of personal mobility history, current environmental quality, and future residential plans. The initial questionnaire also included dispositional measures of environmental exploratory tendencies, multivariate measures of residential and job congruence, and assessments of residential choice, length of residence, and access to attractive residential options. Three months later, a panel of 121 respondents completed a follow-up survey of emotional and physical well-being. The relationships between Phase I measures of environmental experience and dispositional factors, and Phase II indices of health, were assessed through a series of multi-factor analyses of covariance. Respondent's age, educational status, and income served as covariates in these analyses. Circumstances promotive of relocation were examined through a discriminant analysis comparing respondents who changed residence between the first and second phases of our survey with those who did not relocate during that period. A more detailed report of the survey procedures, measures, and results of our study can be found in Stokols et al. (Note 3).

The major findings from the analyses conducted to date can be summarized as follows:

1. Respondents reporting low levels of congruence within the residential setting at Phase I described themselves as being in poorer spirits, and reported a larger number of visits with physicians for medical problems, than those characterized by higher levels of residential congruence.
2. Among longterm residents, those reporting low levels of residential choice at Phase I experienced a larger number of illness incidents by Phase II than those reporting higher levels of residential choice. The interaction between length of residence and residential congruence was marginally significant, with longterm, low-congruence individuals reporting more illness incidents than longterm, high-congruence respondents.
3. The effects of residential and job congruence were additive, with individuals characterized by low congruence in both domains reporting the greatest number of visits to physicians for health problems between Phases I and II, and the lowest mental spirits at Phase II.

4. Individuals reporting a high rate of mobility (number of lifetime moves divided by respondent's age) had a greater number of illness symptoms than less mobile individuals. And among highly mobile respondents, those predisposed to explore new places reported being in better spirits and more energetic than non-exploratory individuals.
5. The effects of personal mobility rate were qualified by the degree of residential choice associated with the most recent move. Among low-mobility respondents, illness incidents were greater for persons reporting low rather than high levels of residential choice. Among high mobility persons, however, low residential choice was not associated with greater health impairment.
6. The effects of personal mobility rate were qualified by the perceived congruence of the current residence. Again, low-mobility groups exhibited significant mean differences, with low-congruence persons reporting a larger number of illness incidents than their high-congruence counterparts. Low residential congruence was not associated with reduced health status among the high mobility individuals.
7. Individuals who rated their current residence less favorably than the preceding one reported a greater number of illness incidents, and rated their overall health more negatively, than those who evaluated their current residence more favorably than the last.
8. Among the respondents who rated their current residence less favorably than the last, those reporting access to attractive residential options described themselves as being in better spirits and more energetic than persons lacking attractive alternatives. Among the respondents who evaluated their current residence more favorably than last, however, the perceived availability of attractive residential options was associated with poorer spirits and lower energy.
9. A discriminant analysis comparing the respondents who changed residence between the two phases of the survey, with those who did not, indicated that the movers were younger, had expressed greater interest in moving at Phase I, had reported lower levels of residential congruence and attachment to their dwelling at Phase I, and had higher rates of lifetime mobility. Additional comparisons of the two groups (via t-tests) revealed that the movers were more aware of attractive residential options and had reported lower levels of job congruence than the non-movers.

On the whole, the findings support several key hypotheses of our contextual analysis of mobility and health. As expected, multivariate



measures of perceived congruence within residential and employment domains were significantly related to measures of health status. These data suggest that it is possible and useful to measure person-environment congruence in terms of the diverse personal needs and environmental conditions associated with major life domains; and to examine the interdependence of events within non-residential as well as residential settings in attempting to understand the individual's adjustment to the post-move environment. Moreover, the findings indicate that the temporal context of relocation (especially the dimensions of personal mobility history, relative desirability of preceding and current residences, and availability of residential options) plays a crucial role in mediating the individual's well-being during the period following the most recent move.

The findings of our research extend earlier studies of mobility and health in several respects. First, while previous analyses have suggested certain potential costs of blocked mobility, particularly among "vulnerable" subgroups of the population who have limited access to residential options (Fairchild & Tucker, 1982; Loo & Mar, 1982; Newman & Owen, 1982), these studies have not directly assessed the health consequences of restricted mobility. Our study, however, demonstrates that remaining in low-quality residential situations for lack of better alternatives is associated with increased illness.

Second, our research indicates that increased length of residence does not necessarily promote greater attachment to place and enhanced well-being, as had been suggested by certain earlier studies (e.g., Kasarda & Janowitz, 1974). Specifically, our results show that the association between length of residence and health is qualified by perceptions of residential choice and congruence, with greater health impairment reported among individuals who had little choice in moving to the current residence, and among those who evaluate their current situation negatively. These data suggest that relocation experiences associated with minimal choice may result in an enduring pattern of reactance against the new environment (cf., Wortman & Brehm, 1975), rather than increased commitment to the post-move situation.

Third, our study reveals the additive effects of congruence within residential and non-residential settings on health, and suggests the importance of further research on different patterns of interdependence among multiple life domains. For instance, positive experiences within the residential domain may or may not compensate for negative experiences in the work environment. Alternatively, negative experiences in one area of one's life may adversely affect, or may be completely unrelated to, the quality of experiences in other life domains. These alternative patterns of interdependence among life domains warrant more conceptual and empirical attention in future research.

Finally, our results indicate that although the effects of frequent relocation on emotional well-being are mediated by dispositional and situational factors, high mobility rate is directly associated with increased illness symptoms. This finding offers partial support for the conceptualization of relocation as a stressful life experience (cf., Holmes & Rahe, 1967) and suggests that the cumulative health consequences of frequent relocation are not entirely mediated by psychosocial factors.

At the same time, however, the design and results of our research must be qualified with respect to several of the conceptual and methodological issues raised in earlier sections of this article. First, our study ignored several dimensions of residential transitions including the relative similarity of pre- and post-move environments and the physical distance separating these locations. Second, our measures of the psychological context of mobility focused on temporally proximal residential periods while ignoring events within more distant life phases that may influence one's appraisals of current environmental congruence. And within the previous, current, and anticipated residential periods, we focused on a small subset of factors relevant to relocation and health while neglecting several other circumstances (e.g., levels of congruence within the areas of commuting, peer relations, and recreation; conflicts that may arise among different members of the household who have divergent opinions about the quality of their present residential situation) that may affect people's adjustment to relocation. Finally, our survey involved only two testing periods that occurred three months apart. Thus, our measures of emotional and physical well-being do not reveal the severity and duration of location stress, as the analysis of these issues would require a larger number of testing sessions over a more extended time interval.

## CONCLUSIONS

The proposed contextual analysis of mobility and health offers a broad organizational framework for a previously fragmented research literature. Many of the issues addressed in the preceding articles are relevant to this framework. Therefore, in this concluding section, we discuss briefly some of the more salient points of these papers in relation to our own theoretical perspective.

### **Determinants of Moving or Staying**

Several articles in this issue consider the factors that influence people's decisions to stay in an area or to relocate. According to our model, staying in a place that does not adequately meet one's needs, for lack of better

options, may promote negative health consequences. By contrast, remaining in a residence that is highly congruent with one's needs will be associated with better health. Both types of residential situations are considered in this volume.

Fairchild and Tucker (1982), for example, discuss the societal factors that force Black Americans to reside in substandard housing, regardless of their income. Also, Loo and Mar (1982) examine personal characteristics of Chinese Americans that impede their assimilation into mainstream American society, forcing them to remain dependent on a locale characterized by widespread overcrowding and substandard housing. Though the causes differ, both Blacks and non-aculturated Chinese Americans exist in non-optimal residences and have severely limited options. While these authors do not discuss health outcomes of restricted mobility, our model suggests that these two subpopulations would experience mental and physical health impairments due to poor housing and limited residential alternatives.

Rivlin (1982), Fried (1982), and Golant (1982) all examine attributes of persons or places that affect people's satisfaction with their environment. Within the context of our model, satisfaction is an index of congruity between salient needs and available resources. When congruence is high, people will be less likely to seek alternative settings and will be more dependent on their current environment. Fried found that within a national sample, objective housing quality was the most critical determinant of housing satisfaction. The availability of social networks within the community predicted satisfaction only if people reported that friendships with neighbors were important to them. In the language of our model, only when the proximity of friends was a salient need did it influence residential satisfaction. Similarly, Golant examined personal characteristics that might influence the satisfaction of elderly people with their residential environment. As in our analyses of personal dispositions to explore new places, Golant found that individual differences are important determinants of people's satisfaction with their residential situation.

Rivlin's research emphasized the personal characteristic of religious affiliation and the degree to which environmental conditions are supportive of religious and cultural activities. Her in-depth case study of a Hasidic group living within a small geographic area revealed that housing quality and perceived housing options are not always the key determinants of residential satisfaction. Among Rivlin's respondents, proximity to the leader of their religious sect and a homogeneous subcommunity were mentioned as highly salient needs, both of which were supported by the current residential environment. Therefore, residents did not wish to relocate even though, for many, the housing conditions were poorer than what they could have obtained elsewhere. Rivlin's case study demonstrates

the importance of looking at the total life context of the resident in assessing factors that influence relocation decisions and residential satisfaction.

### **The Consequences of Mobility**

Newman and Owens' (1982) research highlights the complexity of relocation outcomes. They found that the impact of forced moves is not necessarily negative. Rather, the consequences of moving depend on how well the new location compares with previously-experienced environments in meeting important personal needs. Thus, unlike earlier research on forced relocation, their data suggest that in some instances the effects of such moves are positive. Their data reinforce the assumption, emphasized in our analysis of mobility and health, that mobility is a dynamic process and that, to understand its effects on personal well-being, the temporal context of relocation (especially people's comparative appraisals of their current, previous, and anticipated environments) should be considered.

### **Mobility and Public Policy**

The research reported by Rossi and Shlay (1982) and by Clark and Moore (1982) suggest that federal policies have little direct impact on the national mobility rate. Federal policies do, however, influence the options available for prospective relocators. In addition, state and municipal policies (e.g., land use, rent control, zoning regulations, busing) affect both relocation patterns and the type and quality of available housing. As suggested by our model and the preliminary data that we report, the quality of realistically-available housing alternatives is closely related to personal well-being. For instance, if attractive alternatives are limited and people remain in areas that are incongruent with their needs, they are more likely to suffer health impairment than in those instances where attractive options are perceived to be available. At the same time, however, multiple options may be associated with reduced well-being among persons already living in areas that support their needs. Thus, public policy measures should be aimed at increasing available housing alternatives for people who are least able to accomplish important personal activities and needs within their current housing situation (cf., Michelson, Note 5).

### **Final Comments**

Data presented in the preceding articles support several of the assumptions underlying a contextual analysis of mobility and health. The

contextual approach, therefore, appears to provide a useful framework for organizing a theoretically and empirically diverse literature. Our analysis emphasizes the need for further research that recognizes that dynamic processes are associated with relocation, and that these processes occur within the total life context of the individual. Such research, though complex, would advance our understanding of a life experience that affects a sizable portion of American society, namely: moving to a new place of residence.

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