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ABSTRACT

Numerous career interest measures are available. Information on one such career inventory, the Career Thoughts Inventory (CTI) is presented here. The instrument is a self-administered assessment and intervention tool designed to provide a measure of dysfunctional thinking in career problem solving and decision making. The inventory is intended for use by high school and college students who are choosing a field of study, an occupation, or employment; it can also be used by working adults who are considering a career change or reentering the labor market. The CTI was standardized on a sample of 571 adults, 595 college students, and 396 high school students. The test yields information on three construct scores: decision making confusion, commitment anxiety, and external conflict. It consists of 48 negative statements and takes between 7 and 15 minutes to fill out. Scoring can be carried out in 5 minutes or less. The test booklet is a combination of the inventory, the answer form, and the profile form. Scoring is simple, but it is recommended that confirmation of test results in a clinical interview be made. An accompanying workbook offers exercises, checklists, and diagrams to assist the test taker in interpreting scores. Appropriate procedures were used to establish validity in terms of content, construct, and concurrent aspects of the instrument. (RJM)

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Career Thoughts Inventory:  
A Review and Critique

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Paper presented at the annual meeting of the  
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Title: Career Thoughts Inventory

Authors: James P. Sampson, Gary W. Peterson, Janet G. Lenz, Robert C. Reardon,  
Denise E. Saunders

Publisher: Psychological Assessment Resources

Date of Publication: 1996

Date of most recent norming sample: 1994

Time required to administer: 7 - 15 minutes

Selected costs (as of 12/6/96):

- Specimen set (one Professional Manual and one Test Booklet)--\$29.00
- Other materials: Improving Your Career Thoughts: A Workbook for the Career Thoughts Inventory --\$7.50, (10@)--\$59.00; Professional Manual --\$29.00; Test booklets (25@)--\$39.00; Kit: (Manual, 5 Workbooks, 25 Test booklets)--\$79.00

#### Brief Description of Purpose and Nature of Test

The Career Thoughts Inventory (CTI) is a recently developed self-administered assessment and intervention tool designed to provide a measure of dysfunctional thinking in career problem solving and decision making. Designed for use in a career service delivery setting, the CTI is appropriate for high school and college students who are choosing a field of study, an occupation, or seeking employment as well as for working adults seeking a career change or reentering the labor market. Improving Your Career Thoughts: A Workbook for the Career Thoughts Inventory is a learning resource used in conjunction with the CTI. The Workbook provides information and written exercises to help examinees identify and alter their dysfunctional career thoughts.

The CTI yields percentile and *T* scores for three construct scores: decision making confusion (DMC), commitment anxiety (CA), and external conflict (EC). A Total CTI score is also expressed as a percentile and *T* score. The test consists of

48 negative statements (e.g. item 43, "I'm embarrassed to let others know I haven't chosen a field of study or occupation"), with a 4-point response scale of strongly disagree (SD), disagree (D), agree (A), and strongly agree (SA). Administration of the test takes between 7 and 15 minutes, and scoring can be carried out in 5 minutes or less. The CTI has a readability level at the 6.4 grade level, and the Workbook at the 7.7 grade level.

### Practical Evaluation

All test materials are attractively printed and carry the pyramid logo of CTI representing the three Information Processing Domains. The test booklet is a combination of the inventory itself, the answer form and the profile form. Scoring is as simple as separating the inventory from the carbonless bottom scoring sheet and tallying the responses. A profile of scores for adults, college students, and high school students is located on the back of the test booklet. Directions for scoring are printed on the scoring sheet itself, making referral back to the Manual unnecessary. Higher CTI Total scores reflect greater dysfunctional career thinking. Examination of the construct scores and individual items illuminates the specific nature of dysfunctional thinking. The authors recommend confirmation of test results in a clinical interview with the test taker before a formal interpretation is made.

The 36 page Workbook is comprised of exercises, checklists and diagrams to assist the test taker in interpreting their scores from the inventory. The practitioner may work through exercises with the client, or ask them to complete sections independently. Directions for using the Workbook are straightforward, but tend to be

rather lengthy in some areas. For example, to complete the exercise entitled *Improving Your Career Thoughts*, it is necessary to read one dense page of text encompassing seven separate steps.

The Manual states that a variety of professionals and professionals-in-training (under supervision) may use the CTI including: counselors, psychologists, vocational rehabilitation specialists, nurses, social workers, and marriage and family therapists. However, these professionals must have training and experience in both career service delivery and cognitive-behavioral theory. The Manual suggests that the practitioner become familiar with the manual and personally complete the inventory, scoring sheet, and workbook.

Examiner/client rapport is vital in not only obtaining frank and honest responses on the inventory, but also in motivating the client to complete all applicable sections of the Workbook. The CTI appears to have face validity in that all questions appear to be relevant to career problems.

#### Technical Evaluation

Because significant differences exist between the CTI Total scores for adults, college students, and high school students, separate norms were calculated for each group. Norms for the CTI are expressed in *T* scores as well percentiles for each of the sample groups. The CTI was standardized on a sample of 571 adults, 595 college students, and 396 high school students. The adults in the normative sample range in age from 17 to 83 years, with 77% of the sample having completed some postsecondary education. This norm sample represents a wide geographical

distribution. More females were represented than males, and ethnicity was fairly representative of the national adult population. Of this normative sample, 87% were either employed or not seeking employment.

College students in the sample represent southern, midwestern and western regions. Undergraduates compose all but 11.6% of the sample, with about equal amounts of students receiving or not receiving career assistance. Again, ethnicity was representative of U.S. college students.

High school students in the normative sample represent southern, midwestern, and western regions. Students were either 11th or 12th graders, and ranged in age from 15 to 20. About half the sample was female, and ethnicity was representative of U.S. high school students. Equal percentages of students were receiving or not receiving career assistance.

The authors urge the development of local norms, especially for agency populations which represent a distinct clientele and geographic area.

Two types of reliability were reported in the Manual: internal consistency and test-retest. The internal consistency coefficients for the CTI Total score ( $\alpha = .93-.97$ ) and DMC ( $\alpha = .90-.94$ ) were high across all groups. Internal consistency estimates for CA ( $\alpha = .79-.91$ ) and EC ( $\alpha = .74-.81$ ) were lower, although still adequate, for all groups. Not all test items are used to determine the construct scores.

Test-retest correlations indicate adequate stability over a four-week interval in college and high school students. An adult population was not tested for stability. For high school students, correlations were lower for Total CTI score and construct

scores than those of college students. The EC scale, most likely due to the small number of items making up the scale (5 items), shows the lowest internal consistency and stability scores across the three groups. College student correlations for test-retest on the four scales were as follows: CTI Total score ( $r = .86$ ); DMC ( $r = .82$ ); CA ( $r = .79$ ); EC ( $r = .74$ ). High school student test-retest correlations were as follows: CTI Total score ( $r = .69$ ); DMC ( $r = .72$ ); CA ( $r = .70$ ); EC ( $r = .52$ ).

The cognitive information processing theory (CIP) drove item and construct development for the CTI, and provides the theoretical basis for the instrument. All CTI items can be grouped into one of the CIP content dimensions of self-knowledge, occupational knowledge, communication, analysis, synthesis, valuing, execution, and executive processing. A principal components factor analysis revealed three factors which make up the construct scales of the instrument: DMC, CA, and EC. Intercorrelations among the CTI scales and CIP content dimensions range from .62 to .92.

Intercorrelations among the CTI scales themselves reveals that the CTI Total score correlates most highly with DMC for all sample groups ( $r = .89-.94$ ). The constructs CA and EC consistently show lower correlations with the CTI Total score across groups. The intercorrelations of CA and EC for all groups reveal the greatest distinction ( $r = .23-.66$ ).

Using the Pearson product-moment correlation for the three groups, the CTI demonstrated convergent validity with four other measures of theoretically similar constructs: My Vocational Situation, Career Decision Scale, Career Decision Profile,

and Revised NEO Personality Inventory.

### Summary Evaluation

The CTI is a well constructed new measurement tool, which, in combination with the Workbook, serves as a screening device, a needs assessment tool, and a learning resource. The CTI is quickly administered and hand-scored, making it useful in a career service setting. The Professional Manual provides thorough instructions on administration, scoring, and interpretation of the results in conjunction with the Workbook.

Care was taken in norming the test to achieve a representative sample of the three target populations: adults, college and high school students. Appropriate procedures were used to establish validity in terms of content, construct, and concurrent aspects of the instrument. Obviously missing is evidence of the Workbook's ability to correct dysfunctional career thinking or improve career problem solving and decision making skills.

The CTI provides materials and format that school or agency counselors may find helpful in increasing the depth and quality of thier vocational counseling. However, many counselors may feel that developing the rapport required to effectively use this instrument is unrealistic given the large numbers of individuals they must serve. Although the CTI is not typical of the types of assessments administered to employment agency clients or college or high school students, it would make a valuable companion to the traditional interest and aptitude measures.

The Workbook provides the means for clients to become proactive and



participative in the counseling relationship. However, the value of the Workbook activities will depend greatly on the client's motivation and understanding of the concepts. For clients with appropriate reading levels (at least a 7.7 grade level), the Workbook provides adequate instructions to work through independently of a practitioner, or with minimal involvement. However, a large number of individuals served through career counseling and development agencies would not have reading skills at the necessary level for either the CTI or Workbook.

## References

- Costa, P. T., Jr., & McCrae, R. R. (1992a). Revised NEO Personality Inventory. Odessa, FL: Psychological Assessment Resources.
- Holland, J. L., Daiger, D. C., & Power, G. (1980a). My vocational Situation. Palo Alto, CA: Consulting Psychologists Press.
- Jones, L. D. (1988). The Career Decision Profile. (Available from Lawrence K. Jones, North Carolina State University, College of Education and Psychology, Department of Counselor Education, Box 7801, Raleigh, NC 27695).
- Osipow, S. H., Carney, C. G., Winer, J., Yanico, B., & Koschier, M. (1987). Career Decision Scale. Odessa, FL: Psychological Assessment Resources.
- Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1996). Improving your career thoughts: A workbook for the Career Thoughts Inventory. Odessa, FL: Psychological Assessment Resources.
- Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1996). Professional manual: Career Thoughts Inventory. Odessa, FL: Psychological Assessment Resources.

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