

Transformations of Life Structure and Personal Paradigm
During the Midlife Transition

by

Dennis O'Connor
Le Moyne College
Department of Business Administration
Le Moyne Heights
Syracuse, NY 13214
(315) 445 4483

Donald Wolfe
Case Western Reserve University
Department of Organizational Behavior
Cleveland, Ohio 44106
(216) 368 2068

Marcy Crary
Bentley College
Department of Management
Waltham, Massachusetts
(617) 891 2502

ABSTRACT

In this exploratory study, data were collected from 64 men and women experiencing midlife transitions. Transformations of life structure during the phases of midlife transition were noted. Some changes (degree of conflict, temporariness, and fulfillment potential) were best accounted for by the act of progressing through the steps of this major transition in life; other changes in life structure (complexity, flexibility, self-determination) were better accounted for by an internal process of paradigm shifting.

INTRODUCTION

"No matter how satisfying a life structure is, in time, its utility declines and its flaws generate conflict... no life structure can permit the living out of all aspects of self... The primary tasks of every transitional period are to question and reappraise the existing structure, to explore various possibilities for change in the self and the world, and to move toward commitment to the crucial choices that form the basis for a new life structure," Levinson 1978, pp 49,54,60.

Midlife transitions and crises are increasingly recognized as normal features of adult life rather than deficiencies of character or acute situations to be quickly tidied up (Levinson, 1978; Jung, 1971; Gould, 1978; Havighurst, 1979; Jacques, 1965; Neugarten, 1968; Vaillant, 1971; Schein, 1978; Wolfe and Kolb, 1980). The midlife transition, as a time which bridges two major eras of life, early adulthood and midlife, is a crucial period that impacts a person's career, family, and self. Transitions are times of potential change and development and what actually changes during transitions, in Levinson's view, is the life structure. Levinson (1986) describes both the transitional, life structure-changing periods and the stable, life structure-building periods as important and complementary elements of the adult life cycle. In this context, several researchers (O'Connor and Wolfe, 1986, 1987; Bridges, 1980) have begun to more closely describe the nature of the transition process by constructing models of the regular, predictable steps that occur during the midlife transition process.

Transitions may also be necessary to personal growth and development. O'Connor and Wolfe (1990) argue that under certain conditions, changes in paradigm (underlying values, assumptions, expectation, feelings, and beliefs) take place during the midlife transition. These paradigm shifts are an intra-psychic process in contrast to a life structure change. This exploratory study seeks to identify what observable changes are taking place in individual life structures during the midlife transition and what relationship, if any, exists between the processes of paradigm shifting and the transformations of life structure.

THEORY

Levinson (1978) describes the adult life course as a series of alternating phases of stability and change. In his view, what remains stable and what changes is the life structure. The life structure is "the underlying pattern or design of a person's life at any given time"; more specifically, it is the individual's pattern of involvement in relationships, roles, activities and physical settings. The life structure is the bridge between one's inner workings and the demands of society and is a product of both sets of forces. It is the connection between self and circumstance.

The life structure enables one to live out and elaborate basic choices and values, conscious or not, as well as adapt to one's surroundings. After some period of time, it tends to outlive its usefulness due to several varying factors (Levinson 1978). First, there are limits inherent in all choice. Often people make life choices with insufficient data and experience to know what they are truly getting into. Second, the process of discovering what one has truly chosen (by living with those choices) begins to raise new issues, perspectives and needs. Third, the circumstances that surround the self eventually change and often at unpredictable times and in unpredictable ways. The life structure that is suitable and adaptable to one age and set of circumstances is typically unsuitable for the next phase of life (Levinson 1978). If clung to, it eventually becomes a hindrance and a restraining limit and typically leads to stagnation as the individual fails to recognize and cope with new opportunities and problems.

Levinson (1986) argues that each structure must be judged in terms of its satisfactoriness: suitability to self and adaptability to one's circumstances. Neither an internal nor an external perspective alone is valid in assessing the value of a particular life structure. No matter how suitable to the self a life structure would seem to be theoretically, it is a failure if the individual cannot adequately contribute to society and meet society's demands. Yet, outer adaptation often becomes a hollow conformity. Furthermore, the circumstances of life are always to some degree of one's own making and choice. This complex interdependence of unique individuals in unique circumstances poses knotty issues in evaluating one life structure against another

(Levinson 1986) or in building theories of career development (Sonnenfeld & Kotter 1986). While a recognition of cultural and phenomenological relativity would stand in the way of describing a one best life structure for everyone, various developmental theorists have established general norms for the healthy personality as an open system (Kegan, 1978; Rogers 1958; Loevinger, 1976; Bronfenbrenner, 1970).

Crary (1981) has recently created a set of dimensions on which to compare and contrast the range of unique life structures. These dimensions go beyond the usual identification of important life spaces such as career and family (and the categorizations of which is more important) and provide a more specific means of addressing Levinson's challenge of evaluating life structures. These dimensions seek to better describe the life structure as a whole (complexity, self vs. other determined, fulfillment potential, and balance of new and established contexts) and the various life spaces in relation to each other and the environment (flexibility, degree of conflict between life spaces).(see Method section for a description of variables).

As mentioned earlier, O'Connor and Wolfe (1986, 1987) have begun explorations of some of the contours of the midlife transition and there was evidence to support the concept of a regular transition sequence during the midlife transition. As individuals moved through these phases or steps, they varied in important ways: the level of emotional arousal, the ability to channel emotional energy into productive pursuits, the relative investments of time and energy into career and family, and the need for autonomy at work.

O'Connor and Wolfe (1990) found that many people in midlife transitions were also experiencing underlying paradigm shifts of varying degrees. A paradigm was defined as the underlying set of assumptions, feelings, beliefs, values, and expectations that a person holds. A paradigm shift is a fundamental questioning and re-configuration of this underlying internal structure. Factors such as level of ego development, movement to inner directedness, and involvement in education or training were found to support and advance the paradigm shifting process during the midlife transition. With a paradigm shift, a transition becomes a spiral of change to a new level of development and adaptation (e.g. Loevinger, Kegan), rather than a

cyclic process of adapting in basically the same old ways.

Yet little was said about how the paradigm manifests itself in the life structure and how the life structure changes and re-configures as the person moved through the midlife transition. This leads to the question of whether Crary's dimensions of life structure would systematically vary as people moved through the transition and whether the underlying paradigm shifts that had been identified would somehow relate to the more concrete manifestations of the life structure. This paper will attempt to look at how life structures (as a set of relationships, activities, roles, and life spaces) are transformed during the steps of the midlife transition in response to the changing circumstances of life and to the changing inner processes such as paradigm shifts.

METHOD

This research took place in and emerged from an extensive program of research into adult development and midlife funded by the Spencer Foundation. Its purpose has been to explore the learning processes in adult development and the social, emotional and cognitive factors of midlife transition.

General Design

The general design of the overall project was guided by the philosophy of co-inquiry (Wolfe 1980). A challenge of co-inquiry is to create conditions of trust and openness where the participants are able to join with the staff to examine their lives and experiences. The researcher's need for valid self disclosure on topics that are highly complex and very personal, can link, under favorable conditions, with the participants' personal stake in uncovering, examining, and making sense of their own data. Activities within the project were designed to insure the participation of and benefit to both the researchers and the subjects.

The four major activities were: 1) An initial two to three hour intensive interview covering current career, family, self, and interpersonal issues, as well as personal history. A battery of personality inventories was also given at this time. 2) A set of four initial three day self assessment workshops each with a different group of 13-22 participants. These workshops contained

eight four-hour modules each focused on a specific theme. Each module included an introduction by the staff, individual work centered on an inventory or exercise, and a sharing of the information in subgroups with two other participants and a staff member. Notes were taken as the data were elaborated. 3) A clinical review, a major source of data for the current study, was held after the first workshops. The total staff spent two to four hours reviewing each case. The primary staff member, who worked most closely with the participant, began the individual review with a presentation including life history, life map, and the stress and coping data. Other data and observations were shared. 4) A second set of workshops was held 1 1/2 years later to track changes in the person and his or her life structure.

Participants

The time of onset and resolution of midlife transitions varies considerably, since these transitions are not solely driven by biological changes as those of childhood. What constitutes a midlife transition (versus some other type of transition in this age range) is a qualitative judgment based on the themes defined by Jung, Levinson, etc.

The 64 subjects in our sample consisted of 33 men and 31 women ranging in age from 35-50. These participants had responded to notices sent to local organizations or to letters mailed to past participants of training programs offered by the Weatherhead School of Management at Case Western Reserve University. Of the 130 who responded and were interviewed, 64 met the following criteria and chose to participate: (1) engaged in or anticipating significant changes in life or career, (2) were open to self exploration and sharing of experience with others, (3) revealed a realistic awareness of the purposes, interactive processes, and the time commitments of the workshops, and (4) were not seeing participation as a substitute for therapy. These participants represented a wide range of occupations, e.g. law, medicine, nursing, teaching, entrepreneurs, engineering, managers, CEO's, etc.

With this sample, one cannot address the prevalence of midlife transitions within the general population. Our aim was to engage a diverse sample of people undergoing such transitions in an inquiry into the issues, processes and concerns related to their transitions.

Measures

Degree of Paradigm Shift. Paradigms are coherent clusters of values, beliefs, assumptions, and expectations by which we make meaning and in which we are embedded. As the personal paradigm serves as a frame to guide life, the individual is "being it", and, in the general case, is not articulating or labeling it. The present variable, "Degree of Paradigm Shift", does not attempt to specify individual paradigms as such, but rather it seeks to measure the extent to which they are being re-examined and changed. This scale is geared to assess how active the process of paradigm shift is. The data from the initial interviews and the clinical reviews was used to rate each participant. (see Table 1)

Emotional Tone. Participants varied in their emotional states at the first workshop. Some were vocal and loud in their frustration and anger; others were enthusiastic and positive about their current state. Observations on the affect and tone of each participant during the first three day workshop were recorded at the clinical reviews and were the basis for rankings on the "Emotional Tone" scale. (see Table 1)

Transition Sequence. The transition sequence concept and model emerged from our attempts to understand the process of transition. It became clear that the people in our sample were at several different points in transition. Some were only beginning to contemplate change, while others were consolidating changes that they had already made. Those who had progressed further often talked about past experiences that others were currently going through. A grounded theory approach (constant comparative method) was used to construct a set of meaningful categories (Glaser and Strauss 1967). The interview data were subjected to an inductive analysis in which tentative hypotheses concerning steps in transition were constructed and revised. Themes and categories eventually emerged from the back and forth movement between data and concepts and these formed the basis for the conceptual model of steps in the midlife transition sequence. (see Table 1)

Measures of Life Structure. The life structure variables were developed with the same sample, but in a research process independent of the above variables (Crary 1981). The data on life

structures was drawn from a three hour workshop module in which each participant drew a "life map" on a large sheet of flip chart paper using as many colors and forms as desired. Participants were given examples of the various contexts of life, e.g. activities, relationships, memberships, roles, and physical spaces. They were also shown an example of a life map, but were encouraged to use their own style in portraying their circumstances, e.g. size, color, placement, etc.

In order to compare and contrast these life structures, five point rating scales were constructed for the dimensions described below. These ratings were done by the staff members rather than the participants for several reasons. A number of the dimensions are abstract in character and do not easily lend themselves to a phenomenological sense of one's own life circumstances. Furthermore, the act of rating a particular life structure involves implicit comparisons and contrasts to other life structures. Since the trained staff had developed a basis from which to assess variations across structures, they were in a position to apply ratings to individual lives with consistency. These ratings of life structure constitute a method of quantifying data which in their origin are highly qualitative and phenomenological. They are by no means infallible, but they are highly useful for systematic analysis of idiographic data. The interjudge reliability ratings of the life structure dimensions ranged from .85 to .97.

Degree of Conflict Between Life Contexts is a measure of the extent to which involvement and commitment in one or more contexts creates potential conflict or tension for the person in other contexts. If goals, values, and/or expectations from one context would undermine effective action in other contexts, then conflict is present.

The Fulfillment Potential of the total structure is based on the resources present in one's various contexts for meeting a range of personal needs and aspirations. A high score indicates a rich offering of diverse ways of fulfilling oneself; a low score reflects either impoverished resources available or opportunities present to pursue only a limited range of needs. This rating was not necessarily a measure of whether the person experienced fulfillment. Whether one takes advantage of the resources at hand is a different issue.

Complexity of life structure was derived from combination of two other scales: differentiation (the number and variety of relationships, activities, roles, and physical settings) and dispersal of emotional investments (centralized or distributed emotional investments across contexts). These two dimensions were strongly correlated with each other ($r=.53$, $p<.001$, $n=64$). The more differentiated structures with a wider decentralization of psychic investment were more complex.

Degree of Flexibility indicates how much movement is possible within the structure. Some people live in a tightly fixed environment: their schedules are pre-set, routines govern their daily activities, and most involvements are predictable. Others live in structures where they are able to more spontaneously engage the various domains of their life as they pursue their needs.

Degree of Temporariness indicates the relative balance of established versus new or temporary status contexts in the life structure.

Self/Other Determination indicates the relative balance of taking an active, initiating role in one's various contexts versus a reactive, easily influenced role.

RESULTS AND DISCUSSION

In this section, we will present the quantitative findings on life structure changes during the midlife transition. Qualitative data from the interviews, life maps, and individual clinical reviews will be used to help illustrate these transformations.

The Degree of Conflict Between Life Contexts, the Balance of Temporary and Established Contexts, and Emotional Tone During the Midlife Transition

The three variables of this section (A, B, and C of Table 2), are distinguished by their non-linear progressions through the midlife transition.

In order to change, it is often useful to engage in new or temporary contexts to experience new things. From Table 2-A, we can see that there are relatively few temporary or new contexts (1.3 of 5) in the life structures of those who are in the Stable step (pre-transition). This is no longer the norm however for those in the Rising Discontent phase of transition. They are not completely satisfied with life and they have added some new contexts to their life structures, e.g.

school, new hobby, new work, new friend, etc. The engagement in new life contexts adds stress to the ongoing structures, however. Metaphorically, the individual has added a new piece to the kaleidoscope and consequently must work to achieve a new balance in terms of time, energy, and expectations. Often there is some degree of compartmentalization, that is, a bounding off or sheltering of the new context from the old momentum of self as played out through the other contexts. Inevitably, the established and the temporary come into conflict. The high rating of temporary settings in the final step stems both from the presence of new contexts which are likely to be enduring (e.g. a new marriage) and from dropping old contexts that are no longer satisfying. When people are re-stabilizing, they express commitment to the new contexts and overall pattern, but have not been in it long enough to be rated as permanent.

From Table 2-B, we can also see the rise and fall of conflict between life contexts as a function of progression through the midlife transition. There is little conflict between life contexts for those in the stable group. Their current contexts are well established and tradeoffs have apparently been worked out. As new contexts are added (Rising Discontent), conflict begins to climb and reaches a peak for those on the Crisis phase. It would seem that the full consequences of the changes have gained the awareness of the individual and the significant others in his or her life. With time, the conflict begins to recede as the individual has chances to develop arrangements to manage the differing pulls. The degree of conflict between life spaces is again relatively low during the Re-Stabilizing phase.

Emotional Tone (Table 2-C) is a final variable that takes a curvilinear course through the midlife transition. Those about to enter the midlife transition, the Stable group, are slightly to the negative side of zero. The emotional tone during the midlife transition will get much worse before it gets better. The Rising Discontent and Crisis groups have become very unhappy. Displays of anger, frustration, despair, confusion, etc. dominated their affect. There is a discontent with one's life and a growing degree of conflict between the concrete contexts of the life structure. The emotional tone dramatically improves for those who have come out the other side of crisis. The Re-Stabilizing group is very positive and looking forward to the future.

Changes in Flexibility and Self Determination as a Result of Progression through the Midlife Transition

From Table 2-D, we can see that those in the Stable, pre-transition group tend to lead lives that are predominantly other determined. Early adulthood is generally marked by needs to specialize and to adapt to others' demands (Wolfe and Kolb, 1980). Those in the Rising Discontent have begun to change in this regard. They are reaching for a higher level of self determination in the running of their life structures. It is not until most of the work of transition is accomplished however, that very many are able to go beyond a moderate level of self determination.

We can surmise that to the extent that one's contexts in life are largely determined by others' needs, schedules, goals, etc., then there would be less freedom of choice and less room to spontaneously maneuver in the pursuit of one's own needs and goals. Table 2-E bears this out. Those in our sample who have progressed farthest in their midlife transitions have created and inhabit the most flexible life structures. To highlight this point, in a previous work (O'Connor and Wolfe 1987), we found that men dramatically decrease their career investments during the Crisis step and had moved to a relatively well balanced set of investments (career, family, self, and interpersonal) by the Re-Stabilizing phase. The over-investment in career would generally act as a block to flexibility in other arenas of life. Additionally, these men were increasingly unhappy about their lack of autonomy at work and were presumably pushing for more. Ideally, people can find creative ways to address both their own and others needs and goals.

Changes in Complexity and Fulfillment Potential of Life Structures during the Midlife Transition

We often feel the pull between a desire for a rich variety of activities and possibilities and a desire to retreat to a simple, flowing life when stretched too far. A complex life structure is one that has many differentiated components in which the person has invested. Such a structure supports a diversity of engagements between the self and the world. Many theorists argue that personal development and growth require an expansion of self-in-the-world (Bronfenbrenner

1970, Kegan 1978). Such an expansion is not just a cognitive process. Complexity of life structure concretely involves adding new or temporary contexts.

From Table 2-F, we can see that those in the Stable group are maintaining relatively simple life styles. Those in the Rising Discontent group have taken on some new activities and probably welcome the added complexity. They are, after all, discontent with the life structures they had earlier composed. The Crisis group, by definition, is struggling and they remain at a moderate level of complexity. Those who have survived the crisis and are re-stabilizing have the most complex structures.

The life structures of those in the later phases of transition were also judged to have the greatest fulfillment potential, i.e. the inherent possibilities of a structure to meet a full range of needs, desires, and aspirations of its creator (Table 2-G). People begin the midlife transition at a moderate level of fulfillment potential. While some new contexts are added in the Rising Discontent phase, the potential for fulfillment does not rise. These new or temporary contexts may not be well integrated into the overall structure. As people experience crisis, the possibilities for fulfillment decline. It's darkest before the dawn. The person in his or her changing life structure is leaving behind an old era, but has not yet arrived in the new. The fulfillment potential however strongly rises in the last two steps of transition. Life is more complex, better integrated (less conflict between life contexts), and is being managed in a more flexible, creative way. While complexity of life structure may not equate with individuation (e.g. at high levels, complexity could be either well orchestrated or poorly managed), there may be some reciprocal determination. It would seem that some minimal degree of complexity is necessary for fulfillment.

Paradigm Shift: An Intensifying Element

O'Connor and Wolfe (1990) argue that a cycle of change can become a spiral of development through a process of paradigm shifting. While there is evidence that changes in life structure are a function of progression through the midlife transition, we are still faced with the question as to whether these changes are solely a function of this progression or are they more strongly related

to the change in the pattern of beliefs, values and assumptions. Do the inner processes of self parallel and intensify the external processes of life structure change and re-configuration?

Two-way ANOVAS were used to help determine whether movement through the midlife transition sequence or an underlying paradigm shift is the most crucial factor in developing flexible and more complex life structures which are relatively more self determined and have a greater potential for fulfillment of a range of needs. The process of paradigm shifting was found to better account for higher levels of complexity, flexibility, and self determination of life structure than progression through the midlife transition (see Table 3). While progression through the transition sequence was found to be a necessary condition for paradigm shifts to occur (O'Connor & Wolfe 1990), it is not a sufficient condition for either shifting paradigm or reaching the higher levels of these 3 life structure variables. Those who more deeply examine and modify their underlying set of beliefs, values, assumptions, and expectations as they move through their midlife transitions are more likely to be building more flexible, complex, and self determined life structures.

The Fulfillment Potential variable presents a more complicated picture. Both paradigm shifting and movement through the midlife transition sequence significantly account for variance (see Table 3). The degree of paradigm shift shows a strong linear relationship to Fulfillment Potential. With each increase in the degree of paradigm shifting, there is a corresponding increase in fulfillment potential. As for progression through the transition sequence, Fulfillment Potential dips during the Crisis phase, before rising to its peak in the post-crisis phases (Table 2-G).

SUMMARY AND CONCLUSION

The process of bringing an era of life to a close and initiating the next brings powerful forces for change to bear on the life structure. The life structures of participants in our sample changed in a number of ways as the transitions to midlife were variously navigated. Typically, new or temporary contexts are created and often serve as important vehicles with which to experiment. This often results in increased conflict between the individual's various life contexts. A symbolic

and actual struggle takes place between the old resolutions to life's problems and opportunities as manifested in the life structure and the new possibilities and tentative experiments. Individuals (and their significant others) have needs for stability and consistency. Such needs are a source of resistance to the changes that take the individual (and so others) into the unknown. In spite of this, we found that the midlife transition was a time when many life structures became more flexible, complex, self determined, and ultimately offered a greater potential for fulfillment of a wide range of needs. By this point in life, many individuals have greater resources and wider, deeper experience and are therefore less satisfied by the outer directed orientations that proved adaptive in early adulthood.

Yet, such developments in life structure are not guaranteed. Some will fail to sufficiently change their life structures to meet the requirements of the new circumstances inherent in middle adulthood. The progression through the transition sequence is not a sufficient condition for personal growth. The examination and modification of one's underlying set of values, beliefs, assumptions, and expectations (a paradigm shift) proved to be a facilitating factor in the movement towards more flexible, complex, and self determined life structures which have the potential to fulfill a wide range of needs.

Such life structures seem best suited to a fuller, more authentic self and the conditions, issues, and tasks of midlife as defined by leading adult development theorists, e.g. generativity (Erickson 1950), integration (Wolfe and Kolb 1980), individuation (Jung 1971), the working through of key polarities (Levinson 1978), life tasks (Havighurst 1979), and a range of career tasks (Schein 1978). In short, they are describing increasingly whole, mature, capable, and contributing members of society.

Sonnenfeld and Kotter (1982) have assessed life cycle theory as the most recent and dynamic perspective in grasping the realities of individuals in career. Individuals evolve as integrated wholes, not just within a career or outside a career. This evolution can take place on varying fronts. A change in one area (e.g. career) becomes a catalyst for wider changes which will bring the individual into a new dynamic equilibrium. Since much of modern life is spent in

organizations with others, our organizational cultures, policies, renewal processes, etc. need to be evaluated as to whether they block personal growth or catalyze and support it. While many organizational development processes offer members some opportunity to re-discover themselves and re-orient to their work and work relationships, it is probably safe to say that the bulk of modern organizational experience is a hindrance or limit to the growth members, particularly at the higher stages of development (Torbert, 1987). Transitioning from such organizational "life structures" will require discontent, crisis, risk taking, and creative experiments. For example, professional education programs can be conceived of as simply the efficient conveying of information through classroom lecture or, as Neilsen (1987) describes a unique executive MBA program, "an opportunity for personal renaissance... an important event in the broader life space of participants." In addition to lecture, opportunities for dialogue and contact, practice in the field, feedback on performance, support in building an integrated personal style and professional identity can be designed into curricula to build real competence (Wolfe, 1980). When the development of the whole person is the target, chances to examine one's assumptions and ways of acting will become a more regular, pragmatic feature of organizational life, not a self indulgent luxury.

Because individuals develop as integrated wholes, the relationship between intangible paradigms and concrete life structures is probably one of reciprocal determination, rather than a one-way causality. Changes in life circumstances can catalyze and support deep internal processes of change. Conversely, internal paradigm shifts help to sort out and guide one in the concrete choices faced in living and working in a world with others. It is not too difficult to imagine the extravert who first makes changes happen "out there" and then discovers the deeper meanings of the actions as they play out and have consequences. They act "thinkingly" (Weick, 1984). It is also possible to imagine a more introverted process of change. In this case, the individual, when possible, would generate feeling based or logically reasoned choices before mapping them onto the world. In either case, people who would change themselves in fundamental ways cannot do so without some manifestation in external activities.

In examining case studies, it is clear that neither the evolution of a life structure nor the process of paradigm shifting are neat, predictable linear processes. There are abrupt starts and stops, regressions and progressions, plateaus and valleys. Yet, these processes are not haphazard either. It seems that a constellation of several variables helps to insure successful outcomes. Progressing through transition, questioning underlying values and assumptions, and experimenting through new relationships and activities can be mutually re-inforcing and help to carry the individual through the inevitable crisis and pitfalls (e.g. conflict, doubt, loss, anxiety) that can cower us, force retreat, and create a short term crisis mentality and response. Similarly, to the extent that various life contexts can allow and support processes of introspection and experiment, the individual has greater chances to build a self determined life structure of adequate complexity and flexibility responsive to the multiple needs of self and circumstances at midlife.

REFERENCES

- Bridges, W. Transitions: Making Sense of Life's Changes. Reading, Massachusetts: Addison-Wesley, 1980.
- Bronfenbrenner, U. The Ecology of Human Development. Cambridge: Harvard University Press, 1970.
- Crary, L.M. Patterns of Life Structure, unpublished dissertation, Case Western Reserve University, 1981.
- Crary, L.M., Pazy, A., & Wolfe, D.M. "Patterns of Life Structure and Variability of Self," Human Relations, in press.
- Erikson, E. Childhood and Society. New York: Norton, 1950.
- Glaser, B. & Strauss, A. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine, 1967.
- Gould, R.L. Transformations: Growth and Development in Adult Life. New York: Touchstone Books, 1978.
- Havighurst, R. "The Life Cycle" in the Future American College edited by Jacques, E. "Death and the Midlife Crisis," in Crisis, Work, Creativity, and Social Justice, New York: International Universities Press, 1965.
- Jung, C.G. "The Stages of Life," The Portable Jung. New York: Viking Press, 1971.
- Kegan, R. The Evolving Self. Cambridge: Harvard University Press, 1982.
- Levinson, D., Darrow, C., Klein, E., Levinson, M., Mckee, B. The Seasons of a Man's Life. New York: Knopf, 1978.
- Levinson, D. "A Conception of Adult DEvelopment," American Psychologist, Vol.41, Number 1, 1986, pp 3-13.
- Loevinger, J. Ego Development: Conceptions and Theories, San Francisco: Jossey Bass, 1976.
- Neilsen, E. "Two Roles, Four Realities in the Executive Classroom," The Organizational Behavio Teaching Review, Vol. 11, # 3, 1986-87.
- Neugarten, B.L. "Adult Personality: Towards a Psychology of the Life Cycle" in Middle Age and Aging: Readings in Social Psychology, edited by B.L. Neugarten, Chicago: University of Chicago Press, 1968.
- O'Connor, D.J. & Wolfe, D.M. "Career Crisis are More Than They are Cracked Up to Be."

Annual Proceedings, Academy of Management, 1986.

O'Connor, D.J. & Wolfe, D.M. "On Managing Midlife Transitions in Career and Family," Human Relations, Vol 40, Number 12, 1987, pp. 799-816.

O'Connor, D.J. & Wolfe, D.M. "Crisis and Growth in Midlife: Changes in Personal Paradigm," under consideration, 1990.

Rogers, C. "A Process Conception of Psychotherapy," American Psychologist, Vol 13, 1958, pp 142-149.

Schein, E. Career Dynamics: Matching Individual and Organizational Needs. Reading, Massachusetts: Addison Wesley, 1978.

Sonnenfeld J. & Kotter J. "The Maturation of Career Theory," Human Relations, Vol. 35, Number 1, 1982, pp 19-46.

Torbert, W. Managing the Corporate Dream. Homewood, Illinois: Dow Jones-Irwin, 1987.

Vaillant, G. Adaptation to Life. Boston: Little Brown, 1978.

Weick, K. "The Presumption of Logic in Executive Thought and Action (or Behaving Thinkingly in Organizational Settings)" in The Functioning of the Executive Mind, edited by Srivastva, San Francisco: Jossey Bass, 1984.

Wolfe, D.M. "On the Research Participant as Co-Inquirer," presented at the Academy of Management annual meeting, 1980.

Wolfe, D.M. "Developing Professional Competence in the Applied Behavioral Sciences," New Directions for Experiential Learning, 8, 1980.

Wolfe, D.M. & Kolb, D.A. "Beyond Specialization: The Quest for Integration in Mid-Career," in Work, Family, and Career, edited by C. Derr. Praeger, 1980.

Table 1: Scales and Inter-Judge Reliability *

Paradigm Shift (.83)

- 1) Fully embedded in current paradigm; no evidence of questioning it.
- 3) Actively engaged in questioning and doubting the basic assumptions that they live by; has recognized relativity of current paradigm and its inadequacy in current situations.
- 5) Have actively questioned paradigm and have cast off some old assumptions and beliefs; new ones have been sufficiently examined and expressed in regard to their coherence and workability.

Transition Sequence (.98)

- 1) Stable or pre-transition: no evidence of engaging in change
- 2) Rising discontent: expression of much discontent with current state
- 3) Crisis: critical juncture, peak of the transition process in terms of uncertainty and upheaval
- 4) Re-direction and adaptation: evidence of tentative new directions
- 5) Re-stabilizing: re-committing to new directions.

Emotional Tone (.91)

- 2) Predominantly negative affect and tone; depressed, despairing, angry, etc.
- 0) Neutral or expressing both negative and positive emotions equally
- +2) Positive, optimistic, zestful tone. Able to express negative emotions, but not dominated by negative affect.

* (Numbers in parentheses indicate interjudge reliability for each scale. Each participant was independently ranked by two judges who had access to all the qualitative data. These rankings (and disagreements in particular) were reviewed by a third judge, who had worked extensively with many of the participants, and this generally led to resolutions of the differences. While these are rough measures, the inter-judge reliability coefficients gave us some confidence that they are indeed dimensions that can be replicated.)

Table 2

Means of Life Structure Variables by Phases of the Transition Sequence

	<u>Transition Sequence</u>					ONEWAY ANOVAS*
	Stable	Rising	Crisis	Re-	Re-	
	1	Discontent 2	3	Direction 4	Stabilizing 5	
A. Temporariness**	1.3	2.8	2.9	2.7	3.0	F=5.83 p < .001
B. Conflict	1.7	2.3	3.2	2.6	1.9	F=2.97 p =.028
C. Emotional Tone***	-.6	-1.7	-1.4	.3	1.5	F=38.5 p < .001
D. Self Determination	2.4	3.3	3.0	3.2	4.0	F=2.93 p =.026
E. Flexibility	1.4	2.8	2.9	3.2	3.6	F=6.11 p < .001
F. Complexity	2.0	3.0	2.8	3.0	3.6	F=4.33 p =.004
G. Fulfillment Potential	2.8	3.0	2.3	3.6	4.2	F=6.10 p < .001
N's (64)	(11)	(11)	(16)	(15)	(11)	

* Degrees of freedom for all variables are 4/59

** All life structure variables use a 1-5 scale

*** Emotional Tone uses a -2 to +2 scale

Table 3
**Two-way ANOVAS of Life Structure Variables
by Paradigm Shift and Transition Sequence (3 x 3)**

Life Structure Variable	Paradigm Shift	Transition Sequence	Interaction	Within
Complexity				
MS	3.66	.522	1.35	.912
F	4.03	.57	1.48	
	p =.023			
Flexibility				
MS	8.99	.51	.43	1.29
F	6.97	.4	.33	
	p =.002			
Self Determination				
MS	5.79	.98	1.42	1.25
F	4.63	.78	1.13	

		p =.014			
Fulfillment Potential					
MS	3.57	10.17		.73	1.05
F	3.39	9.65		.70	
	p =.041		p <.001		