Factors Influencing Career Development

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Abstract: Addressed in this article are factors that influence an
individual's career development. Included are topics on the
career development process, concept of constructivism, social
learning, occupational and past learning experiences,
self-efficacy, verbal reinforcement, stress management, cognitive
developmentalism, qualitative changes, dualistic thinking,
relativism, developmental patterns and Holland's Theory of
Vocational Personalities and Work Environments. Vocational
interventions that include decision aids and implications for
educators in relation to career development are also presented.

What factors determine the health career chosen by an individual?
One may pose the question: "Are individuals passively drawn into one
direction or do they actively make choices based on self-evaluation?"
Furthermore, "How do educators help students decide on a health career
and prepare for life-long learning?" Several topics relate to factors

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    a. career Development process,

    b. concept of constructivism,

    c. social learning,

    d. cognitive developmentalism,

    e. qualitative changes,

    f. developmental patterns,

    g. Holland's theory of vocational personalities and work environments' ,

    h. vocational interventions, and

    i. decision aids and implications for education.

These topics are included in the **folowing** sections.

Career Development Process

Optimally, career development is the process whereby an individual develops increasingly accurate self-perceptions of the opportunities offered by the environment and perceptions of the relationship between self and those opportunities. **During** this process, the individual should collect and use information obtained in career development. Cognitive theory gives us some insight into this career development. Individuals construct their own realities, using cognitive theory and actively receive input from the environment. One's personal concept and concept of the environment are developed out of an interaction between new information and prior **learnings.** Therefore, external events are reflected in and changed by internal processes. This concept is referred to as **constructivism** (Stone, **1980).**

Concept of Constructivism

One aspect of constructivism is called social learning. Social learning theorists refer to learning as a function of three

interdependent and interacting sources of influence (a) antecedents, (b) cognitive mediators, and (c) consequence. Antecedents describe the impact of events that precede a person's behavioral change. Most social learning theorists believe that the most **important** antecedent events are social, such as one person influencing another. For example, a young child or a teenager may state: "I would like to be a nurse" because a certain individual who is a nurse is appealing and is serving as a role model. Modeling, then, **is** a widely used social learning method. Cognitive mediation appears to occur after modeling. A vicariously learned response is represented in a new context with added personal knowledge. These cognitive representations then serve to guide future performances. Self-efficacy or individuals' expectations **about** their capabilities, is a major cognitive mediator in behavior change **(Bandura,** 1977). In addition, consequences or reinforcement give individuals incentive to respond a certain way as well as give them an informative cue indicating success (Stone, 1980). What does this mean for career development? To review this aspect, one should examine social learning more **throughly** as revealed in the literature.

Social **Learning**

According to **Krumboltz,** Mitchell, and Jones (1979), social learning has been applied to career development, resulting in models and interventions. One approach identifies personal and environmental making. The **major** differences between social learning and traditional career theories have to do with the explicit description of these characteristics and the outcomes associated with the interactions of these characteristics. The social learning theory may be **summar**ized as

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follows: Individuals bring certain inherited qualities, special abilities, unique learning experiences, and task approach skills to environments that are characterized by specific conditions. The personal characteristics and environments interact to help produce generalized preferences with task approach skills that lead to specific actions and consequences that alter future actions (Stone, 1980). In addition, specific social learning experiences such as occupational preferences and past learning experiences, self-efficacy, verbal reinforcement and management of stress may influence career development.

occupational preferences and past learning experiences. A preference for a particular occupation can be related to past social learning experiences in which a person received positive feedback. Such cumulative experiences may lead an individual to enroll in a certain educational program. Once the person is in the program, negative learning situations may be experienced and less than positive evaluations (consequences) may be received which result in a career change. Thus, self-views are acquired from past learning histories involving the interaction of various personal attributes and environments, and they are modified by current experiences (Stone, 1980). These self-views assist in forming beliefs about self and are referred to as self-efficacy.

Self-efficacy. Another social learning application according to Bandura (1977) uses the self-efficacy theory which recognizes the impact of personal beliefs concerning one's ability to perform a task successfully in continuing career development. Studies have also been made comparing self-efficacy to certain occupations. As revealed by

Betz and Hackett (1981), females, compared to males, are more likely to hold low self-efficacy expectations regarding behaviors required to be successful in occupations traditionally viewed as more appropriate to males. Moreover, females have been reported as having high efficacy levels for "traditional" occupations, and low efficacy levels for "nontraditional" occupations, while males reported equivalent self-efficacy across occupational types.

Verbal reinforcement. Verbal reinforcement is another social learning experience which can have an influence on career development. Krumboltz and Haker (1973) support verbal reinforcement and model reinforcement procedures as effective means of increasing information-seeking behaviors, thus encouraging people to get the facts before making career decisions. Further application of cognitive theory is useful in the workforce after an individual has made the initial career choice. Rational-emotive therapy can be used to reduce stress on the job, thus allowing the individual to be able to make a better decision regarding his/her work status. In this system, workers begin to understand that beliefs about work largely influence how they react and feel on the job (Ellis, 1962). Primarily, this refers to dysfunctional cognitive schemes and their relationships to career disturbance which may possibly create stressful situations in certain jobs.

Stress management. Management of highly stressful occupations such as intensive care unit (ICU) nursing (Claus & Bailey, 1980) should be examined by potential career seekers. If interested in this speciality, the individual should become aware of and participate in stress management programs. One such proposed program is based on

stress-inoculation training (Meichenbaum, 1977) This training

consists of three phases: (a) education, (b) skill training, and (c)

application.

During the educational phase, students develop a conceptual and

personal awareness of the nature of job stress. In skill training,

effective coping skills are described and practiced. In application,

an interpersonal group situation is used to discuss and share job-

related reactions, much like developing a network. This in turn,

assists in cognitive developmentalism during the life span.

Cognitive Developmentalism

Cognitive developmentalism, such as qualitative changes that

include dualistic thinking, relativism and developmental patterns, are

important in relation to career development. Cognitive

developmentalism is an out-growth of the cognitive development work of

Piaget (1970) and Erikson's (1950) view of life-stage development.

Career counseling theorists have adapted cognitive developmentalism to

career development. Knefelkamp and Slepitza (1976) adopted an

intellectual and ethical model as a guide for understanding career

development. They assume that careers and career decision making can

be viewed in different end measurable ways just as students view

subject matter and authorities in different and measurable ways (Perry,

1970). This model describes the movement of a student from a

simplistic, categorical view of career decision making to a more

complex, pluralistic view across areas of qualitative change.

Qualitative Changes

Knefelkamp and Slepitza (1976) revised Perry's model of career

development to contain four categories. The four categories include:

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dualism, multiplicity, relativism, and commitment within relativism. Perry (1970) reports that students exhibit qualitative changes in career decision making as they move upward along **the** scheme. The progression could be from an external orientation to a more inner-directed view with increased ability to accept responsibility, from thinking in absolutes and stereotypes **to** thinking in cognitively complex terms, and from self-absorption to a mature focus on mutual interdependence and increased capacity to empathize with others.

Dualistic thinking. Educators should be cognizant of dualistic thinking students. In terms of career development, lower-stage, dualistic thinking students are controlled by the environment. Because they believe in "only one right career", these students turn to external authorities of parents, teachers, counselors, interest inventories, or various environmental and social indicators to define career identity. **As** learners develop, they become increasingly aware of the possibility of making wrong choices **(Knefelkamp &** Slepitza, 1976).

Multiplicity. In the multiplicity stage, the student moves from an absolutist position about "one right career" to the decision-making process provided by a counselor or a teacher. During the process, the student considers a wider variety of factors, although they are external and result in increasing anxiety and complexity (Perry, 1970).

Relativism. In relativism, external influences impacting on career development, continue to be helpful but students at this point **become** the prime focus in the decision-making process. As they reach higher levels of processing, they analyze and synthesize many diverse aspects of career decision making, resulting in their acceptance of

more responsibility for their career decisions. Students then begin to
experience personal **commitment** in the process. Eventually, they
understand the interrelationship of personal identity, values, and
career development (Perry, 1970) as they progress through developmental
patterns.

Developmental Patterns

Developmental patterns seem to be associated with college
progression from the freshmen level to advanced graduate students.
Therefore, **the** level of cognitive complexity affects the way a person
approaches the-career development process. Bodden and Klein (1973)
found that, for male college students, cognitive differentiation is
positively related to appropriateness of vocational choice where
aPProPriateness of the expressed vocational choice involved the
congruence of measured vocational preference in terms of Holland's
scheme (Holland, 1985). This supports the theory that complex
individuals are more capable of making finer discriminations leading to
potentially more accurate decisions.

Holland's Theory of Vocational Personalities and Work Environments

Some background principles of one theory of occupational
environments and personalities presented by Holland (1973) include the
following:

1. The choice of a vocation is an expression of personality.

2. Interest inventories are personality inventories.

3. Vocational **stereotypes** have reliable and important
psychological and sociological meanings.

4. Because people in a vocational group have similar
personalities, they will respond to many situations and problems in

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similar ways, and they will create characteristic interpersonal environments.

   5. Vocational satisfaction, stability, and achievement depend on the congruence between one's personality and the environment (composed largely of other people) in which one works. (p. 6-9)

   The first formulation for the level of occupational choice or achievement was that occupational level equals intelligence plus self-evaluation. This formulation has been used by several investigators, and has led to positive and often efficient results. To simplify the theory, the formula for the level of occupational choice was reformulated in terms of personality patterns. The more individuals resemble enterprising and social types, the more likely they are to have higher aspirations, to achieve more, and to be more mobile occupationally (Holland, 1973).

   Because emotional stability is initiated in large part by a person's early experiences, the stable person probably has parents whose individual personality patterns are consistent both in themselves and in relation to the other parent's personality pattern. This fosters consistent, integrated behavior in the child. Because children perceive themselves and the world accurately, they are more likely to select congruent environments for training and eventual vocation. This leads to achievement, reinforcement, and satisfaction. However, as reported by Holland (1973), if one or both parents have inconsistent personality patterns, the child is likely to develop (a) an inaccurate picture of self and work, (b) inconsistent values, (c) inconsistent interests and competencies, and (d) little self-confidence. Thus , the child will most likely tend to make poor choices of environments, and to function ineffectively even in compatible environments.

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supported the main hypotheses of the theory. The social types appear

to grow up, perceive occupations, search for an occupation, move among

occupations and behave according to theoretical expectations. The

environmental models appear useful to characterize educational and

occupational environments. The classification receives strong support

since it has been extended to all occupations in the <u>Dictionary of

Occupational Titles</u> (DOT) and the hexagonal arrangement of the

classification has been found to be a useful model for structuring

interest inventories, self-ratings, competencies, and activities.

<u>Vocational Interventions</u>

Vocational interventions in relation to career development may

need to be developmentally organized according to the needs of the

client as determined by their stage, leading to cognitive complexity

and more adequate vocational decisions. Females may require a

different career counseling approach, since they differ developmentally

as individuals in terms of their views of career development

(Knefelkamp, Widick, & Stroad, 1976). A dualistic thinking group of

females may believe in "one right role," so they may need to be exposed

to diversity through such books as Pathfinders (Sheehy, 1981) and

talking to females with different work roles and perspectives. Another

group of females may need to integrate factors such as, time

commitments, ability, work demands, and personal identity as a female

in the work world.

Career counseling should be flexible and meet the needs of the

individual. This should include providing important occupational

information to the individual. Counselors and other educators need to

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be more astounding are the largely unrecognized or unknown sources of occupational information that provide disadvantageous aspects of a job as well as the positive or neutral aspects typically found in some occupational material. Many materials are available and should be accessible to the individual making a career choice. Examples of information that are accessible such as the <u>Dictionary of Occupational Titles</u>,<u>Occupational Outlook Handbook, U.S. Industrial Outlook, Mind Prober, Career Scan</u>, and others such as the <u>State Occupational Information **Coordinating** Committee</u> **(SOICC)** available in Alabama can be very useful to career seekers.   Some of these resources are computer based systems. The availability of the micro-computer (at a price institutions can afford) is converting the computer-based career development system from an interesting luxury to a widely available modern convenience.

<u>Decision Aids and Implications for Education</u>

    Decision aids or possible theories for individuals to use while attempting to make a single-stage decision are generally of four kinds. According to Perry (1970) these include:

    1. structuring the decision situation,

    2. assessing values and beliefs,

    3. providing accurate and complete information, and

    4. evaluating the alternative options.

These theories deal with career development as a continuum rather than a decision made at one point in time, never again to be questioned. Thus, one may ask the question: "How can educators use what is known to foster informed students to make educated decisions in career development?" Career education is one answer. Career education should

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include: (a) career awareness (awareness of life careers); (b)
self-awareness (knowing one's self-interest, and aptitudes); (c)
educational awareness (connecting education and life goals); (d)
economic awareness (knowing the relationship between functions of
production, distribution, consumption and the individual and society);
(e) decision making (applying knowledge in making decisions); (f)
beginning competency/skill awareness (developing psychomotor and
cognitive skills for job); (g) employability skills (social and
communication skills); and (h) attitudes and appreciations (social and
occupational fulfillment). Inventories could be useful in this
educational process. However, they should be used only as guides and
not as labels.

Teachers can assist students to achieve these goals through career
education according to Calhoun and Finch (1982) by:

exploring careers within a specific family of occupations;
selecting a specific career, making initial preparations, and
developing post-high school plans related to it; developing
salable skills; continuing development, refinement, and
application of basic skills; and developing the attitudes, skills
and understandings that relate to the personal, family, social,
and cultural dimensions of one's life. (p. 117)

There are many areas in which individuals in health care can grow and
change throughout their lifetimes (Bailey & Stadt, 1973; Goldhammer &
Taylor, 1972). Therefore, since career development is self
development, the process should begin at a very young age and continue
throughout the life span. Education, work, and leisure, all are
integral parts of self development. Changes will occur in the

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individual or in the environment all along the continuum. Career
education should result in the individual making realistic choices in
productivity as well as fulfillment. It should also result in a
benefit to society because when individuals are happy and
well-adjusted, they contribute positively in the community.
Individuals can be productive if they have the essential knowledge
about themselves and the occupational world so that they can make
realistic choices. Knowing that abilities and interest play an
important role in career choices can assist educators to find out
students' interests and aptitudes for a specific health occupation and
help them make the best choices.

                              Summary

    Career development is considered to be self-development over the
individual's life-span which should begin at a very young age. The
experiences that can assist in influencing career development of an
individual includes education, work, and leisure. The process of
career development involves various components such as: concept of
constructivism, social learning, occupational and past learning
experiences, self-efficacy, verbal reinforcement, stress management,
cognitive developmentalism, quality changes, dualistic thinking,
relativism, end developmental patterns.

    In addition, according to Holland's Theory of Vocational
Personalities and **Work** Environments, educators should utilize interest
inventories as personality inventories because the choice of a vocation
is an expression of the personality. As revealed by Holland,
individuals in vocational groups portray similar personalities and
react to various situations and problems similarly. Also, the

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individual's job satisfaction, achievement, and stability are determined by congruence between the individual's environment and personality.

Vocational intervention should be tailor-made to meet the individual's needs because as revealed in the literature, Knefelkamp, Widick, and Stroad, report that individuals differ in their views regarding career development. Educators and counselors should provide as much information as possible regarding occupational information that includes both advantages and disadvantages of occupations. Resources such as the Dictionary of Occupational Titles, Occupational Outlook Handbook, U.S. Industrial Outlook, Mind Prober, Career Scan, and SOICC could be used in the counseling process.

Educators should include the following in their career education programs: (a) career awareness, (b) self-awareness, (c) educational awareness, (d) economic awareness, (e) decision-making, (f) beginning competency-skill awareness, (g) employability skills, and (h) attitudes and appreciations. In addition, utilization of interest inventories and aptitude tests can result in educators aiding individuals in making realistic career choices. Moreover, individuals can then be more productive occupationally if they have obtained essential knowledge about themselves as well as the occupational world.

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