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The Maturation of Career Theory[1]

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Career theory, like the phenomena it describes, has grown and developed over the past century. During that time, four main types of theory have emerged. This paper examines the contributions and limitations of each type, starting with the oldest, and identifies the most fundamental trends in the evolution of this theory. The key trend identified is a continuous shift from a relatively static to a relatively dynamic theory. The paper offers a synthesis of this literature, and concludes by suggesting what types of research and theoretical development are now needed if career theory is to continue to mature.

INTRODUCTION

For our purposes, "career theory" is theory which attempts to explain occupational variables such as type of job and income and/or psychological variables such as job satisfaction and job-related stress. Defined in this way, career theory has a rich history which dates back nearly 100 years, and which includes at least four broad types or traditions of research. In the article we will review a representative sampling of this research using a developmental perspective. Our objectives are to identity the assumptions that underlie each of these traditions, to describe the fundamental trends in the development of career theory, to assess the current state of this theory, and to suggest directions for future research.

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SOCIAL CLASS DETERMINANTS

The first type of identifiable career theory began at the end of the 19th century and is closely tied to the emergence of sociology as a modern behavioral science. The original focus of sociology was on the breakdown of traditional social structures and the emergence of modern society (Durkheim, 1902; Eisenstadt, 1966; Marx, 1854/1963; Parsons, 1959; Weber, 1909). Early scholars concluded that one of the most important aspects of this change was associated with the fluidity of occupational roles. These roles moved from being ascribed in traditional societies by other commitments such as territory rights, caste, sex, or family relations (Firth, 1939; Malinowski, 1932) to being more freely chosen in industrial societies (Marx, 1854; Simmel, 1950; and Tonnies, 1935). As a result, one of the first major lines of sociological research focused on occupational mobility—usually intergenerational changes in occupation status (called "vertical mobility")—as a measure of the shift to modernization (Sorokin, 1947).

The results of these studies in the United States reveal striking agreement that while there are no rigidly prescribed occupational roles, social class in an important determinant of occupational attainment, and that children generally follow careers that resemble those of their fathers [Berlin, 1955; Davidson & Anderson, 1937; Hollingshead, 1951; Keller (cited in Barber, 1955); Lipset and Bendix, 1959; Miller and Form, 1951; Mills, 1955; Newcombe, 1955; Porter, 1954; Rogoff, 1953; Warner and Stefflre, 1952; Warner and Abegglen, 1955]. For example, in one of the earliest studies, Davidson and Anderson (1937) found that about two-thirds of their sample of the male working population of San Jose, California, were in a social class close to that of their fathers. Typical of the later studies, Rogoff (1953) compared the occupations of two samples of central Indiana men in 1910 and 1940 with those of their fathers and concluded that "the most likely occupational destination of all the sons was the occupation of their fathers" (p. 106).

More recently, sociologists have shifted their inquiry toward explaining the process of how social class affects one's level of occupational attainment. For example, in one influential piece of work, Blau (1956) suggested that social structure influences career outcomes in two ways: (1) first by shaping the social development of the individual and thus his or her career orientation, self concept, values, interests, and (2) by affecting the occupational opportunities available to the individual.

In an early study of this type, Miller and Form (1951) found that parents in upper class families were often owners or managers who tended to pressure their offspring to establish the necessary social contacts for the maintenance of the family's high status. However, middle class youth

tended to have white collar parents who encouraged them to work hard toward deferred rewards and who taught them the important interpersonal skills for later job advancement, good pay, and "clean work." The blue collar family was found to anticipate low social mobility and to focus instead on inculcating career values of security, respectability, good co-worker relations, and the provision for one's family. Studies in this period by Stephenson (1957), Chinoy (1955), and Guest (1954) reported corroborative evidence which suggested that lower socioeconomic status people may have high career aspirations, but a concession to reality leads them to set more modest career goals. Schneider and Lysgaard (1953) and Reissman (1953) probed even more fundamental dispositional differences correlated with social class and found that lower socioeconomic status was associated with more impulsive behavior, and middle class status with more deferred gratification. Rosen (1956) used TAT analysis of motive patterns across social classes and found lower social class children to have lower achievement motives. Still other studies found relationships between social class and espoused work motives (Centers and Bugental, 1966) and factors in job satisfaction (Champagne, 1967). In each of these studies intrinsic factors about the job tasks (challenge, variety, autonomy) were found to be more important to the middle class or white collar groups while extrinsic aspects of the job (e.g., wages, benefits) were found to be more important to blue collar or lower socioeconomic status groups. Still other researchers who have focused on lower status groups have suggested that family pressures against scholastic achievement (Duncan, 1966), low self-esteem and confidence in enterprise (Rosenberg, 1965), limited understanding of the instrumental value of education [O'Dowd and Beardslee (cited in Osipow, 1973)] and a two-tiered labor market (Piore, 1969); Doerringer, 1972) all help explain the lower career attainments of those born to lower SES parents.

More recent work in the social status tradition has also relied on multivariate approaches to the study of social background characteristics. Using this approach, Blau and Duncan (1967) suggested that the most influential forces on career attainment in one's social class background are father's occupation and father's education. These two forces were found to be strong predictors of a person's education and their first job, which in turn could predict their current job. The model of occupational attainment developed by Sewell, Haller, and Ohlendorf (1970) emphasizes the social influences associated with socioeconomic status as well as individual mental ability and academic performance. Thus they argue that the impact of social class can be overcome through affecting aspirations and the encouragement of respected others (Haller & Portes, 1973).

Although the statistical sophistication of recent work in this field has increased greatly, this has not led to greater convergences of results.

Instead we find, for example, Jencks (1972) concluding that occupational success was determined mostly by factors other than family background, education, and competence. But a few years later, we find him reversing his conclusions (Jencks, 1979). In a similar vein, a major study by deLone (1979) concludes that little mobility exists in the U.S. today, while another major study by Featherman and Hauser (1978) concludes that considerable mobility exists.

In summary, the first wave of careers research, dating back to the beginning of this century, was conducted mostly by sociologists who focused on the relationship of social status to career attainment. This work has made one very important contribution; it was rather clearly demonstrated that there is a relationship among parental occupation, education, and wealth and the occupational status and income attained by children. But it is still unclear after nearly a century of work exactly how strong the relationship is, and exactly why this relationship exists.

The lack of more substantive results from this first type of career theory is directly related to the very static and deterministic assumptions upon which the theory and methodology are based. Such assumptions, which were the order of the day when this type of research first evolved, primarily because of the appeal of the grand deterministic schemes of Marx (1867/1949), Darwin (1889), and Freud (1924), have led to the following kinds of errors:

1. Social class researchers often fail to consider the impact of changes in the social status of an occupation over time. For example, Jenck's (1979) latest work measures career success with the Duncan Occupational Status scale, which was developed using 1950 census data. On this scale, an engineer drops down in occupational prestige through a promotion to management.
2. Social class researchers often neglect to appreciate that an individual can change occupations over time. As such, they often look at a father's occupation at one stage in his career and a son's occupation at a different stage in the son's career (Davidson & Anderson, 1937; Miller & Form, 1951; Rogoff, 1953).
3. Social class researchers often ignore the fact that the distribution of the population in different occupations changes over time. Farming, for example, has changed dramatically. It employed 40% of the labor force in 1900, but only 6% in 1960. Thus, the fact that a son does or does not follow his father into farming may be due more to occupational demand than to social status.
4. Finally, these researchers have often ignored the fact that individuals change over time. For example, people's memories of historical facts are not always reliable, yet researchers in this tradition often use retrospective data (Caplow, 1954; Horton &

Leslie, 1965). Furthermore, in the past century since this type of career theory emerged, people's values have changed regarding what they consider "success" is in a career (Weiss, Harwood, and Riesman, 1971; Yankelovitch, 1974). Yankelovitch (1979) commented that this research"...fails to take even passing note of the pluralism in values that has developed in recent years." Yet social status researchers such as Jencks (1979) continue to use occupational status as the key dependent variable in their work. This denies the logic of those who chose to maximize satisfaction over pay, prestige, and power.

STATIC DISPOSITIONAL DIFFERENCES

A second type of careers research started shortly after the social structure perspective as psychologists began to develop trait theory and to explore its relevance to occupations (Hollingworth, 1916). Trait theory grew out of a long search for explanations of individual differences despite common externalities. The matching of individual characteristics with vocational choices was an important concern even in traditional societies, but prior to the 20th century the methodologies used were fortune telling, magic, palmistry, astrology, phrenology, and the like.

For example, phrenology, the belief that skull shapes were indices of mental and moral traits, began at the end of the 18th century by physicians and galloped way beyond the pace of scientific fact (Jastrow, 1915). Phrenological societies remained popular into the 20th century with a continued lack of systematic observation and biological fact. A related pseudoscience, which was frequently applied by vocational counselors, was physiognomy, the study of facial profiles, jaw shape, eyebrows, hair color, eyes, etc. An early 20th century vocational guide related square faces to pioneers, builders, engineers, explorers, and athletes. Found faces and bodies were said to be related to judges, financiers, and organizers. Writers and educators were thought to resemble triangles with both head and body wide above and narrower in the lower portions. Kretschmer (1925) and Sheldon, Dupertius, and McDermott (1954) continued a similar tradition relating skeletal types and body shape to disposition. Today we still find ourselves using facial and body features to draw personality inferences about strangers.

While devoid of any accuracy, or predictability, these pseudosciences helped direct attention to the study of individual differences in mental characteristics as a distinct path of inquiry. The first scientific attempts to measure individual traits started at the beginning of this century (Wissler,

1901). These pioneering efforts involved accumulating measurements of a large number of individuals and locating where each stood in relation to the average and general distribution. For example, the work of Binet (1909), Thorndike (1913), and Wechsler (1958) led to the development of "intelligence" scales. Work by Seashore (1912) and others led to the compilation of vocationally specialized "psychographs" to help in the matching of people and jobs.

This approach continued for the next several decades. The Minnesota Multiphasic Personality Test (MMPI) and the Strong Vocational Interest Blank (SVIB) are among the best tools developed by this approach. The MMPI was originally designed to test personality traits that correspond with personality disorders, but was adapted for occupational use. The SVIB distinguishes occupations by the relatively unique interests of those successfully employed in them (Strong, 1943). In both of these tests a person's profile is compared to the accumulated profiles of people in that occupation.

Studies of specific occupations using trait theory and instruments have revealed the following sorts of trait profiles. Engineers have been found to prefer impersonal objects and avoid interpersonal conflict (Izard, 1960; Korn, 1972; Roe, 1961; Steiner, 1953; Thumin, 1965). Nurses were found to be passive and nonachievement oriented (Furst, Raygor, & Crofoot, 1962; Gunther & Gertz, 1962). Artists have been found to be consistently more independent and disinterested in the attainment of approval and status, and to be creative and emotionally passive (Irvin, 1968; Munsterberg & Mussen, 1953; Roe, 1946; Spiaggia, 1950). Actors have been found to be somewhat more impulsive, emotionally unstable, insensitive to others, exhibitionistic, and homosexually oriented (Stacy & Goldberg, 1953; Taft, 1961). Theological students were found to be more conscientious, serious, sensitive, introspective, gentle, and dependent (Barry & Bordin, 1967; Childer & White, 1966; Strunk, 1959). Scott and Day (1972) found MBA students to be better adjusted, more self-assertive and high in ego control. Teachers were found to have an average achievement orientation and to be steady individuals who like predictable lives, enjoy identifying with institutions, and are socially oriented.

Perhaps the most influential theory that has emerged from this type of research is Holland's (1959, 1962, 1966, 1972). It suggests that people with different personality types drift toward predictably different types of occupational environments. He outlined six such environments:

1. *Realistic*—requires aggressive behavior, physical skill, and strength (farming, trucking, forestry, and the like).

2. Investigative—which demands cognitive processes rather than action, and less interpersonal contact (mathematics, biology).
3. Social—typified by interpersonal rather than intellectual or physical activities (counseling and teaching).
4. Conventional—which requires a great concern with rules, self-control, respect for power and structure (bank clerking, bookkeeping).
5. Enterprising—requiring verbal skills, persuasiveness, and power aspirations (sales, politics).
6. Artistic—which allows for expression of emotion and aesthetics in an instructural environment (music, art).

Holland proposed that if one of the above orientations decisively dominates the others, the individual will gravitate toward an occupational environment consistent with that orientation. If two or more orientations are of near equal intensity, the individual will vacillate in the selection of an occupational environment. The Vocational Preference Inventory was the instrument originally designed to measure one's orientation. This index is a list of 160 occupational titles toward which an individual indicates his likes and dislikes. One extensive review of the literature on the VPI and rigorous testing of the theoretical premises concluded that "it would appear that considerable construct validity exists between the personal orientations, SVIB group scores, and occupational preferences." (Osipow, 1973, pp. 65-66). A new instrument designed for self-administered use and called the Self-Directed Search has also been found to be effective (Zener & Schnuelle, 1972).

More comprehensive theories of personality and career orientation have been proposed. The single most important theory of this kind is associated with Roe (1957), who placed a great emphasis on affiliative needs in childhood. She argued that offspring of parents attentive to those needs were likely to develop a more social orientation in their later career, while offspring or less attentive parents would tend not to be people-oriented in their career choice. However, these theories have not been well supported in empirical tests (DeCoster & Rhose, 1972; Kriger, 1972), and generally have not proved to be as powerful as trait theory.

Career theory has only been incidental to the most comprehensive personality theory—psychoanalytic theory. Segal (1961) has found some support for anal retentive compulsive behavior patterns to be associated with accountants and anal expressive behavior patterns to be associated with writers. White (1963) has found bank personnel to be particularly concerned about dirt and sloppiness. Steimel and Suziedelis (1963) suggested that parental identification was associated with college major,

father-influenced boys were higher on social and verbal occupational scales. These relationships, however, are not very strong and could only be applied to interest inventory scores, but not actual behaviors such as career choice or attainment.

In summary, a second type of career theory emerged early in this century that was directed by psychologists who looked for relationships between static personal traits and the occupations in which people were employed. This research has been somewhat successful in finding such relationships, but there is little consensus today regarding exactly what traits are most important or exactly how they relate to different occupations.

In many ways, this second wave of career theory has been more successful than the first. Nevertheless, in 60 years it too has not succeeded nearly as well as many of its founders may have hoped. New and more powerful theories and instruments have not evolved at a rapid pace in the past 30 years. Furthermore, the most successful early theories and instruments have been found lacking in many ways. For example, Cattell, Day, and Meeland (1956) found that the 16 Personality Factor Questionnaire could only crudely distinguish occupational categories on individual personality scales. Sternberg (1955) conducted a factor analytic study of college majors and personality traits as measured by the Kuder Preference Record, the Allport-Vernon-Lindsey Study of Values, and the MMPI. Although the range of differences on factors such as aggressiveness, aesthetics, extroversion, health orientation, and quantitative detail orientation varied between each college major, the degree of variation was too small to constitute separate personality profiles. Numerous people have criticized instruments like the SVIB for being susceptible to faking by participants (Bridgeman & Hollenback, 1961; Guion, 1965; Kirchner, 1962).

The primary problem here, once again, is the relatively static foundation on which this work is based. Although trait theory, unlike social status theory, rests on the assumption that people do change and develop at least during childhood, it still assumes that adults and their occupational environments are relatively static. These assumptions are directly related to the problems this type of research has encountered. For example:

1. Trait researchers generally ignore the fact that traits such as cognitive style can change throughout a lifetime (Kolb & Plovnick, 1977).
2. Trait theory tends to deemphasize the influence of changing work place demands at the various stages in one's career (Schein, 1971).
3. Trait researchers often assume an unrealistically simple and static view of the occupational environment. As such, they often rely on overly general occupational categories for which many alternative trait profiles may be appropriate (Super & Backrach, 1957).

CAREER STAGES

A third major type of career theory began to emerge in the 1940s and 1950s. This research focused on the process of and stages in occupational choice and development. Although this work was done mostly by vocational and organizational psychologists, the first major study and theory were created by an interdisciplinary team and two sociologists.

Ginzberg, Ginzberg, Axelrod, and Herma (1951) attempted to synthesize the contributions of four disciplines to arrive at a more dynamic and complete model than found in previous research. This interdisciplinary team represented the collaboration of an economist, a psychiatrist, a sociologist, and a psychologist. Their first conclusion was that at least four significant variables were involved in vocational choice: (1) a reality factor (which caused an individual to respond to the pressures of his environment in making vocationally relevant decisions); (2) the educational process; (3) emotional factors; and (4) a person's values. Their study of students led them to conclude that vocational choice is an irreversible process occurring in reasonably clear periods, which they labeled Fantasy (ending at age 10), Tentative (11-18), and Reality (19-25). In the Fantasy stage the individual begins to imagine what it would be like to be in various occupations. In the Tentative stage he or she begins to make tentative choices and to do some career planning. In the Reality stage, the person actually makes some choices. They describe each of these periods, and the stages within them, in some detail. The overall process was characterized by a series of compromises the individual makes between wishes and possibilities. This theory has been quite influential, although empirical support has been mixed (Hollender, 1967; Gibbons and Lohnes, 1968; Navis, Hagan, & Strouf, 1962; O'Hara, 1959; Tiedeman & O'Hara, 1963; Tucci, 1963).

Working independently and at about the same time, Miller and Form (1951) described five career stages based on their observations: (1) the Preparatory Work Period; (2) the Initial Work Period; (3) the Trial Work Period; (4) the Stable Work Period; and (5) Retirement. Unlike the Ginzberg et al. model, Miller and Form described a process that lasted throughout a person's life. Thinking along similar lines, Tiedman and O'Hara (1963) later extended the Ginzberg model beyond the age of 25. They suggested an eight-stage model, the first four stages of which were similar to Ginzberg's. In their fifth stage, which they called clarification, the person tries to reduce internal conflict or dissonance (Festinger, 1958) caused by the recently made choices. Their sixth stage involves induction or socialization into an organization. In their seventh stage, the individual becomes established and begins to be influential in the organization. In the eighth stage, the person reaches a point of equilibrium—able to influence the organization as much as the organization can influence him or her.

In a somewhat similar way, Super, Crites, Hummd, Moser, Overstreet, and Warnath (1957) reacted to the Ginzberg work by developing an extended model of career stages which draws from differential and developmental psychologists such as Rogers (1942), Carter (1940), Bordin (1943), and Buehler (1933). Super's work can be summarized as such:

1. Growth Stage (birth-14)
   - Fantasy (4-10): fantasizes; engages in role-playing.
   - Interests (11-12): gives likes more weight.
   - Capacity (13-14): gives abilities more weight.
2. Exploration Stage (15-24)
   - Tentative (15-17): makes tentative choices.
   - Transaction (18-21): enters labor market
   - Trial (22-24): starts work.
3. Establishment Stage (25-44)
   - Trial (25-30): sometimes changes occupation.
   - Stabilization (31-44): tries to stabilize the career.
4. Maintenance Stage (45-66)
   - Holding on to what one has.
5. Decline Stage (65-on)
   - Deceleration (65-70): slows down the pace.
   - Retirement (71-on): moves out of career.

Although Super focuses on the entire lifetime, his work deals mostly with the ages 14-24 (his Exploration Stage). A career stage model developed by Schein (1971), on the other hand, focuses mostly on Super's Establishment Stage, when a person enters an organization as an employee. This work was originally based on socialization research, which focused on the ways in which group norms and values influenced a new group member's behavior (Homans, 1950; Kelly, 1952; Newcombe, 1952; Sherif, 1936), and was influenced by a group of Chicago sociologists who had been studying the actual membership stages and professional rituals in various occupations (Becker, Geer, Hughes, & Strauss, 1961; Dalton, 1959; Hughes, 1958). Schein's stages, briefly summarized, are: (1) preentry and entry; (2) basic training and initiation; (3) first regular assignment and promotion or leveling off; (4) second assignment; (5) granting tenure, termination, and exit; (6) postexit. Schein further suggests that career movement in an organization can be thought of as in a three dimensional space: (1) vertical (moving up or down in rank); (2) radial (moving closer or further from the central tasks, people, and power); and (3) circumferential (movement from function to function). The type of mobility one finds in an organization is largely determined, he argues, by the structure and boundaries relating to these dimensions.

A variety of research done in the last 20 years has given credence to and helped elaborate these career stage models. Work by Vroom (1966) and Soelberg (1966) supports Tiedman and O'Hara's "clarification" stage. Both found evidence of "dissonance reduction" following job choice by MBAs. Hall and Schneider (1973) have confirmed that "reality shock" is common during Schein's basic training and initiation periods. Considerable evidence suggests that initial experiences in the organization, such as the first regular assignment, can have an important effect on later career outcomes (Berlew & Hall, 1966; Dunnette, Avery & Banas, 1973; Kotter, 1972, 1973; Rosenbaum, 1979; Wanous, 1975, 1979; Weitz, 1956). For example, Berlew and Hall found in a study of young managers at AT&T that the more challenging a person's job was in the first year of employment, the more effective and successful the person was even five to seven years later. Considerable evidence also suggests that the period coinciding with Schein's "2nd assignment" stage is one characterized by achievement and advancement. For example, Bray, Campbell, and Grant (1974) report finding increased concerns for achievement and autonomy between the first and eighth years of employment.

In summary, the third type of career theory to emerge strongly suggests that it is useful to think of careers as developing in somewhat predictable stages. Although at this time empirical support is somewhat mixed on exactly what the stages are and when they occur, the evidence seems clear that more dynamic thinking than was found in the first two types of career theory is essential.

Despite the relative success of this third wave of career theory, it too is limited by certain static assumptions. Specifically:

1. The individual is seen as rather passive. Career stage models tend to assume that people do not switch organizations or occupations (at least after an initial trial period). Yet evidence exists that people commonly switch career tracks, particularly in certain occupations and at certain ages (Jaffe, 1972).
2. Career stage theory tends to ignore the dynamic interaction between work and nonwork aspects of life at any given moment. Yet there is evidence that what happens outside of work affects work and vice versa (Kohn & Schooler, 1973; Near, Rice, & Hunt, 1978).
3. Further, career stage theory usually overlooks the importance of relevant biographical data. That is, it often ignores historical dynamics. For example, it is rare to find a career stage theorist seriously taking parental social class into account. The a prior life history.

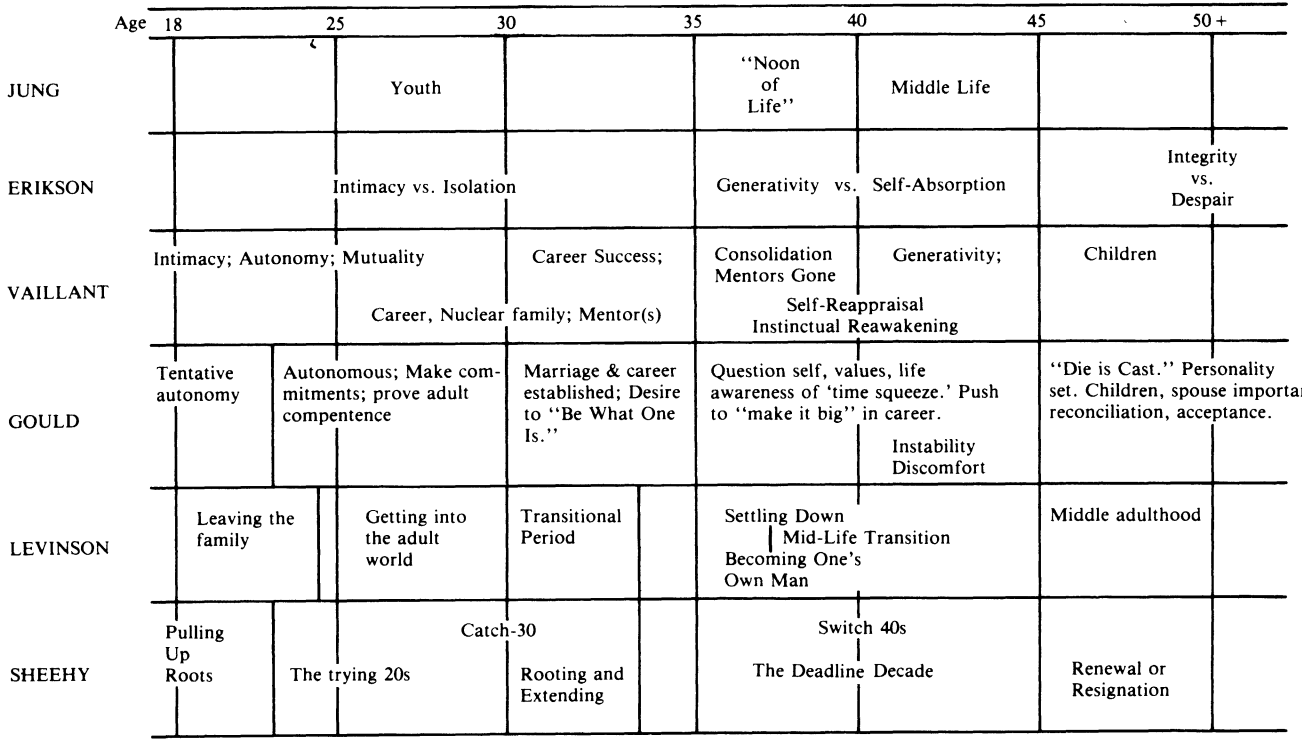
4. Finally, some of the initial work in particular has been criticized for its overemphasis on the early work years and for its deterministic nature (Osipow, 1973; Hall, 1976).

THE LIFE CYCLE APPROACH

A fourth type of career theory has emerged in the past decade, largely as a result of psychological examination of adult development. The latest wave of theory is even more dynamic than the career stages work. It seriously looks at almost the entire lifetime, not just the early career years. And this type of research includes more factors associated with the three major aspects of life: work, family, and the individual.

The principal work that sparked this fourth type of research was done by Gould (1972), Levinson, Darrow, Klein, Levinson, and McKee (1974), Levinson (1978), Sheehy (1976), and Vaillant (1977). This work is rooted in the theories of Jung (1933) and Erikson (1950). Jung suggested that man has two goals, the acquisition of money and social position, and the pursuit of culture. He suggested a "noon of life" transition from youth to middle life (between the ages of 35 and 40) which is the "last summons to attain all of one's capabilities." Psychosomatic symptoms and psychogenic disorders at this period (depressions, ulcers) result from the failure to attain the goals established during youth. The femininity of men and the masculinity of women begins to appear then. Jung virtually ignored old age and childhood. Erikson (1950; 1959; 1960) suggested eight stages of man, building beyond Freudian childhood determinism. In each of Erikson's eight stages, new dimensions in a person's social interactions are possible. The developmental periods were labeled: (1) trust vs. mistrust (birth to 1 year); (2) autonomy vs. doubt (2-3); (3) initiative vs. guilt (4-5); (4) industry vs. inferiority (6-11); (5) identity vs. role confusion (12-18); (6) intimacy vs. isolation (young adulthood: sharing with others without fear of losing oneself in the process, intimacy or loneliness if no one to care for); (7) generativity vs. self-absorption (adulthood: concern with others beyond immediate family, possible stagnation and bitterness if not tied in with young people and next generations); (8) integrity vs. despair (old age: nearing completion, time for reflection on one's life).

New studies by Valliant (1977), tracing the lives of 268 Harvard alumni until they reached age 50); Gould (1972), a clinical cross-sectional study of 524 white middle class men); Levinson et al. (1974), a four-year study of 40 men between the ages of 35 and 45); and Sheehy (1976), based on interviews with 115 people), all extend this work. The stages in life they have identified are not entirely the same, but there are many similarities (see Fig. 1). So far the most influential of these studies has been



Adapted from Wilhelm (1976)

Fig. 1. A comparison of several conceptualizations of adult life development.

Levinson's. He, Darrow, Klein, Levinson, and McKee described the stages of adult life they observed as: leaving the family (16-24); getting into the adult world with the assumption of new responsibilities, older friends, and mentors (early 20s); a 30s transition (28-32); a settling down and seeking stability (early 30s); becoming one's own person, and seeking recognition (late 30s); mid-life transition (late 30s, early 40s); and middle adulthood, where bodily decline and a sense of disparity appears.

Many of their most interesting conclusions from this work deal with mid-life. These ideas, such as the notion of a mid-career restructuring of one's orientation, have found support and elaboration in other studies too (Dennis, 1966; Dubin, 1973; Jacques, 1965; Kaufman, 1974; Kelleher & Quirk, 1973; Lehman, 1968; Neugarten, 1968; Pelz, Sofer, 1970; Sonnenfeld, 1978; Stoner, et al., 1974; Thompson & Dalton, 1975; Welford, 1976). For example, the recognition of limited time and sense of reduced opportunities for new starts has been found to prevail at mid-life (Jacques, 1965; Neugarten, 1968; Sofer, 1970). Performance declines during mid-career have been located in each of the major occupational categories (Dennis, 1966; Kelleher and Quirk, 1973; Lehman, 1968; Pelz, 1964; Sonnenfeld, 1978; Welfaord, 1976). Job mobility patterns indicate increased activity at midcareer, further suggesting a midcareer reorientation to life.

Research is now continuing with this life stage perspective by integrating across the total life of a person. Kanter (1977), for one, has argued that work is only one of several core activities in a person's life and can be understood only after an assessment is made of the relative absorption of each of the major activities. For example, large families and demanding hobbies (like drama and local politics) may divert significant amounts of one's life energies away from work. Similarly, the spillover effects of satisfactions in the various life arenas show that the emotions and events in work, family, and in one's life-style have a great effect on the feelings one has about each of the other arenas (Kohn & Schooler, 1973; Near, Rice, & Hunt, 1978; Rousseau, 1978). The relationship of satisfaction in these different life arenas to job changing behavior has been found to be consistent with life-cycle explanations (Wright & Hamilton, 1978), although the research has made longitudinal generalizations from cross-sectional data. Bartolome and Evans' (1979) study of 513 managers found five paths which individuals take in traveling through the career and life stage issues in their late 30s and early 40s. They all illustrate a growing preoccupation with the integration of private life concerns into one's career.

The family itself has even emerged as an important focus of career research (Rapaport & Rapaport, 1974; Hall & Gordon, 1973; Hall & Hall, 1979). Bailyn and Schein's (1977) research on engineers, for example, found

that high work involvement, to the exclusion of the accommodation of family life concerns, leads to long-run unhappiness. Previously, Bailyn (1970) had identified patterns among dual career families which indicate several alternative paths couples take in managing their careers: (1) limitation of the ambition of each, (2) recycling or staggering the goals each has, (3) joint occupational ventures, (4) segmentation of work and family issues, and (5) independent maximum career fulfillment.

In summary, this fourth type of career research focuses on the dynamic evolution of people, their families, and their careers over a lifetime. Despite the limited amount of this type of research done to date, it already strongly suggests that there are patterns in the adult life cycle, and that to understand career outcomes one needs to focus on adult development, the family and life-style, as well as career stages.

The principal criticism that one can make of life-cycle studies to date is that they are often too limited in scope. Life-cycle theory suggests that a large number of factors are relevant to career dynamics, yet these studies usually still ignore many important factors. For example:

1. While it is impressive that much of the research on adult development tends to be longitudinal, the time frames used are still too short. Levinson's (1977) study only tracks people for four years, and no participants were older than 50. Even the exhaustive Grant study has to date only tracked participants until the end of middle-aged life. Very little has been done that focuses on later career stages, yet some evidence suggests that job attitudes and performance follow patterns during these years too (Sonnenfeld, 1979). In addition, very little has been done so far to test and elaborate such theories. Some tests which have been conducted have found current theories somewhat lacking (Kopelman & Glass, 1979).
2. Although researchers in this fourth type of career theory acknowledge the importance of all aspects of an individual's life, empirical tests usually study only a few dimensions of the total picture. For example, longitudinal studies have rarely given equal balance to learning from the spillover between life sectors (Rabinowitz & Hall, 1977). Studies of work behavior and attitudes which have used age as a variable rarely consider nonwork behavior and attitudes (Kelleher & Quirk, 1973; Porter, 1966).
3. Research in this fourth tradition is also limited to date in the type of samples used. Much of the work relies heavily on male subjects. Considerable evidence is developing that the experiences for women may be different because of differences in family and achievement values (Horner, 1973; Benn & Benn, 1972; Miller,

1972; Harmon, 1973; Hyde, 1968; Lewis, 1978; Walsh & Barrow, 1972). In addition, other types of sample limitations include drawing from a single large organization (e.g., Bray, Campbell, & Grant, 1974; Hall & Nougaim, 1968), drawing from unusual occupations such as priests or forest rangers (Hall & Schneider, 1973), or drawing from elite populations (Bailyn & Schein, 1972; Levinson, 1977, Vaillant, 1977).

SUMMARY AND DISCUSSION

Career theory dates back nearly 100 years. During this time, four major types of theory have emerged, the first in the late 1800s, the second in the early 1900s, the third in the 1940s and 50s, and the last quite recently. The most notable trend in this evolutionary process is toward an increasingly dynamic theory (see Fig. 2).

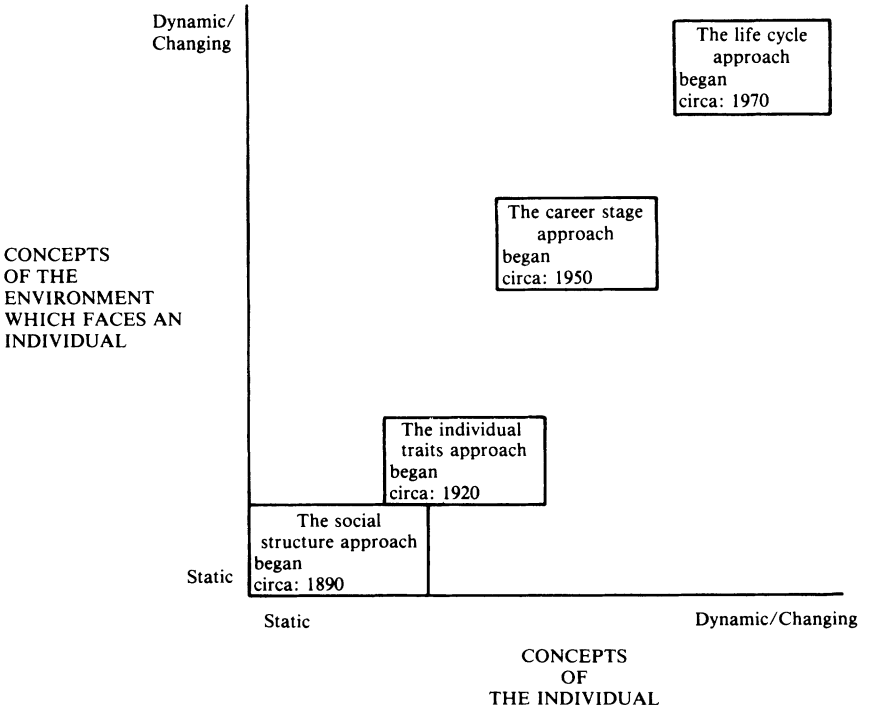


Fig. 2. The maturation of career theory.

The first wave of career theory focuses primarily on the relationship of parental social class to individual career attainment. Emerging at an earlier stage of industrialization and modernization and at a time when the grand deterministic theories of Marx, Darwin, Spencer, and Freud were fresh, social class theory essentially assumed that both individuals and their environments were relatively static or unchanging. As such, important career outcomes were generally assumed to be set from birth. Although this type of research has made important contributions to career theory, the static assumptions have limited those contributions.

The second type of career theory focused on the relationship of individuals traits to career choice. Partially in reaction to limitations inherent in social class theory, individual trait theory took a slightly more dynamic view of the individual. It suggests that there are complex forces involved in shaping an individual's traits or personality, which in turn determine career choice, but that these forces complete their work during childhood. As such, important career outcomes are set by an early age. Although this second kind of career theory has had perhaps a larger impact than the first, it still has been limited in its contribution due to its relatively static assumptions.

The third type of career research tried to identify career stages and to show how they affect career attainment and satisfaction. Emerging after World War II, when the world had just weathered violent changes in economic stability, political boundaries, and social change, career stage theory took a more dynamic view of both the individual and his or her environment, especially the environment. It argues that the career-related environmental demands placed on a person change in important ways over time, especially during the early adult years. As such, important career outcomes are not set until age 30 or 40. Although this type of research is less than 30 years old, it has clearly made a significant contribution to career theory. But again, contributions have been limited by certain underlying static assumptions.

The latest type of career theory has focused more on the adult life experience and how the development of it over time influences career-related outcomes. Emerging at a time when people were becoming increasingly aware of demographic change (Sheppard, 1976), life-cycle theory assumptions are even more dynamic than career stage theory, especially of the individual. Here the individual is seen as growing and changing throughout his or her life as a result of work, family, and internal (biological and psychological) forces. As such, important career outcomes are never entirely set until retirement or death. Although this type of research is very new and suffers a variety of methodological limitations, it already has made some very interesting contributions to career theory.

In this process of becoming increasingly dynamic, career theory has added more variables and complexity along two orthogonal dimensions.

One runs across time (from birth onward); the other across life space (e.g., work, family). Fig. 3 shows one way of summarizing how all these variables fit together. It suggests that career outcomes are the result of the interactions of occupational, personal and family factors throughout a lifetime.

Of the nine major sets of variables shown in Fig. 3 (the boxes), the social class approach has focused mostly on two: the childhood family environment and the current work situation. The static dispositional approach has dealt mainly with three: the individual's personality, the current work situation, and the individual's current perspective. The career stage approach has focused on four: the educational environment, work history, the current work situation, and the individual's current perspective. The life-cycle approach includes seven; only the childhood family environment and the individual's personality tend to be neglected.

The synthesis shown in Fig. 3 suggests that, at least ideally, the type of career research we need in the future must go beyond even the life-cycle approach. Yet a fifth approach is necessary. That is, theoretically, we need more attempts to include all the factors in Fig. 3. We need more attempts to integrate concepts and findings from all four previous types of career theory. We would agree with Holland (1975) who has recently stated that "no one has demonstrated that the virtues of infinite dissection, now in vogue, are superior to a survey of how the main parts go together." Empirically, we need more longitudinal studies. The trend seems to be in this direction, but the vast majority of work is still cross-sectional. Roos (1978) has demonstrated the misleading nature of cross-sectional career research by looking at inconsistent cross-sectional relationships. Only through such a theoretical and empirical approach can researchers, for example, distinguish actual transitions between social roles from internal readjustments of perspective within the same roles (Lewis, 1980). The basic questions that this kind or work needs to focus on are:

(i) What is the relative importance of childhood environment, personality, education, work history, family history, adult development history, and current life structure variables in determining career outcomes such as income, occupation, and job satisfaction?
(ii) What are the more common patterns in the evolution of these variables, for people in general, and for specific subgroups (e.g., men, women, managers, lawyers, etc.).
(iii) How exactly do these factors interact over time? What are the more important relationships?

We see some promising signs that both empirical research and theoretical development are going in needed directions. Recent work by Alderfer

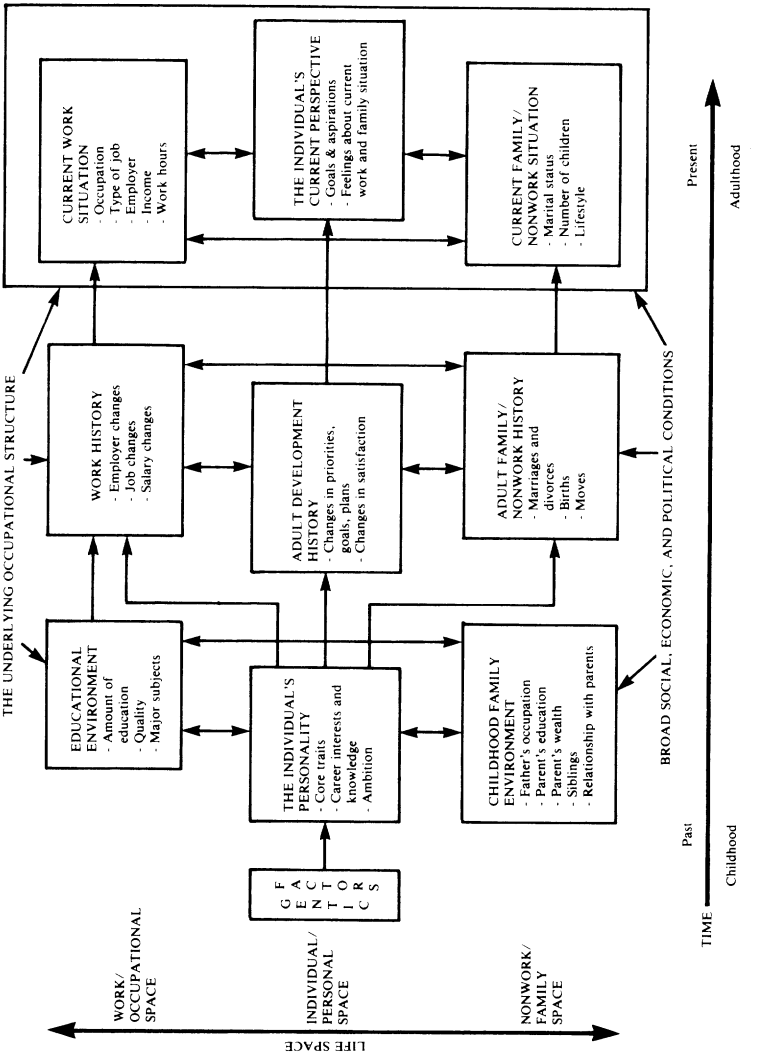


Fig. 3. A model of career development.

(1978), Pfeffer (1977), Rosenbaum (1979), Hall (1978), and Schein (1978) are encouraging. So is the new work that has been labelled "interactionist" perspective because it addresses the interaction between a worker and the person's immediate culture (Lawrence, 1980; Lewis, 1980; Schneider, 1980; Van Maanen, 1977). But these are more the exceptions than the rule. More commonly one still finds people working within the relatively static bounds of one of the older traditions, ignoring more recent developments. Such work retards the maturation of career theory.

The objective of early career researchers was to separate one's occupation from other roles in life. Now perhaps it is important to reposition research on career phenomena within a broader mosaic of unfolding life experiences beyond the workplace.

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