Assessing and Changing Career Decision-Making Self-Efficacy Expectations

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The presence of internal barriers which impede effective career decision-making may be a significant factor in determining whether or not an undecided individual receives benefits from career counseling (Crites, 1981; Isaacson, 1985). These personal-emotional barriers may be globally defined as attitudes about oneself and the world which deter a person from making and enacting sound career plans. Individuals who experience these barriers are sometimes called "indecisive", in contrast to their being simply "undecided" (e.g., Salamone, 1982; Van Matre & Cooper, 1984). A variety of constructs and corresponding assessment instruments have been developed which specify the nature of these internal barriers. They have included goal instability (Robbins & Patton, 1985), career choice anxiety (Chartrand, Robbins, Morrill, & Boggs, 1990), weak vocational identity (Holland, Gotthfriedson, & Power, 1980) and poor problem-solving (Larson, Heppler, Ham, & Dugan, 1988). Recent research (Fuqua, Newman, & Seaworth, 1988; Larson, Heppler, Ham, & Dugan, 1988; Lucas & Ep- person, 1988; McAuliffe, Pickering, & Calliotte, 1992) has shown that between 8.5% and 21% of career-undecided individuals may experience sufficient barriers to make special intervention necessary. Savickas (1990), in his review of the indecisiveness literature, concluded that indecisive individuals may require "personal counseling . . . to deal with psychological blocks to decision-making, reduce anxiety, and increase problem-solving competence" (p. 125).

Despite the seeming importance of this attitudinal dimension in good career decision-making, career counseling practice generally emphasizes the use of rational, information-oriented strategies which

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are aimed at generating self and occupational information. Gelatt (1989) recently described the limitations of simple rational decision-making models. He suggested that they do not account for the critical influence of emotional factors and contradictory information as crucial components of the decision-making process for many individuals.

While the rational approach may help the majority of undecided persons, the indecisive individual may need to specifically alter attitudes that hinder his/her ability to use such information for career planning. Further definition of these factors and the development of practical counseling strategies which are targeted at them seem to be warranted at this time.

A promising construct which describes personal-emotional barriers to effective career decision-making is self-efficacy. This construct has the dual advantage of being both soundly based in social cognitive theory and of providing for explicit counseling strategies for change (Bandura 1977; 1986). Self-efficacy expectations can be defined as beliefs in one's ability to successfully perform a given behavior which is required to produce certain outcomes. Self-efficacy has been applied to the career domain, under the assumption that efficacy expectations affect occupational decisions and achievements. For example, Betz and Hackett (1981) and Lent, Brown, and Larkin (1986) demonstrated the influence of self-efficacy on the range of career options that an individual is willing to consider and the degree of interest shown in them. This research suggests that low self-efficacy limits career aspirations.

A potentially fruitful application of the self-efficacy notion lies in the process of career decision-making itself. Career decision-making self-efficacy can be described as individuals' beliefs about their ability to enact the behaviors required for deciding on and enacting career choices. Taylor and Betz (1983) found that career decision-making self-efficacy expectations are significantly related to career indecision. Robbins (1985) further found career decision-making self-efficacy to be significantly related to self-esteem, general anxiety, and vocational identity, and Taylor and Popma (1990) reported career decision-making self-efficacy to be related to locus of control. As the construct continues to be defined, a number of authors (e.g., Lent & Hackett, 1987; Maddux, Stanley, & Manning, 1987) have suggested that greater attention be paid to actual treatments of low career decision-making self-efficacy.

It is the purpose of this paper to describe counseling practices which might improve self-efficacy expectations for the behaviors re-
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required for career decision-making. Such practices include helping clients to change beliefs by their experiencing successful performance of targeted behaviors and recognizing their role in that success. Another example of an efficacy-oriented counseling practice is promoting vicarious learning of desired attitudes and behaviors, for example, by means of exposing clients to models who have successfully engaged in targeted career decision-making behaviors. It is hoped that counselors in schools, colleges and other settings will be encouraged to assess clients’ career decision-making self-efficacy expectations, and to subsequently help them to improve those expectations, while they continue to provide the traditional information-oriented interventions as needed.

Assessing Career Decision-Making Self-Efficacy

Assessment of the client’s specific career decision-making self-efficacy expectations should precede intervention. Both the Career Decision-Making Self-Efficacy Scale (CDMSES; Taylor & Betz, 1983) and the Career Confidence Scale (CCS; Pickering, Calliotte, & McAuliffe, 1990) were designed to assess career decision-making self-efficacy. Both ask individuals to report confidence in their ability to enact a variety of career decision-making behaviors, although the specific questions differ. Either instrument should be useful in counseling. The CDMSES asks individuals to rate beliefs in their ability to enact each of 51 career decision-making tasks on a scale of 0 (no confidence) to 9 (complete confidence). The CDMSES has an internal consistency ranging from .88 to .97 (Robbins, 1985; Taylor & Betz, 1988). Validity has been demonstrated both by relationships between the CDMSES and constructs such as self-esteem (Robbins, 1985), beliefs about specific occupations (Taylor & Popma, 1990), and career indecision (Taylor & Betz, 1983). The CCS is a 96-item experimental measure of career decision-making self-efficacy. Scores on each of its subscales have been found to be significantly related to associated constructs such as goal instability, career choice anxiety, generalized indecisiveness, need for self-knowledge, and self-esteem (McAuliffe, Pickering, & Calliotte, 1992). Further work on its reliability and validity are currently underway.

One difference between the two instruments is that the 96 items of the CCS have been subdivided, by means of factor analysis, into five general scales which represent different aspects of the decision-mak-
ing process. Each subscale may be treated as a group of self-efficacy expectations about these five categories of career decision-making behaviors. The scales are based on the decision-making models of Gelatt, Varenhorst, Carey, and Miller (1973), Harris-Bowlsby, Spivak, and Lisansky (1986), Katz, Norris, and Pears (1977), and Krumboltz and Baker (1973). The first scale, "Readiness", draws from Thoresen and Ewart’s (1976) application of the behavioral self-control model to career decision-making. "Readiness" represents the commitment step in developmental self-control, which is considered antecedent to successful behavioral enactment. The second scale is "Self-Assessment", which refers to confidence in the ability to name personal attributes. "Information-Seeking", as the name implies, assesses such items as naming one’s level of confidence in finding career information in areas of interest. "Deciding" asks individuals to rate their confidence in actually choosing a satisfactory occupation. Finally, "Implementation" assesses confidence in areas such as successful completion of a training program and performance on a job. On the CCS the counselor and client might initially consider the client’s ratings on the five scales, treating them as indicators of efficacy expectations for each of the five general decision-making behaviors. Alternatively, individual item scores on either the CDMSES or the CCS might be the basis for intervention (Taylor and Popma, 1990).

Counseling for Improved Career Self-Efficacy

A useful model (Isaacson, 1985) of the initial phase of career counseling suggests that, in addition to establishing rapport, the counselor should assess the client’s view of self, of others, and of work, while also determining relevant client background characteristics. During this initial career counseling phase the CDMSES or the CCS might be given. After determining those self-efficacy beliefs about which the client has the least confidence, the counselor can employ a combination of two related sets of counseling strategies which are especially well-matched to this type of assessment. They are Bandura’s (1977; 1986) social-cognitive principles and Krumboltz’s (1990) adaptation of cognitive restructuring techniques.

Bandura describes four sources of information that can change efficacy expectations. The counselor typically combines more than one of these in practice (Maddux, Stanley, & Manning, 1987). The first source of efficacy information is "performance accomplishment", 
which is considered to be the most effective. With counselor assistance, clients who engage in performance of a previously-intimidating behavior can change expectations of future success by successfully engaging in that behavior. Efficacy expectations are subject to change if, after the performance, clients ascribe their success to their own efforts, rather than to situational determinants. Simply stated, this requires (1) targeting of the relevant behavior, (2) performance of it, and (3) cognitive processing of the significance of the performance. For example, clients who express low confidence that they are “capable of following through on a decision once it is made” can be helped to plan and carry out a current decision. Alternatively, they might be encouraged to name a past decision that was successfully followed through. In either case, counselors help clients to recognize themselves as the source of the successful behavior. This process may need to be repeated a number of times until a “critical mass” (Goldfried and Robins, 1982, p. 372) of success experiences are accumulated, followed by counselor-client consideration of the implications of the new experiences. At that point clients may reconstruct their images of themselves and their abilities.

Bandura’s second source of efficacy information is observation of others (vicarious learning). For example, for clients who have low confidence in being able to name work-related achievements, the counselor might present examples of achievements that others have named for themselves. Clients might recognize others’ successful achievements which are similar to theirs and they might then name past achievements of their own. Similarly, clients who express lack of confidence in being able “to move to another area to seek employment in [their] chosen occupation” (an item from the CCS) might interview persons like themselves who have made such moves successfully.

The third source of efficacy information is verbal persuasion. It is weaker than the first two sources. If counselors are seen as expert, trustworthy, and attractive, their analysis of clients’ achievements are likely to have influence, especially when used in combination with the strategies mentioned above.

Finally, a fourth source of efficacy information is emotional arousal. For example, clients who experience anxiety about “interviewing for a job in [their] chosen occupation” may demur from either the decision-making process or from applying for jobs in that field. Relaxation training and biofeedback are examples of strategies that attempt to change the relationship between emotions and behavior.

These four general strategies for providing new efficacy informa-
tion have been shown to lead to increases in clients' confidence in their ability to enact those behaviors in the future. However, changes in strongly-held beliefs are not an automatic result of receiving new information. To promote cognitive change, Goldfried and Robins (1982) outlined a conceptual framework for helping clients to cognitively process such experiences. They suggested that the counselors help clients to (a) contrast recent successes with past ineffective behaviors, (b) attribute successful behavioral changes to effort, as opposed to external circumstances, (c) retrieve past success experiences, and (d) align expectancies, anticipatory feelings, behaviors, objective consequences, and self-evaluation. In this sense verbal persuasion is combined with performance accomplishments to produce new efficacy expectations.

A related approach to improving career self-efficacy expectations is Krumboltz's (1990) method for challenging dysfunctional career beliefs. In this formulation the basic principles of social cognitive theory are used to reframe beliefs that deter successful career behavior. This strategy is generally based on the cognitive-behavioral approaches of Beck (1977), Ellis (1984), and Meichenbaum (1977). The first step of this cognitive reframing approach is for the counselor and client to assess the specific beliefs which deter career progress. This assessment may be assisted by the aforementioned instruments, the CDMSES or the CCS, or by means of Krumboltz's Career Beliefs Inventory (1982). Subsequent to identification of a specific belief, the counselor asks the client for evidence that the belief is accurate. This is step two of the reframing strategy. For example, for the client who has low confidence that s/he can "choose an occupation you want even though significant others in your life would not aprove of your choice" (an item from the CCS), the counselor might probe with, "What makes you feel this way?". A client response such as, "I can't go against family wishes; it wouldn't be worth it", could be followed by the counselor's probing of the imagined consequences of disagreeing with family preferences. At this point it might become evident to the client that s/he is incorrectly assuming that the family would disapprove, or that the consequences would be disastrous.

One cognitive-behavioral technique for probing assumptions is the "downward arrow" (Beck, 1990), in which the counselor helps the client to examine a fundamentally absurd assumption underlying a belief by means of questions such as, "And then what might occur?" or "What's the worst thing that could happen?". The client in this case
might imagine family disapproval at its worst, with the accompanying dialogue proceeding perhaps as follows:

CLIENT: I would be rejected by my parents if I chose to become a teacher.
COUNSELOR: What might happen?
CLIENT: Well, they might not pay my tuition.
COUNSELOR: Is that likely?
CLIENT: I don’t know. (Whereupon a test of the belief may be set up).

OR

CLIENT: Yes.
COUNSELOR: And then what might happen?
CLIENT: I'd have to take out a loan.
COUNSELOR: And . . . ?
CLIENT: I'd have to pay it back someday.
COUNSELOR: What do you imagine that would be like?

The conversation might go in any of a number of directions, with an extremely unlikely conclusion being reached (“My parents would never speak to me again if I chose a teaching career.”).

Replacing a dysfunctional belief with an alternate one can be promoted by arranging for a “test” of the assumption. “Testing the accuracy of the beliefs” is the third step in the cognitive reframing process, following the naming of the specific dysfunctional belief and determining the current evidence that maintains it. For example, using vicarious learning, the counselor might encourage the client to interview someone who chose an occupation against family wishes or someone who paid for her/his own education. Exposure to role models who share common characteristics with clients, and who have successfully made such decisions, might change clients' beliefs, especially if they are helped by counselors to rethink their assumptions. Subsequent to clients' carrying out of tests, counselors can help them to examine the evidence that supports or refutes the dysfunctional beliefs. This, then, is the fourth step in the cognitive restructuring model: “Determining the logical consequences of the test”. Further tests might be arranged, including actual performance of the overt behavior (e.g., making the decision to choose a teaching career, if other evidence leads to this choice) or continuing to test the dysfunctional belief.
Complexities in Changing Career Self-Efficacy Expectations

Changing embedded beliefs is not a simple task. Dysfunctional schemata, or sets of expectations (Anderson, 1984), are usually well-entrenched. The seeming straightforwardness of the cognitive-behavioral approach to improving career decision-making efficacy expectations shouldn't disguise the complexity and difficulty of changing such expectations. As Goldfried and Robins expressed it, “the behavior change process is a gradual and at times erratic one” (p. 368), as clients will frequently ignore information which conflicts with their strongly-held beliefs. The counselor can continue to help clients to integrate new information and to strengthen new schemata by encouraging them to keep daily logs of beliefs, emotions, and counter-thoughts. During sessions, dysfunctional and functional beliefs can be reviewed. Helping clients to recognize and accept progress is a continuing activity for the counselor.

A second complication in implementing self-efficacy-focused career counseling is that clients will frequently have multiple areas of low career decision-making self-efficacy. Theoretically, each behavior or attitude should be dealt with separately, although there is evidence (Robbins, 1985) that career self-efficacy might be a more generalized construct than was originally proposed. Generalization from one career self-efficacy belief to another may be possible. This awaits further research.

The application of cognitive restructuring strategies does not exclude the use of strategies from other modalities. For example, both Beck (1990) and Goldfried and Robins (1982) have emphasized the importance of the therapeutic relationship. Beck sees a cognitive counseling approach as the practice of “collaborative empiricism”, in which the counselor and client, as partners, mutually generate behavioral experiments which explore new ways of thinking and behaving. In that sense, both directive and non-directive elements are combined in this approach. Betz and Hackett (1986) have proposed that a self-efficacy-based career counseling framework be combined with existing interventions to enhance them. Fundamentally, the advantage of the self-efficacy approach for addressing internal barriers to career decision-making is that it provides focused goals for counseling and accurate measures of intervention success (Maddox, Stanley, & Manning, 1987). A self-efficacy focus also has the potential to be used in short-term interventions, which are required in many career counseling settings.
Case Illustration

A simplified example might illustrate how self-efficacy can be facilitated. The following is based on a client who was actually seen by the author for five sessions.

Rob (not his real name) was a 22-year-old college student who presented himself for counseling at a college counseling center because he was still "directionless" after having taken a one-credit college career planning course. In the initial interview the counselor conducted an informal assessment of his attitudes toward work and school, his relationship with his family, and his career fantasies, using the intake model suggested by Isacson (1985). He expressed some interest in teaching industrial arts, although he lacked confidence in his potential for a professional future. Results from the CCS revealed that he felt "no confidence" on two items: "name your career-related skills" and "be offered and accept a job in your chosen occupation". After two sessions in which the client's interests and other personal-emotional concerns were explored, counseling focused on the two career decision-making self-efficacy issues from the CCS.

Following a discussion of what those items meant to Rob, the counselor and he agreed on activities which might improve his self-efficacy expectations in those areas. In response to his lack of confidence in naming skills, Rob was asked to identify past achievements and the transferrable skills that they exemplified. This activity acted as a vicarious "performance accomplishment", in that he generated previous actual achievements as a basis for his skills identification. For example, he discovered that he had taught and coach young people successfully in the past. He then was encouraged to interview some of his former "students" and their parents about their perceptions of his skills, which confirmed that he had strong interpersonal and organizational abilities. The counselor and Rob considered this in light of his previous belief that he couldn't name career-related skills, which had previously led him to doubt his professional potential. His new-found confidence led Rob to subsequently inquire further about a teaching career. He later registered for courses which were in line with these goals. The generation of skills and achievements is not a new career counseling intervention. However, the process of pinpointing the specific area of low efficacy belief by means of the CCS enabled the counseling to be focused and appropriately brief.

Other low efficacy beliefs which emerged did require further attention in this case. In regard to his second area of low self-efficacy, which was low confidence in being offered a job in a chosen occupation, the counselor asked Rob to recall past successful job applications, both paid and unpaid. Rob was able to see the link between these and future successful job applications, and to believe that, with appropriate training, he would succeed in finding work in his field.

Frequently a client will name more areas of low career decision-making self-efficacy than did Rob. If Rob had said, for example, that
he was also not confident that he was "generally a good decision-maker" or that he was "capable of following through on [his] decision once it was made", other strategies which utilized a combination of performance accomplishments, vicarious learning and verbal persuasion might have been tried. If the self-efficacy belief seemed to be a dysfunctional one, in that it was not based on accurate information, Rob might have been directed to provide evidence for the belief and then asked to conduct an "experiment" to test the belief, following Krumboltz's strategies. Creativity on the part of the counselor is required in generating performance tests of low efficacy expectations and in helping clients to create more functional beliefs with clients.

Conclusion

Evidence that a significant percentage of career decision-makers may be helped only partially by traditional information-oriented approaches suggests that career counselors pay increased attention to the personal-emotional barriers which deter many individuals from making and enacting sound career plans. Self-efficacy theory seems to be especially promising as a guide for changing negative expectations, as it offers the counselor a set of specific strategies for assessing low expectations and for treating them. Social-cognitive theory provides a firm research-based framework from which the counselor can encourage clients to gather new efficacy information. Using the basic social-cognitive strategies, counseling can proceed to facilitate the changing of clients' cognitive schemata, by means of the counselor's encouraging clients to consider new evidence and to try further tests of old beliefs. Counselors are encouraged to continue to explore methods for assessing and treating low career decision-making self-efficacy expectations. A self-efficacy-based approach lends itself to the requirement for focused, short-term intervention which is typical of many settings in which career counseling is practiced, while it also ensures that important personal-emotional issues in career decision-making are addressed.

References


