

Core Concepts of A Cognitive Approach to Career Development and Services

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Purpose

The cognitive information processing (CIP) approach to career development and services (Peterson, Sampson, & Reardon, 1991; Peterson, Sampson, Reardon, & Lenz, 1996; 2002; Sampson, Lenz, Reardon, & Peterson, 1999; Sampson, Peterson, Reardon, & Lenz, 2000, Sampson, Reardon, Peterson, & Lenz, 2004) is intended to enhance the link between theory and practice in the delivery of cost-effective career services for adolescents and adults. Our aim is to help individuals make an appropriate current career choice, and learn improved problem-solving and decision-making skills that will be needed for future choices.

Definitions

Problem - A career problem is defined as a **gap** between an existing state of affairs and an ideal state of affairs. The gap may be between an existing state (knowing I need to make a choice) and an ideal state (knowing I made a good choice). Common gaps in career problem solving involve occupational choice, program of study choice, and employment choice.

Problem Solving - A series of thought processes in which information about a problem is used to arrive at a course of action to remove the gap between an existing and a desired state of affairs. The transformation of information in problem solving involves the recognition of a gap, analysis of its causes, the formulation of alternative courses of action, and the selection of one of these alternatives.

Decision Making - Includes the problem-solving process, and also the cognitive, affective, and sometimes psychomotor processes that transform a chosen solution into action. Moving from the problem solution to action requires two additional components: first, the derivation of a plan or strategy to implement the solution; and second, the adoption of a risk-taking attitude and the making of a commitment to carry the plan to completion. The problem-solving components are thus a subset of the wider set of decision-making

The Nature of Career Problems

Complex and Ambiguous Cues

Career problems tend to be complex with many factors such as the economy, the labor market, the availability of educational and training opportunities, and family issues interacting with an individual's personal values, interests, skills, and financial resources. Often an individual is overwhelmed with cues, some distinct and some ambiguous, that a career problem exists that needs solving. For example, a dual-career couple who are trying to balance career and relationship issues during their final year in college, are faced with numerous signals from friends, family, college faculty and staff, and potential employers that they have career problems that need to be solved.

Interdependent Courses of Action

In career problem solving there is rarely only one correct solution. There are almost always several possible solutions to a career problem, with each solution having distinct and often overlapping advantages and disadvantages. For example, a college student, who has the ultimate goal of establishing her own business, could major in electrical engineering, management, or many other fields and still achieve her goal. The routes to achieving her goal may vary, but the ultimate goal could still be achieved.

Uncertainty of the Outcome

There is no guarantee that the choice of a college, occupation, or job will ensure success and satisfaction. A student who has chosen to become an Emergency Medical Technician may have been admitted to a training program and may have been encouraged by teachers, parents, and peers to make this choice. There is no guarantee, however, that he will graduate and find a job in his field or be satisfied being an Emergency Medical Technician. He needs to make the best informed choice possible and then commit himself to exerting his best effort to maximize his chances of success.

Solutions Present New Problems

A major career decision often presents a new set of problems that must be solved to make the initial decision effective. For example, the decision to attend a college brings forth a new set of issues related to financing, transportation, living arrangements, and the establishing of new peer relationships. It is unlikely that all of the subsequent problems can be known or anticipated. Thus, in order to be effective career problem solvers and decision makers, we need to develop the capability for effectively locating and processing relevant information.

Translating Theory to Practice

By applying a CIP paradigm to career problem solving and decision making, we hoped to achieve the following four goals related to improved client learning. First, we wanted a paradigm that would be parsimonious and easy for counselors and clients to comprehend and remember, yet robust enough to appropriately explain the career problem solving and decision making process. Second, we wanted the pyramid to draw counselors' and clients' attention to essential client characteristics and decision-making needs, such as the extent of their self and occupational knowledge, as well as the nature of their decision-making process and metacognitions. Third, we wanted to provide a conceptual framework for teaching clients about the components and process of career choice through explanation of the pyramid and CASVE cycle. (Adaptations of the pyramid and CASVE cycle used by clients are provided in [Figure 3](#) and [Figure 4](#) at the end of this handout.) Fourth, we wanted to provide a standard for monitoring and evaluating client progress in career problem solving and decision making (Sampson, Peterson, Lenz, & Reardon, 1992).

Pyramid of Information Processing Domains

The information processing domains related to career decision-making and job placement can be conceptualized as a pyramid (see [Figure 1](#)):

Knowledge DomainSelf Knowledge

- What are my values, interests, skills, and employment preferences?
- What am I looking for in an occupation or program of study?
- What am I looking for in a job?

Occupational Knowledge (Also includes knowledge of programs of study and jobs)

- What kind of job can I get with my education and experience?
- What is a typical day for a person employed as a _____?
- What are the educational and training requirements for _____?
- How can employers be categorized?

Decision-Making Skills DomainGeneric Information Processing Skills (e.g., CASVE Cycle)

- What are the steps in choosing an occupation, program of study, or job that will meet my needs? How do I usually make important decisions?

Executive Processing DomainMetacognitions

- Self-talk "I'll never be able to make a good career choice."
- Self-awareness "I'm getting very scared about this."
- Monitoring and control "I need help in making this choice."

CASVE Cycle

Problem solving and decision-making can be conceptualized in terms of the CASVE cycle (see [Figure 2](#)):

CommunicationExternal demands

- 1) Event "I need to choose a major by next semester."
- 2) Significant other "My roommate said that I'll have problems if I don't make a decision soon."

Internal affective, behavioral, or physiological states

- 1) Emotions "I'm scared about committing myself."
- 2) Avoidance behavior "I'll get started next week."
- 3) Physiological "I'm so upset about this, I can't eat."

Analysis

Enhance self-knowledge (obtained from personal experience, structured exercises, assessment instruments, and computer-assisted career guidance systems) by clarifying:

- 1) Values
- 2) Interests
- 3) Skills
- 4) Employment preferences

Enhance occupational knowledge by identifying important characteristics of occupations, programs of study, or jobs.

- 1) Knowledge of individual occupations, programs of study, or jobs (obtained from print material, audio-visual material, CACG system, information interviews, shadowing, work experience, academic courses, etc.).
- 2) Knowledge of the structure of the world-of-work (occupations, programs of study, or jobs) obtained from the Holland Hexagon, World-of-Work Map, etc.

Generic information processing skills (capacity to apply the CASVE Model or similar approach)

Metacognitions

- 1) Self-talk (I need to make a decision)

- 2) Self-awareness (I'm uneasy about this whole process)
- 3) Control and monitoring (What information do I need to obtain about myself and the situation to make a decision?)

Synthesis

Elaboration

Identify the maximum number of potential alternatives (occupations, programs of study, or jobs).

Crystallization

Narrow potential occupations, programs of study, or jobs to a manageable number of options (3-5).

Valuing

Judge the costs and benefits of each alternative to:

- 1) Oneself
- 2) Significant others, e.g. family
- 3) Cultural group
- 4) Community and/or society at large

Prioritize alternatives

Make tentative primary and secondary choices

Execution

Formulate a plan for implementing a tentative choice:

- 1) Preparation program (formal education/training experience)
- 2) Reality testing (full-time, part-time, and/or volunteer work experience, as well as taking courses or training)
- 3) Employment seeking (steps to apply for and get a job)

Communication

Review external demands and internal states

- 1) Has the gap been closed?
- 2) Have the negative emotions and physiological states been replaced by feelings of serenity?
- 3) Am I taking action to achieve my goal?

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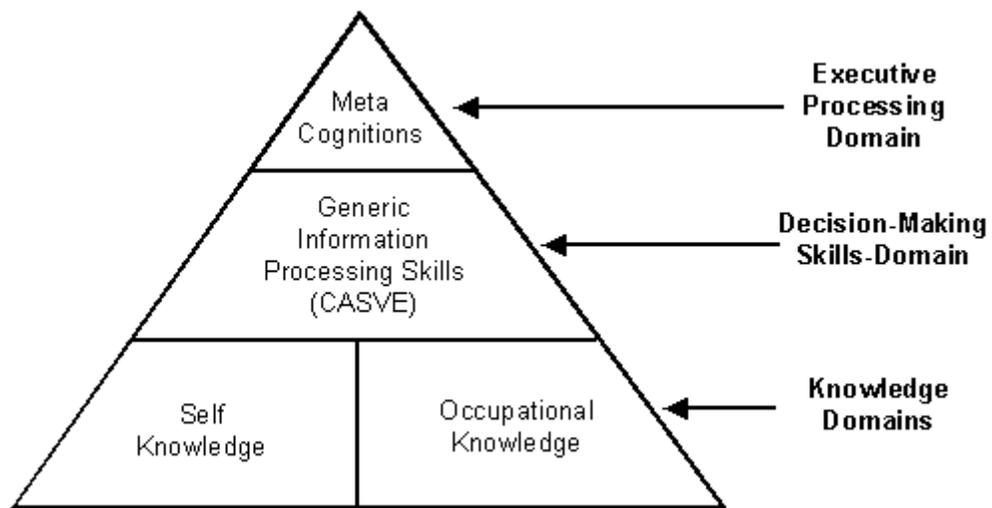


Figure 1

**Pyramid of Information Processing Domains
In Career Decision Making**

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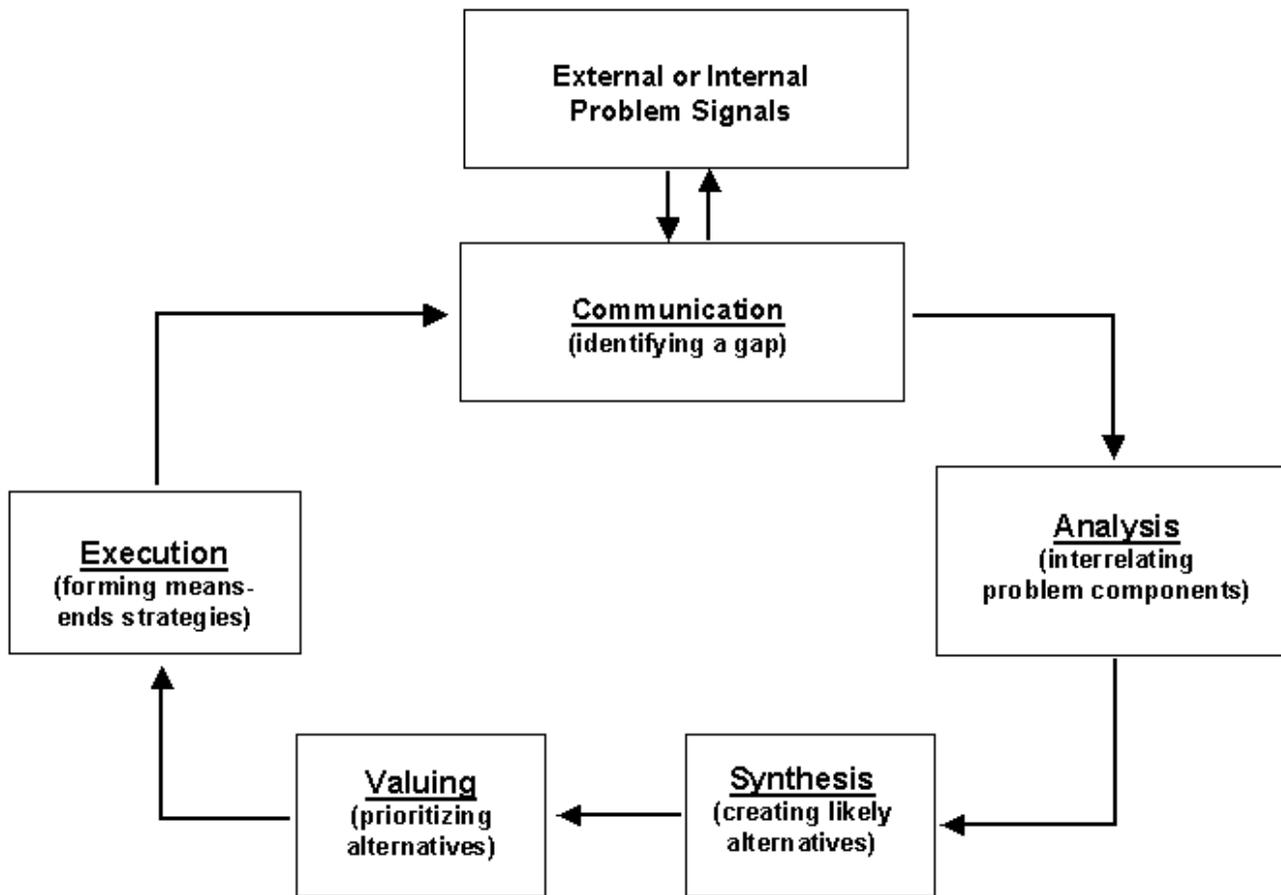


Figure 2

**The Five Stages of the CASVE
(Communication, Analysis, Synthesis, Valuing, Execution)
Cycle of Information Processing Skills Use in Career Decision-Making**

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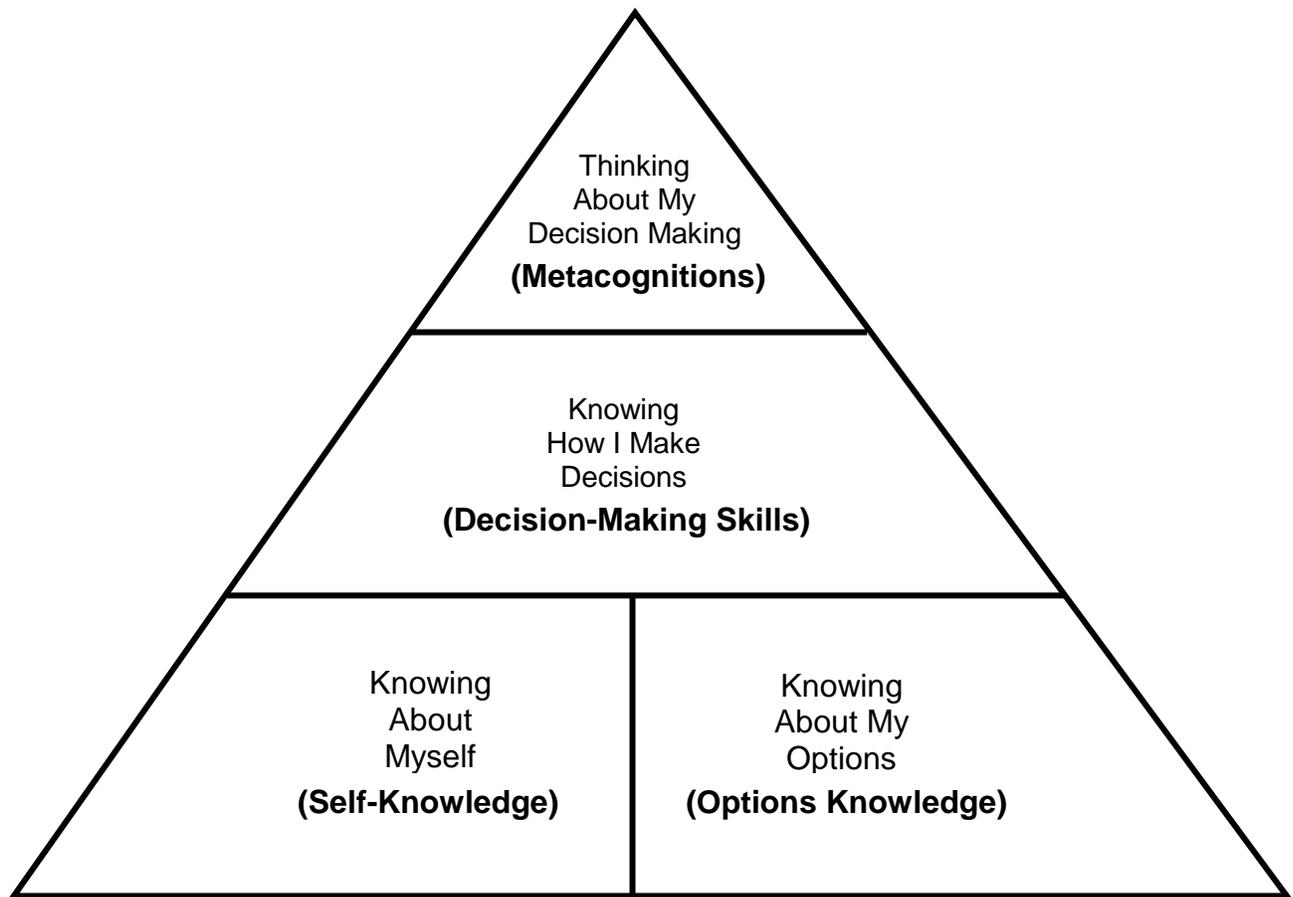


Figure 3

**The Five Stages of the CASVE
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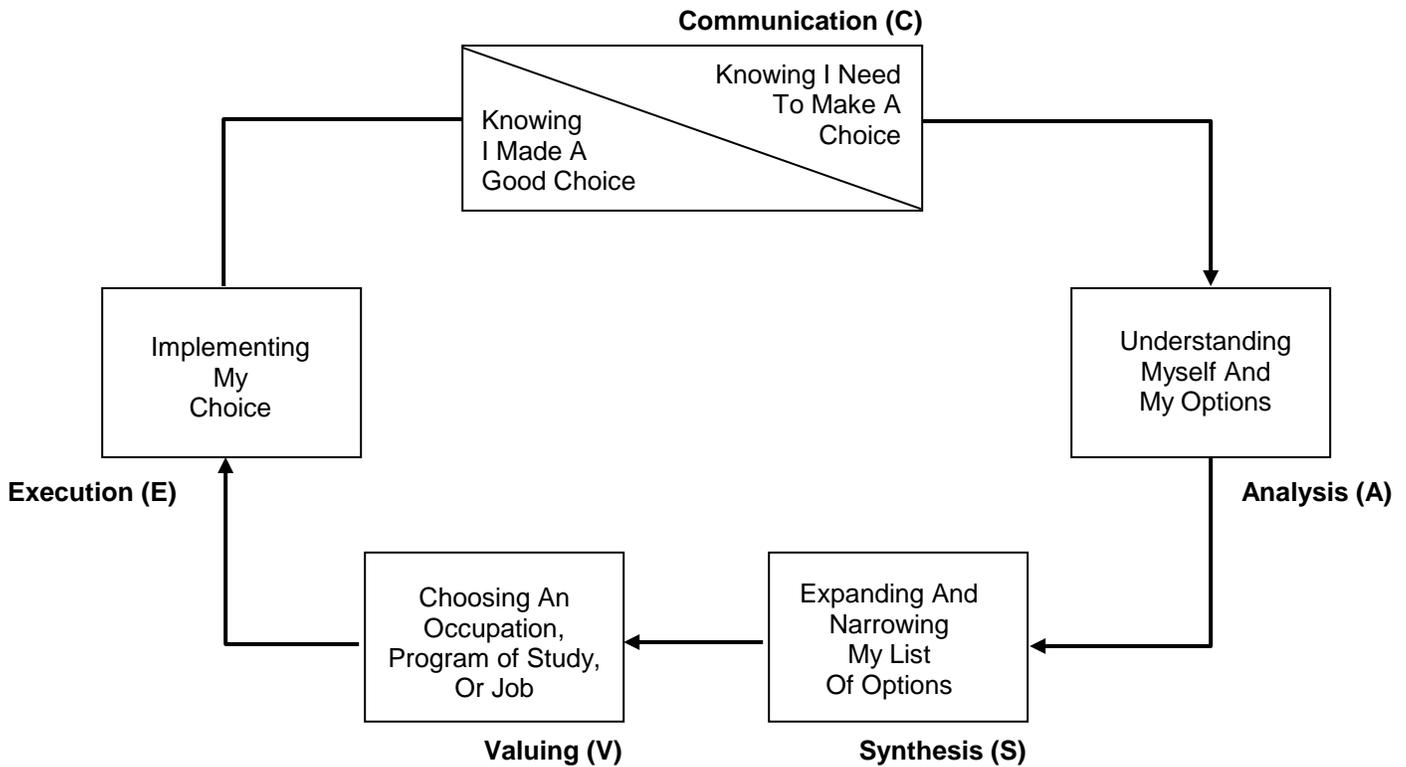


Figure 4

**The Five Stages of the CASVE
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