

Article 48

Assessing Career Readiness Factors and Personality Type: Implications for Practice

Brittany R. Melvin and Janet G. Lenz

Melvin, Brittany R., is a doctoral candidate in Florida State University's Combined Program in Counseling Psychology and School Psychology. Her areas of expertise include career counseling and its interaction with mental health counseling and using assessments with diverse populations. She is currently completing her dissertation on first generation college students and readiness for career decision making.

Lenz, Janet G., is an Associate-In Professor and a Program Director for Instruction, Research, and Evaluation at Florida State University. Her interests include the application of cognitive information processing theory to career interventions, the intersection of career and mental health counseling, and the design and delivery of career service.

Abstract

This research study examined the relationships among three career readiness assessment measures and the relationships among selected readiness variables and personality characteristics in a sample of 120 university students enrolled in a career development class. The readiness assessment measures included the Vocational Identity (VI) scale of My Vocational Situation, the Career Thoughts Inventory, and the Goal Instability Scale. The results showed that all three readiness assessments were significantly intercorrelated in the expected direction. The results also suggest that readiness factors and personality characteristics are separate variables that should be considered when determining how best to assist career clients. The importance of using readiness assessment in the context of career counseling is discussed along with recommendations for future research examining personality variables in relation to career interventions.

Introduction

Individuals vary in readiness levels when seeking assistance for career concerns and engaging in the career decision-making process. The idea of readiness assessment in the context of career interventions has been the subject of increasing attention in recent years (Sampson, McClain, Musch, & Reardon, 2013; Sampson, Peterson, Reardon, & Lenz, 2000). In many counseling settings, but particularly in educational institutions, individuals present themselves for career services seeking quick resolutions to their concerns. This need to make a decision quickly is often associated with the time pressures placed on them by institutional deadlines (e.g., requiring students to choose a

course of study by a certain semester), as well as input from important people in their lives. Clients seeking quick resolutions to their concerns may present a challenge for career counselors, academic advisors, and related helping professionals. While these clients are focused on examining their self-knowledge (“I want to take the test that will tell me what career to pursue”) or trying to expand or narrow their options as their primary concern, it is often readiness factors (e.g., career indecision, confusion, negative thinking, lack of motivation, low vocational identity) that impact their ability to effectively resolve their educational and career concerns.

Readiness Assessment

Incorporating readiness assessment into career services delivery is one way to increase efficiency and better target the needs of persons seeking career services (Sampson, Reardon, Peterson, & Lenz, 2004). Sampson et al. (2004) suggest using a readiness measure to learn more about a client’s current state for beginning the career decision-making process (Sampson et al., 2013). Readiness assessment allows practitioners and clients to collaboratively determine the level of assistance needed and whether readiness interventions (e.g., reducing anxiety, increasing self-efficacy, reframing negative thinking) are necessary before individuals can effectively engage in the career problem-solving and decision-making process (Sampson et al., 2004). Research shows that clients with low readiness typically benefit less from career development interventions (Blustein, 1989; Galles & Lenz, 2013). Low readiness (e.g., negative thinking) has also been associated with significant mental health issues which are often present when clients present for career concerns (Dieringer, 2012; Walker & Peterson, 2012). In recent years, a variety of instruments have been developed to assess career decision-making readiness (Brown et al., 2012; Sampson et al., 2013). Given the increased number of readiness assessment measures used in career counseling practice, an important area of research is to determine the extent to which these measures are assessing unique constructs and the extent to which they share common variation (Peterson, Bullock-Yowell, & Lenz, 2012).

Personality and Readiness Assessment

In addition to assessing client readiness, prior research has suggested that career practitioners may further inform and target their interventions by assessing selected client characteristics (Larson, Bonitz, & Pesch, 2013), including personality factors. One framework for understanding personality, in relation to career problem solving and decision making, is Holland’s RIASEC theory (Holland, 1997; Holland & Messer, 2013). Holland’s RIASEC theory has been applied worldwide for over 50 years (Bullock, Andrews, Braud, & Reardon, 2009-2010). Two key aspects of its practicality are the hexagonal model and the Self-Directed Search (SDS; Holland & Messer, 2013). Holland (1997) suggested that certain RIASEC types are more likely to struggle with career-related tasks and transitions such as unemployment or job changes. Holland suggested that higher levels of positive coping would be associated with the six RIASEC types in the following order: Social, Enterprising, Artistic, Investigative, Conventional, and Realistic (Holland, 1997). Exploring how personality types are related to factors assessed by readiness measures may provide some useful insights to improve career counseling

practice. For example, do Enterprising types have higher vocational identity levels? Do Artistic types possess higher levels of goal instability?

If certain RIASEC types can better cope with career transitions, to what extent will certain RIASEC types more easily navigate career problem solving and decision making? This research explored whether personality type, as measured by Holland's RIASEC types, might be related to selected readiness factors. Research studies related to the relationship between RIASEC types and readiness to make a career decision have produced mixed results; however, significant findings have been reported in studies that examined readiness levels and specific RIASEC types. For example, two studies found a significant positive relationship between "I" types and various measures of career decision-making readiness (Healy & Mourton, 1984; Leong & Morris, 1989). Additionally, Wright, Reardon, Peterson, and Osborn (2000) found that the readiness factor, dysfunctional thinking, may be related to some RIASEC types more than others. Specifically, Social and Enterprising types showed a statistically significant ($p < .05$) negative relationship with Decision Making Confusion, one aspect of dysfunctional career thoughts.

One possible explanation for the limited findings between RIASEC types and readiness is the wide range of measures used to assess readiness (Sampson, et al, 2000). Readiness has been defined in varied ways including: career maturity (Super & Thompson, 1979), vocational identity (Holland, Daiger, & Power, 1980), dysfunctional career thoughts (Sampson, Peterson, Reardon, Lenz, & Saunders, 1996a), goal instability (Robbins & Patton, 1985), and career decision-making difficulties (Osipow, & Gati, 1998). These varied readiness definitions and assessments potentially complicate the field's understanding of readiness and how this concept is best used to inform practice. Exploring relationships among readiness assessment measures and the connection between personality variables and readiness assessment may help to further inform evidence-based practice in this area.

The Present Study

The present study explored the relationships among three readiness assessment measures to determine the extent to which they are tapping into similar constructs or whether they provide unique information that can inform career counseling interventions. The three readiness constructs included: vocational identity (Holland et al., 1980), dysfunctional career thoughts (Sampson et al., 1996a), and goal instability (Robbins & Patton, 1985). Secondly, this study examined whether a relationship exists between a person's assessed personality type, using scores on the Self-Directed Search (SDS; Holland, Fritzsche, & Powell, 1994), and selected readiness variables. The research questions were as follows: (1) Is there a relationship among three readiness assessment constructs (i.e., vocational identity, dysfunctional career thoughts, and goal instability)? (2) Is there a relationship between assessed personality type, as measured by the SDS, and vocational identity? (3) Is there a relationship between assessed personality type, as measured by the SDS, and dysfunctional career thoughts? (4) Is there a relationship between assessed personality type, as measured by the SDS, and goal instability?

Method

Participants

The sample included 120 undergraduate students, 61 (51%) males and 59 (49%) females at a large southeastern four-year university. They were enrolled in five sections of a credit-based career planning class, and volunteered to participate in the research. The participants ranged in age from 18-28, with a mean age of 21. All class levels were represented, including 11 freshman (9%), 23 sophomores (19%), 23 juniors (19%), 62 seniors (52%), and one unknown. With regard to ethnicity, the participants identified themselves as White (68%), African American (18%), Hispanic/Latino (9%), Hawaiian Native/Other Pacific Islander (1, 1%), or Other (3%).

Measures

Vocational Identity (VI) Scale. The My Vocational Situation's Vocational Identity (VI) scale (MVS; Holland et al., 1980) was used to assess the vocational identity readiness construct. The Vocational Identity Scale (Holland et al., 1980) is a self-administered, objectively scored measure of one's self-perceptions about goals, interests, personality, and talents. The VI scale consists of 18 items in a true-false format, and "false" responses are summed to calculate a vocational identity score, with items endorsed as "true" indicating lower vocational identity (Holland et al., 1980). Higher scores reflect greater clarity about one's future goals, self-knowledge, and more confidence in decision making, while lower scores are associated with more difficulties in career decision making. Sample items include: "I am not sure of myself in many areas of life" and "I am uncertain about the occupations I could perform well."

The VI scale's test-retest reliability for periods of 2 weeks to 1 year ranged from .62 to .84 in five samples of college students and adults (Holland, 1997). Leong and Morris (1989) found evidence of convergent validity, given the positive relationship between vocational identity and career maturity ($r = .69$), and discriminant validity, given the negative relationship with a dependent career decision-making style ($r = -.60$). In their review of empirical evidence on the Vocational Identity Scale, Holland, Johnston, and Asama (1993) concluded that the "Identity scale has substantial construct validity and retest reliability" (p. 1).

The Career Thoughts Inventory. The readiness construct of dysfunctional career thoughts was operationalized using the Career Thoughts Inventory's Total Score (Sampson et al., 1996a). The Career Thoughts Inventory (CTI; Sampson et al., 1996a) is a 48-item self-administered, objectively scored measure of dysfunctional cognitions involved in career problem solving and decision making. The CTI uses a 4-point Likert-type scale ranging from "Strongly Agree" to "Strongly Disagree" to generate a dysfunctional career thoughts Total Score and three subscale scores: Decision-Making Confusion, Commitment Anxiety, and External Conflict. Higher CTI scores suggest lower readiness for career decision making (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996b; Galles & Lenz, 2013).

The CTI is based on three nationwide norm groups: 11th and 12th graders (396), college students (595), and adults (571; Sampson, Peterson, Lenz, Reardon, & Saunders, 1998). The norm group's coefficient alphas, ranging from .97 to .93 on the Total Score, .97 to .93 on the DMC scale, .91 to .79 on the CA scale, and .81 to .74 on the EC scale;

provide evidence of the CTI's strong internal consistency (Sampson et al., 1998). The test-retest coefficients, based on a 4-week interval, provide strong evidence for the CTI's stability (Sampson et al., 1996b). The CTI evidenced discriminate validity when it showed strong negative correlations with vocational identity ($r = -.67$ to $-.73$) and career certainty ($r = -.54$ to $-.61$). The CTI Total Score showed strong positive correlations with negative constructs such as indecision ($r = .53$ to $.75$; Sampson et al., 1996b).

The Goal Instability Scale. The third readiness assessment measure used in this study was The Goal Instability Scale (GIS; Robbins & Patton, 1985). The GIS is a 10 item self-report rating scale with items developed first by rational procedures then factor analytic techniques. The GIS uses a 6-point Likert-type scale, ranging from "Strongly Agree" to "Strongly Disagree" to determine if a client has high goal instability (Robbins & Patton, 1985). Overall test scores decrease as subjects increasingly agree with each of the ten items; lower scores indicate higher goal instability with a maximum possible score of 60. Robbins and Patton (1985) noted that high agreement with GIS items was associated with "lowered career decisiveness and lower interest pattern maturity" (p. 226).

Research has provided support for the GIS's psychometric properties (Robbins & Patton, 1985; Robbins & Tucker, 1986). The GIS shows evidence of internal consistency ($\alpha = .81$; Robbins & Patton, 1985) and test-retest reliability (over a 2 week interval, $r = .76$). The GIS also shows evidence of generalizability given that it accurately measured the single construct of goal instability among varying populations such as Portuguese and English students (Casillas, Schulz, Robbins, Santos, & Lee, 2006).

The Self-Directed Search. Personality type was assessed using Holland's Self-Directed Search (SDS) Form R, 4th ed. (Holland et al., 1994). The SDS assesses a person's resemblance to the six RIASEC types and produces a three letter code that can be connected to personality characteristics, occupations, fields of study, and leisure activities. The SDS derives a person's code type using three scales (activities, occupations, competencies) and a set of self-ratings. The SDS also includes an occupational daydreams section which reflects the client's history of occupational daydreams (Holland et al., 1994).

The SDS Form R 4th edition's normative sample of 2,602 students and working adults nationwide indicated support for the SDS's psychometric properties. KR-20 coefficients ranged from .72 to .92 for the Activities, Competencies, and Occupations scales. Summary scale coefficients had KR-20 coefficients from .90 to .94, demonstrating internal consistency. Seventy-three people, including high school students, college students, and adults, completed the SDS over time intervals ranging from 4 to 12 weeks to measure test-retest reliability. The summary scale test-retest correlations ranged from .76 to .89 (Holland, et al., 1994). The SDS demonstrated strong concurrent validity when considering the 54.7% hit rate for the normative sample. Savickas, Taber, and Spokane's (2002) study found evidence for the convergent validity of the SDS; the SDS showed median validity coefficients ranging from .70, between the SDS and the Strong Interest Inventory, to .41, between the SDS and the Kuder Occupational Interest Survey-Form DD.

Procedures

The study was approved by the institution’s research review board. Participants were recruited from students enrolled in five career planning class sections at a large, public, southeastern university. Participants included freshmen to seniors and represented a wide variety of majors. Students received five extra credit points for participating in the study. On the first day of class, students who agreed to participate were given a folder containing an informed consent, demographic data form, and three assessments: the My Vocational Situation Vocational Identity Scale, Career Thoughts Inventory, and Goal Instability Scale. The research folders were assembled with assessments in alternating order to control for ordering effects. Midway through the semester, participants also completed the Self-Directed Search (SDS) Form R as one of their course assignments. Participants’ responses from the SDS Form R Assessment Booklet were entered into the Self-Directed Search Software system (Reardon, PAR Staff, & Holland, 1996). The SDS Software system generates a Professional Summary of participant results, including their six RIASEC scores.

Table 1

Descriptive Statistics for Readiness Variables and RIASEC Types

Variable	M	SD
GIS	45.35	8.90
Voc. Identity	9.39	4.38
CTI Total Score	48.99	22.87
SDS_R	17.30	11.84
SDS_I	17.32	8.80
SDS_A	18.43	10.12
SDS_S	28.65	9.67
SDS_E	32.39	9.19
SDS_C	21.97	10.29
DMC	10.94	8.02
CA	13.33	5.77
EC	4.6750	3.14

Data Analysis

This study employed a correlational design which explored the strength of relationships among four variables: vocational identity, dysfunctional career thoughts, goal instability, and personality type. Each readiness variable was correlated with personality type, operationalized using RIASEC scores, to determine whether participants’ personality characteristics related to selected readiness factors. Additionally, results from the three readiness assessments were examined to explore bi-variate relationships between these three measures. Pearson Product-Moment Correlation Coefficients were used to explore the strength of the relationships among personality

type, vocational identity, dysfunctional career thoughts, and goal instability. The three readiness measures, the Vocational Identity Scale, the Career Thoughts Inventory, and the Goal Instability Scale, were correlated with one another to determine whether these readiness measures were related and the strength of the relationships.

Results

Four research questions guided the data analysis, and the results are provided below. Table 1 includes the descriptive statistics for each of the variables. No significant relationships were found between participants' RIASEC scores and the readiness measures. A correlation matrix including these results is available from the authors upon request. A correlational analysis was conducted to explore bi-variate relationships between the three readiness assessment variables: vocational identity, dysfunctional career thoughts, and goal instability. The data showed significant correlations among the three readiness constructs ($p < .01$). The Vocational Identity scale showed a strong correlation with the CTI Total Score ($r = -.75, p < .01$) and the GIS ($r = .43, p < .01$). The CTI Total Score and GIS also showed a strong correlation ($r = -.61, p < .01$). Table 2 provides further detail on these results.

Table 2

Correlations Among Readiness Variable (n=120)

Readiness Variable	1	2	3
Voc. Id. Scale	1.00	—	—
CTI	-.75**	1.00	—
GIS	.43**	-.61**	1.00

Note. **Correlation is significant at the .01 level.

Discussion

This study examined the relationships among assessed personality type and three readiness assessment measures: vocational identity, dysfunctional career thoughts, and goal instability. Some previous research has found significant relationships among readiness factors and specific RIASEC types (Healy & Mourton, 1984; Leong & Morris, 1989). Additionally, Wright et al. (2000), reported that dysfunctional thinking showed a statistically significant negative relationship with S and E types. As noted, there were no significant findings in this study relating assessed personality type to selected readiness factors. One explanation for the non-significant findings may be that individuals' personality types, as measured by Holland's SDS, are separate and distinct factors from readiness variables such as vocational identity, dysfunctional thinking, and goal instability. Indeed, as Holland (1997) noted, one of the rationales for developing the My Vocational Situation (Holland et al., 1980), including the Vocational Identity scale, was to capture factors outside the theory (Holland, 1996). Another explanation may be the limitations of the current study, which are discussed below.

The results did show that the readiness variables (i.e., vocational identity, dysfunctional career thoughts, and goal instability) were significantly related to each other. These findings potentially inform career counseling practice by pointing to the importance of treating readiness factors and personality characteristics as separate variables that may impact not only the choice of interventions, but the outcomes of interventions. While readiness is most likely a multifaceted concept, which comprises a variety of factors that interfere with a person's ability to move through the career decision-making process, these results suggest that these types of variables should be assessed and considered prior to proceeding with standard career counseling interventions, such as the exploration of self-knowledge and career alternatives.

These findings add to the literature that shows relationships between various readiness assessment measures. The counseling literature (Brown et al., 2012; Holland, 1997; Lent, 2005; Sampson et al., 2013; Savickas, 2011) points to the need to consider readiness factors that may impact an individual's ability to profit from career interventions. Even if individuals have high quality self-knowledge and accurate option knowledge, factors such as anxiety, low vocational identity, negative thinking, and goal instability, may impede their ability to effectively engage with career problem-solving and decision-making activities. These results add to the literature that has found relationships between high levels of goal instability and negative thinking (Bertoch, Lenz, Reardon, & Peterson, 2014). While these instruments clearly share some common variance, they also point to unique factors that may need to be addressed in the career counseling process.

Limitations

The current study had several limitations which may have influenced its findings. First, the sample was a convenience sample of students enrolled in an undergraduate career development course. The sample had an overrepresentation of upperclassman, 71%, which may have altered the findings. Also, the study may have limited generalizability to a population outside of a university environment. Another limitation of the sample was the participant numbers across each of the RIASEC types. Even if correlations among the readiness variables and assessed personality type were present, the limited numbers in the sample may have concealed the relationships. The measures completed by the participants were self-report measures. When using self-report measures, the researchers assume honesty and full engagement when participants complete the measures, which may not be an accurate assumption.

Implications for Practice and Future Research

The current study adds to the literature (Brown et al., 2012; Sampson et al., 2013) on the relationships among readiness measures. In so doing, the current study underscores each of the readiness measures' validity. Practitioners can use one of these measures with further confidence that they would uncover parallel findings regarding readiness levels if they chose the other two instead. The findings regarding the relationships between personality type and readiness factors were inconclusive. Given the current study's limitations discussed above, future research should include larger sample sizes to provide for a more robust analysis of RIASEC scores in relation to readiness assessment

variables. Also, a sample that is more representative of the university population, versus a convenience sample, could increase generalizability.

This study attempted to demonstrate a relationship between RIASEC scores and readiness levels by using a correlational design. Other studies have demonstrated evidence for the connection between RIASEC types and readiness levels by incorporating interventions specific to certain RIASEC types. For example, Kivlighan and Shapiro (1987) compared readiness change levels of a task-oriented group comprised of Realistic, Investigative, and Conventional types and an interpersonal group comprised of Social, Artistic, and Enterprising types after implementing a task-oriented career intervention. The results indicated that the task-oriented group, which was more congruent with the intervention, showed a larger effect size. Therefore, future research could attempt to link RIASEC types with career decision-making readiness through studies with interventions as part of the design.

Additionally, this study used RIASEC scores, derived from Holland's Self-Directed Search, as a measure of personality characteristics, but future research could utilize the Big Five personality dimensions (Costa & McCrae, 1992) to consider differences in readiness levels. Perhaps assessing individuals using the Big Five personality dimensions would better capture differences which are associated with readiness factors.

References

- Bertoch, S. C., Lenz, J. G., Reardon, R. C., & Peterson, G. W. (2014). Goal instability in relation to career thoughts, decision state, and performance in a career course. *Journal of Career Development, 41*, 104-121. doi: 10.1177/0894845313482521
- Blustein, D. L. (1989). The role of goal instability and career self-efficacy in the career exploration process. *Journal of Vocational Behavior, 35*, 194-203. doi:10.1016/0001-8791(89)90040-7
- Brown, S. D., Hacker, J., Abrams, M., Carr, A., Rector, C., Lamp, K., Telander, K., & Siena, A. (2012). Validation of a four-factor model of career indecision. *Journal of Career Assessment, 20*, 3-21. doi:10.1177/1069072711417154
- Bullock, E. E., Andrews, L. M., Braud, J., & Reardon, R. C. (2009-2010, Winter). Holland's theory in an international context: Applicability of RIASEC structure and assessments. *Career Planning and Adult Development Journal, 25*(4), 29-58.
- Casillas A., Schulz E. M., Robbins S. B., Santos P. J., & Lee, R. M. (2006). Exploring the meaning of motivation across cultures: IRT analyses of the Goal Instability Scale. *Journal of Career Assessment, 14*, 472-489.
- Costa, P. T., & McCrae, R. R. (1992). *NEO-PI-R professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Dieringer, D. D. (2012). Dysfunctional career thinking as a predictor of depression and hopelessness in students seeking career services. *ProQuest Dissertations and Theses, 102*. Retrieved from <http://search.proquest.com/docview/1035148968?accountid=4840>. (1035148968).
- Galles, J. A., & Lenz, J. G. (2013). Relationships among career thoughts, vocational identity, and calling: Implications for practice. *The Career Development Quarterly, 61*, 240-248. doi: 10.1002/j.2161-0045.2013.00052.x

- Healy, C., & Mourton, D. (1984). The Self-Directed Search personality scales and career maturity. *Measurement and Evaluation in Guidance, 17*, 3-14.
- Holland, J. (1996). Exploring careers with a typology. *American Psychologist, 51*, 397-406.
- Holland, J. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources, Inc.
- Holland, J., Daiger, D., & Power, G. (1980). *My vocational situation*. Palo Alto, CA: Consulting Psychologists Press.
- Holland, J., Fritzsche, B., & Powell, A. (1994). *The Self-Directed Search technical manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Holland, J. L., Johnston, J. A., & Asama, N. F. (1993). The Vocational Identity Scale: A diagnostic and treatment tool. *Journal of Career Assessment, 1*, 1-12. doi:10.1177/106907279300100102
- Holland, J. L., & Messer, M. A. (2013). *John Holland's Self-Directed Search professional manual*. Lutz, FL: Psychological Assessment Resources, Inc.
- Kivlighan, D., & Shapiro, R. (1987). Holland type as a predictor of benefit from self-help career counseling. *Journal of Counseling Psychology, 34*, 326-329.
- Larson, L. M., Bonitz, V. S., & Pesch, K. M. (2013). Assessing key vocational constructs. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.). *Handbook of vocational psychology: Theory research and practice* (4th ed., pp. 219-248). New York, NY: Routledge.
- Lent, R. W. (2005). A social cognitive view of career development and counseling. In S. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 101-127). Hoboken, NJ: John Wiley & Sons, Inc.
- Leong, F. T., & Morris, J. (1989). Assessing the construct validity of Holland, Daiger, and Power's measure of vocational identity. *Measurement and Evaluation in Counseling and Development, 22*, 117-125.
- Osipow, S., & Gati, I. (1998). Construct and concurrent validity of the Career Decision-Making Difficulties Questionnaire. *Journal of Career Assessment, 6*, 347-364.
- Peterson, G. W., Bullock-Yowell, E., & Lenz, J. G. (2012, June). *Assessing and enhancing readiness for career decision making: Findings and implications from recent research*. Presentation at the National Career Development Association Global Conference, Atlanta, GA.
- Reardon, R. C., PAR Staff, & Holland, J. L. (1996). *Self-Directed Search form R computer version* [Computer software]. Odessa, FL: Psychological Assessment Resources, Inc.
- Robbins, S. B., & Patton, M. J. (1985). Self-psychology and career development: Construction of the Superiority and Goal Instability Scales. *Journal of Counseling Psychology, 32*, 221-231.
- Robbins, S. B., Payne, E. C., & Chartrand, J. M. (1990). Goal instability and later life adjustment. *Psychology and Aging, 5*, 447-450. doi:10.1037/0882-7974.5.3.447
- Robbins, S. B., & Tucker, K. R. (1986). Relation of goal instability to self-directed and interactional career counseling workshops. *Journal of Counseling Psychology, 33*, 418-424.

- Sampson, J. P., Jr., McClain, M., Musch, E., & Reardon, R. C. (2013). Variables affecting readiness to benefit from career interventions. *Career Development Quarterly*, *61*, 98-109. doi: 10.1002/j.2161-0045.2013.00040.x
- Sampson, J., Peterson, G., Lenz, J., Reardon, R., & Saunders, D. (1996a). *Career Thoughts Inventory*. Odessa, FL: Psychological Assessment Resources, Inc.
- Sampson, J., Peterson, G., Lenz, J., Reardon, R., & Saunders, D. (1996b). *Career Thoughts Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Sampson, J. P., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1998). The design and use of a measure of dysfunctional career thoughts among adults, college students, and high school students: The Career Thoughts Inventory. *Journal of Career Assessment*, *6*, 115-134. doi:10.1177/106907279800600201
- 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
- Sampson, J., Reardon, R., Peterson, G., & Lenz, J. (2004). *Career counseling & services: A cognitive information processing approach*. Belmont, CA: Brooks/Cole-Thomson Learning.
- Savickas, M. L. (2011). *Career counseling*. Washington, DC: American Psychological Association.
- Savickas, M. L., Taber, B. J., & Spokane, A. R. (2002). Convergent and discriminant validity of five interest inventories. *Journal of Vocational Behavior*, *61*, 139-184. doi:10.1006/jvbe.2002.1878
- Super, D. E., & Thompson, A. S. (1979). A six-scale, two-factor measure of adolescent career or vocational maturity. *Vocational Guidance Quarterly*, *28*, 6-15.
- Walker, J. V., & Peterson, G. W. (2012). Career thoughts, indecision, and depression: Implications for mental health assessment in career counseling. *Journal of Career Assessment*, *20*, 497-506. doi: 10.1177/1069072712450010
- Wright, L., Reardon, R., Peterson, G., & Osborn, D. (2000). The relationships among constructs in the Career Thoughts Inventory and the Self-Directed Search. *Journal of Career Assessment*, *8*, 105-117.

Note: This paper is part of the annual VISTAS project sponsored by the American Counseling Association. Find more information on the project at: http://counselingoutfitters.com/vistas/VISTAS_Home.htm