

Designing Career Services to Cost-Effectively Meet Individual Needs¹

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A Cognitive Information Processing (CIP) Approach to Decision-Making Readiness²

Within the framework of the CIP approach, readiness is defined as the capability of an individual to make appropriate career choices, taking into account the complexity of family, social, economic, and organizational factors that influence an individual's career development. Another way of viewing these two dimensions is that capability represents internal factors and complexity represents external factors that influence an individual's ability to make appropriate career choices (Sampson, Peterson, Reardon, & Lenz, 2002; Sampson, Reardon, Peterson, & Lenz, 2004).

¹ This handout is intended to be used along with the document entitled, "Core Concepts of A Cognitive Approach to Career Development and Services," or along with the references identified at the end of this handout.

² Adapted from Sampson, J. P., Jr., Peterson, G. W., Reardon, R. C., & Lenz, J. G. (2000). Using readiness assessment to improve career services: A cognitive information processing approach. *The Career Development Quarterly*, 49, 146-174. Copyright National Career Development Association.

Capability

Capability refers to the cognitive and affective capacity of an individual to engage in effective career problem solving and decision making. The following conditions influence individuals' capability to successfully engage in career problem solving and career decision making:

1. Individuals are willing to honestly explore their knowledge of self (e.g., interests, skills, and values) so as to attain a clearer sense of identity (Self-knowledge).
2. Individuals are motivated to learn about the world of work so as to enhance the development of occupational knowledge (Occupational knowledge).
3. Individuals are willing to learn about and engage in career problem solving and decision making (Career decision-making skills). Important components of the ability to think through a career problem and to arrive at a career decision include:
 - (a) the capacity for thinking clearly about one's career problem, its causes, and alternative courses of action to solve it (absence of problematic decision-making confusion);
 - (b) confidence in selecting a best alternative course of action to solve the problem and the commitment to carry out a plan of action to implement a solution (absence of problematic commitment anxiety); and
 - (c) an acceptance of personal responsibility for making a career decision (absence of problematic external conflict).
4. Individuals are aware of how negative thoughts and feelings potentially limit their ability to think clearly and remain motivated to solve problems and make decisions. Individuals are willing to seek assistance when they perceive that personal or external barriers are limiting their ability to choose. Individuals also possess the capacity to monitor and regulate lower-order problem solving decision-making processes (Executive processing).

Complexity

Complexity refers to contextual factors, originating in the family, society, employing organizations, or the economy, that make it more (or less) difficult to process information necessary to solve career problems and make career decisions.

Family factors can contribute to or detract from readiness for career decision making. Individuals with few family responsibilities or stressors have fewer constraints to cope with, which can contribute to reduced complexity in career decision making. Individuals with supportive family members typically have more resources for understanding and coping with problems that exist. Family factors that can contribute to complexity include deferral, e.g., compromise career development to meet needs of spouse or children or parents, role overload, e.g., roles of worker, parent, son/daughter, homemaker, student, and dysfunctional family input, e.g., over-functioning parents.

Social factors can also contribute to or detract from career decision-making readiness. While social support in the form of modeling, networking, and caring can greatly facilitate career development; other factors make individuals' career decision-making process more complicated. Discrimination on the basis of group membership, (e.g., age, disability, ethnicity, gender, immigration status, nationality, occupation, physical characteristics, poverty level, race, religion, sexual orientation, and social class), may limit opportunity in education, training, and employment. The above groups may also be negatively impacted by stereotyping, lack of role models, bias in education, and harassment in education and employment.

Economic factors can support or inhibit readiness for career decision making. The influence of economic factors on readiness can be experienced on a general and a personal level. General economic factors include

economic trends that influence the rate of change in the labor market. A greater rate of change results in greater complexity. On a personal level, poverty and the related difficulty in obtaining housing, health care, and childcare makes it more difficult to think clearly and solve career problems, and may also make it more difficult to fund education and training once an occupational choice is made.

Organizational factors can help or hinder the readiness of employed adults to make career decisions. The size of the organization influences complexity. The larger number of employment options in a large organization make the decision more complex than decisions made in small organizations with limited opportunities. Organizational culture influences complexity in relation to the amount of support provided for employee career development. In an organizational culture that supports effective mentoring, supervision, and performance appraisal, employees are more likely to have higher readiness to make career decisions. Organizations with a culture that does not support employee career development may result in employees being less well prepared to make career decisions. The stability of the organization can also influence complexity. Stable organizations with predictable opportunity structures tend to be less complex to negotiate in comparison with organizations that are rapidly expanding or are being downsized.

A Generic Sequence for Career Counseling and Guidance Services

The following seven-step sequence can be used to guide clients through the problem-solving and decision-making process. Individuals referred for self-help services complete only step 1, while clients receiving brief staff-assisted and individual case-managed services complete all seven steps in the sequence. In group counseling, prescreening occurs in steps 1 and 2, while input from group members is included in steps 3 through 7.

1. **Initial interview**: An interview in which a professional³ or paraprofessional⁴ gains qualitative information about the context of the client's career problem.
2. **Preliminary assessment**: A screening instrument is completed by the client, to give the professional or paraprofessional quantitative information about the client's problem.
3. **Define problem and analyze causes**: Counselor and client come to a mutual preliminary understanding of the problem, defined in terms of a gap between real state and ideal state. Hypotheses regarding the causes of the gap are formulated.
4. **Formulate goals**: Counselor and client together develop a set of attainable counseling goals to remove the gap.
5. **Develop individual learning plan (ILP)**: The professional or paraprofessional assists the client to develop an individual learning plan (ILP) that will help in identifying a sequence of resources and activities necessary to help the client attain his or her counseling goals. (Figure 3 and Figure 4.)
6. **Execute individual learning plan**: The client carries out the ILP with the professional or paraprofessional providing encouragement, information, clarification, reinforcement, and planning for future experiences.
7. **Summative review and generalization**: When the client has completed the ILP, the client discusses with the counselor his or her progress toward reaching the counseling goals established in Step 4. Plans for the

³ Professionals include counselors, psychologists, librarians, teachers/faculty, and human resource specialists who are qualified to provide services within the limits of their training and experience.

⁴ Paraprofessionals include parent and community volunteers, counselors, psychologists, librarians, and teachers-in-training, as well as student peer counselors who are qualified to provide services within the limits of their training and experience.

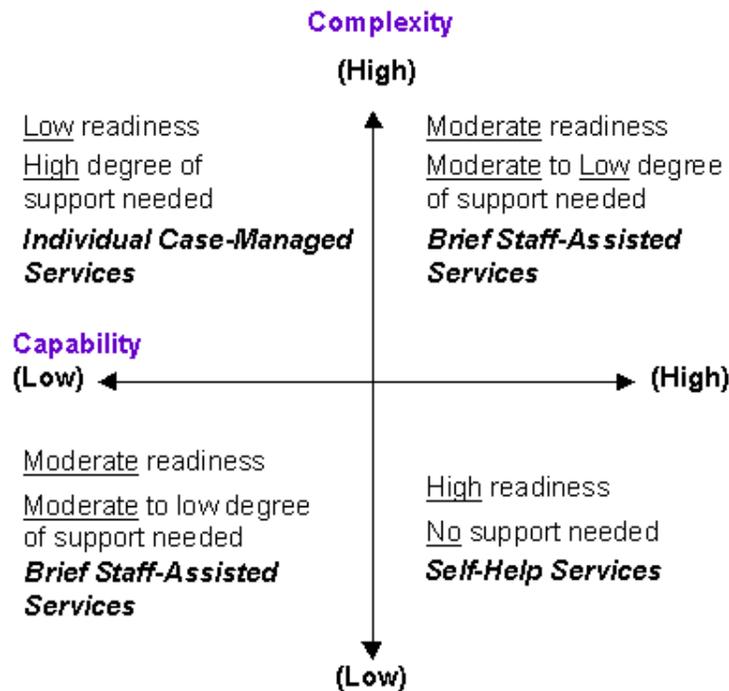
continued use of career services are formulated. A discussion is held about applying the career problem-solving approach used in this instance to the solving of career problems in the future.

Selecting Career Service Interventions to Meet Individual Needs

Each individual has unique career problems and is best served by using unique combinations of career resources and services in making career decisions (Peterson et al., 1991; 1996; 2002; Sampson et al., 1999; in press). A career service intervention combines assessment, information, and instructional resources with varying types and amounts of assistance to help individuals in making occupational and employment choices. Career resources include assessment, information, and instruction.

The cost-effectiveness of career service delivery depends upon the level of staff support meeting, but not exceeding, the needs of the individual. Individuals with high readiness for occupational and employment decision making have the potential to be most cost-effectively served by self-help services. Individuals with moderate readiness for occupational and employment decision making have the potential to be most cost-effectively served by brief staff-assisted services, while low readiness individuals are potentially best served by individual case-managed services. The readiness of an individual for occupational and employment decision making can be determined by simple screening questions (brief screening), and if needed, practitioner interpretation of quickly administered, hand scorable screening instruments (comprehensive screening) (Sampson & Reardon, 1998). The relationship between CIP readiness constructs (capability and complexity) and levels of career service delivery (self-help, brief staff-assisted, and individual case-managed) is shown in Figure 1 below.

Figure 1. A Two Dimensional Model of Readiness for Career Decision Making

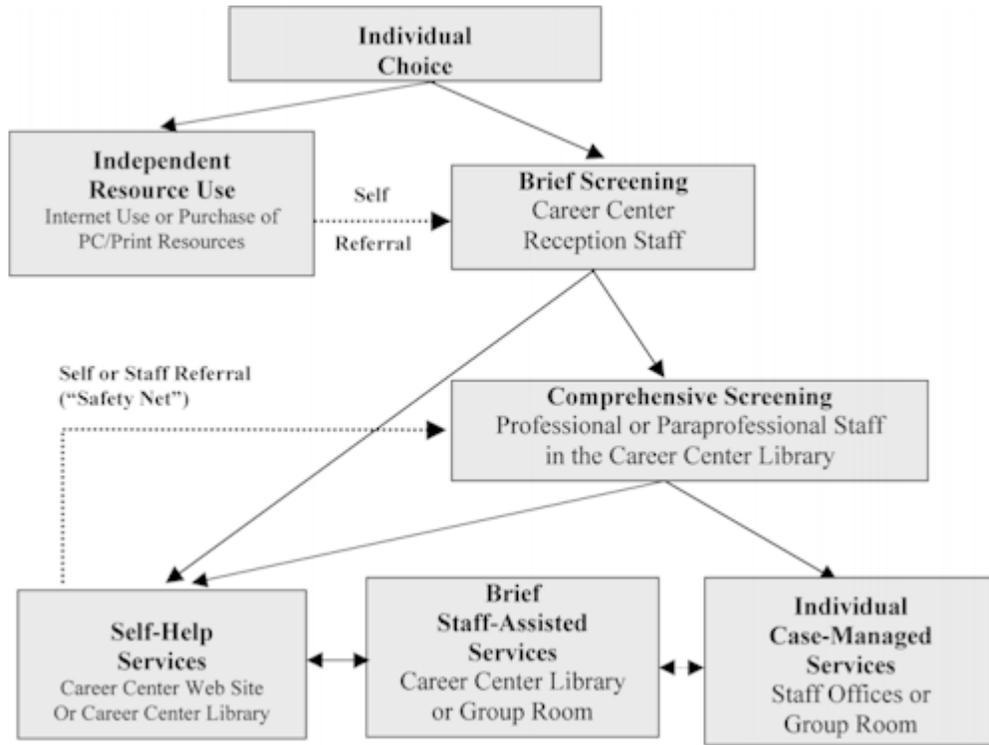


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The above model is implemented in practice as follows. The sequence for screening and selecting service delivery options based on decision-making readiness is shown in Figure 2 below. The following assumptions provide a foundation for the model depicted in Figure 2. First, a career center in an educational, agency, or organizational setting is being used to deliver resources and services to individuals seeking assistance with career, educational, training, and employment decision making. Second, individuals have the option to seek career resources on a self-help basis via the Internet or other self-help resources without being physically present in a career center. Third, if either clients or practitioners identify a lack of progress in the successful use of self-help resources, readiness assessment may be subsequently used to better match client needs with service delivery options. Fourth, readiness assessment occurs in one step for some clients and two steps for others. Fifth, clients and practitioners may collaboratively decide to move from one level of assistance to another level to more appropriately meet clients' needs. For example, a client initially receiving individual case-managed services may improve in career decision-making readiness to where they move to brief staff-assisted services, or a client initially receiving brief staff-assisted services may be more cost-effectively served with a self-help or an individualized intervention as his or her level of readiness changes or is more accurately assessed.

The first step in this model involves a brief screening upon entry to the career center where clients are greeted and asked their reason for seeking resources or services. If the subsequent response is judged by the staff member to be a concrete request with no indication of a problem, then self-help access to career resources is provided without further screening. Reception staff with good verbal ability and effective communication skills can perform this brief screening function with on-the-job-training. If the request for information is vague or if a career problem is apparent that involves uncertainty when a decision needs to be made, disabling emotions, confusion, or a complex array of circumstances, then a second, more comprehensive screening step occurs involving the completion and interpretation of a readiness assessment measure. While we use the Career Thoughts Inventory (Sampson et al., 1996b), other assessments identified later in this handout could be used in comprehensive screening. The use of a readiness assessment measure provides clients and practitioners with a common frame of reference for discussing individual needs. A recommendation for an appropriate level of service (self-help, brief staff-assisted, and individual case-managed services) is then provided based on the collaborative judgment of the practitioner and the client using the model shown in Figure 1. It is important to emphasize that staff members' judgments about individuals' readiness for career decision making should be based on test results and interaction with the individual, as opposed to a relying on a simple score on an assessment instrument. The comprehensive screening function requires a professional or paraprofessional who has demonstrated knowledge of career development, assessment, and career service delivery along with supervised experience in the use of readiness assessment measures.

Figure 2. Screening and Selection of Service Delivery Options



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Table 1 identifies different career intervention options for delivering self-help services, brief staff-assisted services, and individual case-managed services.

Table 1 - Intervention Options for Delivering Three Levels of Career Services

Self-Help Services	Brief Staff-Assisted Services	Individual Case-Managed Services
Self-help career services	Self-directed career decision making	Individual counseling
	Career course (with large group interaction)	Career course (with small group interaction)
	Group counseling (short term)	Group counseling (long term)
	Workshops	

(1) **Self-help services.** Self-help services are more likely to be cost-effective for individuals with a high readiness for occupational and employment decision making. This level of service does not include the maintenance of individual counseling records and places no emphasis on regular systematic monitoring of individual progress. Successful use of career service interventions in a self-help mode depends on:

- (1) Accurately assessing user needs during brief screening to ensure that there is a reasonable likelihood that the use of career resources will meet the individual’s needs;

- (2) The availability of an effective “safety net” that provides reasonable opportunities for identifying individuals who are not making successful use of career resources, e.g., brief periodic checking with users;
 - (3) The availability of staff to respond to basic questions about career resource use, e.g., clarifying interpretation of self-assessment instruments and solving problems related to the use of a specific resource;
 - (4) The availability of easy-to-understand text and multimedia support materials and signage to direct users to specific career resources, as well as supplemental services, that relate to individuals’ needs; and
 - (5) The availability of text and multimedia career resources that are self-instructional and easy to use, including appropriate readability for various populations.
- Self-help career services involve **self-guided** use of self-assessment, information, and instructional resources in a **library-like** or **remote setting**, where resources have been designed for independent use by individuals with a **high** readiness for occupational and employment decision making who need **little** or **no** assistance to effectively use career resources.

Guiding and monitoring the selection and use of resources by individuals is the responsibility of the practitioner in brief staff-assisted and individual case-managed service delivery. In self-help career services the guiding and monitoring function is the responsibility of the individual with support provided within the resources being used. Effective self-help resources are designed to help users understand when and how the resource should be used. Well designed self-help resources also help individuals identify when problems are occurring in the use of the resource and understand the further resource use or additional assistance that maybe need to resolve the problem. Text and multimedia support materials and signage can be used to guide individuals in appropriately sequencing various resources among the specific options available to meet their needs.

(2) **Brief staff-assisted services.** Brief staff-assisted services are more likely to be cost-effective for individuals with moderate readiness for occupational and employment decision making. This level of service typically places less emphasis on the maintenance of individual counseling records and regular systematic monitoring of individual progress. Successful use of career service interventions in a brief staff-assisted mode depends on:

- (1) Accurately assessing user needs during comprehensive screening to ensure that there is a reasonable likelihood that the use of career service interventions will meet the individual’s needs;
- (2) The availability of an effective “safety net” that provides reasonable opportunities for identifying individuals who are not making successful use of a career service intervention, e.g., brief periodic checking with users; and
- (3) The availability of staff to respond to basic questions about career resource use, e.g., clarifying interpretation of self-assessment instruments and solving problems related to the use of a specific resource.

The four options for brief staff-assisted services include self-directed career decision making, career course (with large group interaction), group counseling (short term), and workshops.

- Self-directed career decision making involves **practitioner-guided** use of self-assessment, information, and instructional resources in a **library-like setting** by individuals with a **moderate** readiness for occupational and employment decision making who need **minimal** assistance to effectively use career resources.

Self-directed career decision making can be used to cost-effectively deliver career service interventions (Reardon, 1996). The availability of practitioners in a library-like setting allows modeling of information seeking behavior and the provision of timely encouragement and reinforcement of client exploratory behavior (Sampson & Reardon, 1998). Practitioner availability also provides users with opportunities for relatively immediate follow-up of resource use while the experience is still recent. Experience has also shown that career service interventions in the self-directed career decision-making mode tend to be more successful when practitioners make specific recommendations about resource use that relate to identified user needs.

- Career course (with large group interaction) involves **instructor-guided** use of assessment, information, and instructional resources in a **classroom setting** with **minimal** opportunity for interpersonal interaction among individuals with a **moderate** readiness for occupational and employment decision making who need **minimal** assistance to effectively use career resources.

The use of specific career resources can become student assignments in a career course. Screening is accomplished by students self-selecting to register for the course or by having an advisor or instructor recommend the course. Faculty grading of student assignments (e.g., use of career resources) provides the “safety net” to identify students who may have low readiness for occupational and employment decision making and who therefore may need more individual assistance. Orientation to resource use can be provided in class or by assigned orientation videos. Follow-up of career resource use can be provided via class discussion. The use of career resources can be individualized through student learning contracts or the same career resources can be assigned for all students in a predetermined order.

- Group counseling (short term) involves **practitioner-guided** use of assessment, information, and instructional resources in a **group setting** with **minimal** opportunity for sharing information or for developing group cohesion among individuals with a **moderate** readiness for occupational and employment decision making who need **minimal** assistance to effectively use career resources.

Screening for career service intervention use can occur at the same time screening for group membership occurs. The use of video resources for career resource orientation (such as a computer-assisted career guidance system) minimizes using valuable group processing time for didactic presentations of orientation information. Group sessions can be used as a follow-up activity to process the insights and barriers group members experience in the use of career resources. It is important that group leaders be competent to respond to member questions from the use of various career resources. The use of career resources can be linked to specific needs via an individual learning plan (ILP) for each group member. Or, if a more structured group approach is followed where all members use a common set of career resources, group sessions can be used for follow-up by processing members’ experience in using specific resources.

- Workshops involve **practitioner-guided** use of assessment, information, and instructional resources in a **group setting** with **little** or **no** opportunity for sharing information or for developing group cohesion among individuals with a **moderate** readiness for occupational and employment decision making who need **minimal** assistance to effectively use career resources.

If a workshop has a predetermined sequence of topics, resource use (or categories of resource use) follows the topic sequencing. For example, a workshop on adults in career transition might include specific orientation and follow-up for a transferable skills analysis prior to orientation and follow-up to the use of occupational information. If workshop topics vary each time according to participant needs, resource use will also vary, with orientation and follow-up dependent upon the resources used by workshop participants. In comparison with group counseling, interactions among participants are less emphasized in workshops.

(3) **Individual case-managed services.** Individual case-managed services are more likely to be cost-effective for individuals with low readiness for occupational and employment decision making. This level of service typically places more emphasis on the maintenance of individual counseling records and regular systematic monitoring of individual progress. Successful use of career service interventions in an individual case-managed mode depends on:

- (1) Accurately assessing user needs during comprehensive screening to ensure that there is a reasonable likelihood that the use of career service interventions will meet the individual’s needs;

- (2) The availability of staff to respond to basic questions about career resource use, e.g., clarifying interpretation of self-assessment instruments and solving problems related to the use of a specific resource; and
- (3) The availability of practitioners who are competent to integrate career and mental health counseling in dealing with individual's low readiness for occupational and employment decision making.

The three options for individual case-managed services include individual counseling, career course (with small group interaction, and group counseling (long term).

- Individual counseling involves **practitioner-guided** use of assessment, information, and instructional resources in an **individual office setting** with individuals who have a **low** readiness for occupational and employment decision making who need **substantial** assistance to effectively use career resources.

Individual counseling offers maximum flexibility in relating counseling interventions to the needs of the individual. The timing and content of orientations and follow-up to resource use can vary considerably among clients. The nature of individuals' use of career resources provides practitioners with information about factors that may be contributing to low readiness for occupational and employment decision making. For example, individuals' comments about potential occupations resulting from the completion of an interest inventory may indicate specific negative self-talk that can be identified, challenged, and altered. The nature of the supportive relationship established between the practitioner and the client over time may be a key element in client willingness to risk the inevitable change associated with decision making.

- Career course (with small group interaction) involves **instructor-guided** use of assessment, information, and instructional resources in a **classroom setting** with **considerable** opportunity for interpersonal interaction among individuals with a **low** readiness for occupational and employment decision making who need **substantial** assistance to effectively use career resources.

The previously described counseling interventions for a career course (with large group interaction) apply here as well. The difference is that by meeting with small groups of students, instructors have the opportunity to gain more information about the nature of student decision-making difficulties and can provide more assistance to students in improving their readiness for occupational and employment choice. Dividing the class into small groups of students can improve the capability of students to learn from each other via modeling and encouragement.

- Group counseling (long term) involves **practitioner-guided** use of assessment, information, and instructional resources in a **group setting** with **considerable** opportunity for sharing information and the development of group cohesion among individuals with a **low** readiness for occupational and employment decision making who need **substantial** assistance to effectively use career resources.

The previously described counseling interventions for group counseling (short term) apply here as well. The difference is that the longer duration of the group allows the development of group cohesion necessary to confront and change typically long established problematic patterns of thinking, feeling, and behaving. The longer duration of the group also provides potential support over a larger proportion of the decision-making process, e.g., supporting members in following through on an action plan to implement their goals.

Table 2 summarizes variation in career interventions by level of service delivery and characteristics.

Table 2: Variation in Career Interventions by Level of Service Delivery

	Self-help services	Brief staff-assisted services	Individual case-managed services
Readiness of the user	High	Moderate	Low
Assistance provided	Little or none	Minimal	Substantial
Who guides resource use	The user	A practitioner	A practitioner
Where services are provided	Library-like or remote settings	Library-like, classroom, or group settings	Individual office, classroom, or group settings
Selection and sequencing of resources and services	Resource guides	Individual learning plans	Individual learning plans
Record keeping	Aggregate data for program evaluation and accountability	Aggregate data for program evaluation and accountability	Individual records

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Variations in Level of Career Intervention Related to Decision-Making Status

The career decision-making status of individuals can be conceptualized as decided, undecided, or indecisive (Peterson et al., 1996):

Decided Individuals

- 1) **Decided-Confirmation**: Individuals who are able to specify a choice, but wish to confirm or clarify the appropriateness of their choice by contrasting it with other possible choices. For example, some individuals have a tendency to be careful and systematic in their approach to making any important decision. These individuals wish to ensure that the valuing phase of the CASVE cycle has been completed to the best of their ability.
- 2) **Decided-Implementation**: Individuals who are able to specify a choice but who need help in implementing their choice. For example, individuals may need assistance in getting a job or selecting training options related to an occupation chosen in the valuing phase of the CASVE cycle. These individuals either realize they need assistance before they begin the execution phase of the CASVE cycle or they have attempted execution previously and experienced difficulty.
- 3) **Decided-Conflict Avoidance**: Individuals who present themselves as decided as a strategy for reducing conflict and stress, when in fact they have the characteristics of the undecided or indecisive individuals described below.

Undecided Individuals

- 1) **Undecided-Deferred Choice**: Individuals who are unable to specify a choice, but have no need to make a choice at the present time. For example, a college freshman taking general education courses and participating in various campus activities to obtain knowledge and life experience prior to committing to a college major, can appropriately defer a choice until a later date.

- 2) **Undecided-Developmental**: Individuals who need to choose, are unable to commit to a choice, and who lack self, occupational, and/or decision-making knowledge. These individuals should not be considered dysfunctional, rather they have not gained the knowledge or experience necessary to make a choice. In terms of the pyramid, these individuals need clarification or addition of self, occupational, and/or decision-making knowledge. Their self-talk about career choice is less negative in comparison with indecisive individuals.
- 3) **Undecided-Multipotential**: Individuals who have the characteristics of someone who is undecided, with the addition of having an overabundance of talents, interests, and opportunities. These individuals are often overwhelmed with the diversity of available options and may experience pressure from significant others, including family members, for high levels of achievement.

Indecisive Individuals

- 1) **Indecisive**: Individuals who have not made a commitment to a specific occupational choice due to gaps in the knowledge necessary for choosing, while having a maladaptive approach to problem solving in general that is accompanied by a dysfunctional level of anxiety. Indecisive individuals are similar to undecided individuals in terms of knowledge gaps, but differ in terms of executive processing. Executive processing deficiencies present in indecisive individuals may include excessive negative self-talk, attentional deficits, or confused thought processes. These executive processing deficiencies limit the acquisition of decision-making skills and occupational knowledge, as well as limit the clarity and consistency of self-knowledge. Subsequent awareness of these limitations only serves to reinforce perceived inadequacy in decision making.

A career service intervention may be appropriate for all of the types of individuals identified above. Decided and undecided individuals are often best served by self-help and brief staff-assisted interventions. In general, practitioners would rarely sit with a decided or undecided individual while he or she uses career resources. Indecisive individuals are often best served by individual case-managed interventions. Practitioners may occasionally sit with an indecisive client to help him or her to monitor negative self-talk that may be limiting the individual's ability to effectively use a career resource.

Assessing Readiness for Career Problem Solving and Decision Making

Screening instruments can be used, along with a brief interview, to determine client readiness for career problem solving and decision making (Peterson, Sampson, & Reardon, 1991; Peterson, Sampson, Reardon, & Lenz, 1996; 2002; Sampson & Reardon, 1998; Sampson, Peterson, Reardon, & Lenz, in 2000). For example, a high score on vocational identity and low scores on need for information and barriers on My Vocational Situation (Holland, Daiger, & Power, 1980), along with concurring information from a brief interview, would likely indicate less need for staff support in using career resources and services. A low identity score and high information need and barriers scores, plus concurring interview data, would indicate more need for staff support. Similarly, low scores on total dysfunctional career thoughts, decision-making confusion, commitment anxiety, and external conflict on the Career Thoughts Inventory (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996), would indicate less need for staff support, while high scores would indicate more need for staff support (assuming concurring interview data).

The following are examples of potential instruments that can be used in readiness screening. Each instrument identified below can be hand scored. Hand scoring capability facilitates rapid responsiveness, which is an important characteristic in efficiently serving large numbers of clients in a timely manner.

The **Career Decision Scale** (Osipow, Carney, Winer, Yanico, & Koschir, 1976), measures Career Certainty and Indecision.

My Vocational Situation (Holland, Daiger, & Power, 1980), measures Vocational Identity, Need for Information, and Barriers in career decision making.

The **Career Decision Profile** (Jones, 1988), measures Decidedness, Comfort, Self-Clarity, Knowledge About Occupations and Training, Decisiveness, Career Choice Importance.

The **Career Factors Inventory** (Chartrand, Robins, Morrill, & Boggs, 1990), measures Career Choice Anxiety, Generalized Indecisiveness, Need for Career Information, and Need for Self-Knowledge.

The **Career Beliefs Inventory** (Krumboltz, 1991), measures Employment Status, Career Plans, Acceptance of Uncertainty, Openness, Achievement, College Education, Intrinsic Satisfaction, Peer Equality, Structured Work Environment, Control, Responsibility, Approval of Others, Self-Other Comparisons, Occupation/College Variation, Career Path Flexibility, Post-Training Transition, Job Experimentation, Relocation, Improving Self, Persisting While Uncertain, Taking Risks, Learning Job Skills, Negotiating/Searching, Overcoming Obstacles, and Working Hard.

The **Career Attitudes and Strategies Inventory** (Holland & Gottfredson, 1993), measures Job Satisfaction, Work Involvement, Skill Development, Dominant Style, Career Worries, Interpersonal Abuse, Family Commitment, Risk-Taking Style, and Geographical Barriers.

The **Career Maturity Inventory-Revised** (Crites & Savickas, 1995), measures Career Maturity Attitude and Career Maturity Competence.

The **Career Thoughts Inventory** (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996; 1998), measures Total Dysfunctional Career Thoughts, Decision-Making Confusion, Commitment Anxiety, and External Conflict (with significant others).

Additional information on these instruments may be obtained from each publisher. Reviews on some of the above instruments may be found in Kapes, Mastie, and Whitfield (1994).

Assumptions Related to Selecting Career Service Interventions

The criteria for selecting career service interventions in the Cognitive Information Processing (CIP) approach are based on the following assumptions.

1. The type and frequency of career assistance should vary to take into account the readiness of the individual for career decision making and individual differences in information-processing capabilities.
2. The choice of career service interventions should take into account their costs so as to maximize the number of individuals who may receive appropriate assistance.
3. Group-based interventions, such as group counseling, courses, and workshops, offer reasonable effectiveness at the lowest cost to clients who (a) possess adequate readiness to benefit from the interventions that are offered; (b) are not under short-term time pressures or in a state of crisis that would make it inappropriate to wait for the next scheduled group, course, or workshop; and (c) are willing to spend the time necessary to complete the intervention.
4. Individual counseling offers the greatest effectiveness at an acceptable cost for clients who (a) have low readiness for career decision making, short-term time pressure, or a crisis, that cannot be effectively addressed in a group; and (b) have access to counselors with the training and experience necessary to deal with the

career, personal, and family dynamics associated with the indecisive client. In some cases, legislation requires that individuals meeting specific eligibility requirements receive individual case-managed services.

Similarities Among Career Service Interventions

Effective individual career counseling, self-directed career decision-making,⁵ group career counseling, and curricular interventions, all involve:

- 1) Exploration of self and occupational knowledge, decision-making skills, and executive processing (cognitions about self & career);
- 2) Use of the CASVE cycle of information-processing skills - communication, analysis, synthesis, valuing, and execution;
- 3) The creation and maintenance of a relationship between an individual and a professional or paraprofessional staff member;
- 4) The assessment of the client's readiness to engage in problem solving and decision making to select the intervention that is most congruent with the client's needs;
- 5) Use of personal information resources to enhance the awareness of self schemas: self-assessment, (such as, checklists), standardized tests, (such as, interest inventories), and projective instruments, (such as, card sorts);
- 6) Use of external information resources to enhance the development of occupational knowledge schemas: non-interactive media, (such as, print materials), and interactive media, (such as, computer-assisted career guidance systems);
- 7) An awareness on the part of both counselor and client that the client's problem-solving and decision-making processes are influenced by a variety of external factors such as the client's peer group, the client's family, the economy, and the occupational opportunities that are available;
- 8) A cycle of (a) contact with a helper or use of information resources, followed by (b) a period of reflection to integrate new schemas, information-processing skills, or metacognitions, followed by (c) additional helper contact or use of information, and so on.
- 9) A two-stage approach to problem solving and decision making with Execution (forming and implementing means-ends strategies) continuing after the intervention is complete.
- 10) Use of generic helper skills such as communication, assessment, identifying and making available appropriate information, problem solving and decision making, and referral.

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⁵ "Self-directed career decision-making involves professional and paraprofessional guided use of self-instructional materials by individuals who need self-assessment resources and information and who possess adequate vocational identity to make effective independent use of career resources. As used here, this term does not include individuals' independent acquisition and use of self-help materials" (Peterson, Sampson, & Reardon, 1991).

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Figure 4

Individual Learning Plan

(or Individual Career Learning Plan, Individual Activity Plan, Individual Resource Plan, or Individual Action Plan)

(Insert Address)

Goal(s): #1 _____

#2 _____

#3 _____

Activity	Purpose/Outcome	Estimated Time Commitment	Goal #	Priority

This plan can be modified by either party based upon new information learned in the activities of the action plan. The purpose of the plan is to work toward a mutually agreed upon career goal. Activities may be added or subtracted as needed.

Student/Client/Customer

Date

Staff Member

Date