Counseling for Career Decision-Making Difficulties: Measures and Methods

Itamar Gati and Nimrod Levin

Career indecision may be the primary reason people go to career counselors. Much effort has been exerted to identify and investigate the causes of clients' career decision-making difficulties. With the aim of facilitating clients' career decision making, the use of career indecision assessments can promote the effectiveness and efficiency of face-to-face career counseling. The authors review three evidence-based, cost-free assessments derived from decision theory: the Career Decision-Making Difficulties Questionnaire, the Emotional and Personality-Related Career Decision-Making Difficulties questionnaire, and the Career Decision-Making Profile questionnaire. The unique features of these assessments are described, and the ways they can contribute to facilitating career decision making in career counseling are explored with a case study example.

Keywords: career indecision, career assessment, career decision-making difficulties, emotional and personality-related career decision-making difficulties, career decision-making profile

People live in a period of accelerated modernization, one aspect of which is an increase in the already enormous number of occupational paths, college majors and courses, career specializations, types of professional training, and types of jobs. Meanwhile, career paths are becoming far less predictable and demand much more flexibility from individuals (Krumboltz & Levin, 2010). In this situation, individuals often find themselves overwhelmed, struggle to plan their professional future in the face of the practically endless possibilities they can attempt to realize, and seek professional help in the quest for a college major or deciding on a career path that will fulfill them (Illouz, 2008).

To help clients make better career decisions, many career counselors try not only to guide their clients toward the "right" decision but also to help them overcome the difficulties that impede their career decision making. Career counselors often attempt to teach their clients how to

make career decisions by providing insights about which actions are adaptive for career decision making using the framework of decision theory (Gelatt, 1962; Hilton, 1962; Kaldor & Zytowski, 1969; Katz, 1966; Tiedeman & O'Hara, 1963). According to this framework, career choice is essentially a situation in which an individual is in the process of deciding which occupational alternative(s) to pursue. To this end, the individual compares and evaluates the different alternatives using various factors. Consequently, facilitating clients' career decision making can be better achieved if each client's unique ways of making career decisions are taken into account and his or her difficulties are discovered.

Indeed, many factors contribute to the complexity and the difficulties involved in career decision making (e.g., Gati, 1986; Krieshok, Black, & McKay, 2009; Sauermann, 2005). First is the large number of alternatives from which to choose. Second, there are many factors or considerations to take into account (e.g., work environment, length of training, using or avoiding using numerical ability). Third, there is much uncertainty about the self and the world of work during the process. Fourth, most career decisions demand some compromise. Fifth, social barriers—imagined or real—often limit clients' career options. Finally, most clients are aware of the importance of their decision and worry about making the "wrong" decision.

Given the various causes of career indecision (cf. Gati & Tal, 2008; Osipow, 1999), career counselors could benefit from taxonomies and assessments that effectively evaluate this issue (National Career Development Association [NCDA], 2010). Therefore, we review three evidence-based career indecision assessments that provide pertinent information about three facets of individuals' career decision making: (a) the Career Decision-Making Difficulties Questionnaire (CDDQ; Gati, Krausz, & Osipow, 1996), which helps locate the foci of clients' difficulties in making career decisions; (b) the Emotional and Personality-Related Career Decision-Making Difficulties questionnaire (EPCD; Saka & Gati, 2007; Saka, Gati, & Kelly, 2008), which helps locate the sources of clients' indecisiveness; and (c) the Career Decision-Making Profile questionnaire (CDMP; Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010), which helps pinpoint the way each client tends to make career decisions. These assessments are available for use free of charge in both paper-and-pencil and computerized, Internet-based versions (see http://kivunim.huji.ac.il/cddq/).

We first introduce the theory underlying these assessments and then explore the ways in which these instruments provide core information that can help career counselors facilitate their clients' career decision making. Next, we discuss the multidimensional nature of these assessments and their unique features and advantages. In the final section, we present the case of Jim, a sophomore who has to choose a major, to illustrate how these assessments can be incorporated into face-to-face career counseling. Our review highlights the advantages of these process-oriented assessments; we do not discuss content-related assessments that attend to variables such as vocational interests, work values, abilities, and skills.

Assessing Clients' Career Decision-Making Characteristics

Career decision making requires gathering information about one's preferences and abilities and the various occupational alternatives and

training tracks, as well as the subsequent processing of this information. The challenge of adequately combining the information about oneself and the various relevant career alternatives is not trivial, and many individuals, especially young adults, feel incapable of doing this (Phillips & Jome, 2005; Sauermann, 2005; Van Esbroeck, Tibos, & Zaman, 2005). To help clients, counselors typically start by trying to discover what is impeding their clients' career decision making. In this respect, we maintain that assessments during intake should try to pinpoint each client's main difficulties in making decisions and how he or she makes career decisions. Each of these variables contributes to the severity of difficulties clients face in making a career decision and, thus, to the quality of its outcomes.

Assessing Career Decision-Making Difficulties

The assessment of individuals' career decision-making difficulties, namely, discovering the foci of the difficulties they face in the process, is one of the first steps toward helping clients make better career decisions (Gati & Tal, 2008). To promote this goal, Gati et al. (1996) proposed a taxonomy of career decision-making difficulties that includes three major clusters and 10 specific difficulty categories. The first cluster includes difficulties that arise prior to engaging in the decision-making process. These difficulties involve a lack of readiness, which may be caused by (a) a lack of motivation, (b) general indecisiveness, and (c) dysfunctional beliefs. The second and third clusters involve difficulties that typically arise during the process itself. Specifically, the second cluster includes difficulties that are due to a lack of information about (a) the career decision-making process itself (e.g., "What are the steps involved in choosing a major?"), (b) the self (e.g., preferences, interests, values, skills, abilities), (c) occupations or majors, and (d) ways of obtaining additional information and help. The third cluster includes difficulties that involve the use of information and are typically due to inconsistent information comprising (a) unreliable information, (b) internal conflicts, and (c) external conflicts.

On the basis of this taxonomy, Gati et al. (1996) developed the CDDQ (see Appendix A for examples of items). Compared with other assessments of career decision-making difficulties—such as the Career Decision Scale (CDS; Osipow, Carney, & Barak, 1976), which provides only a single global assessment of individuals' indecision—the CDDQ reveals various aspects of such difficulties (e.g., whether an individual's difficulties stem from a lack of knowledge about the decision-making process or dysfunctional beliefs that are hindering progress). Osipow and Gati (1998) showed that the results of individuals' CDDQ and CDS scores converge, but they argued that the multilevel and multidimensional model underlying the CDDQ supports its incremental utility over the CDS.

Specifically, the CDDQ provides multidimensional information about a client's career decision-making difficulties on three levels: (a) the 10 difficulty categories, which are based on the mean responses to the items in each scale; (b) the three major difficulty clusters, which are based on the mean of the three or four scales included in each cluster; and (c) a global level, which is based on the mean of the 10 difficulty scales. Gati,

Osipow, Krausz, and Saka (2000) found that career counselors' judgments of their clients' career decision-making difficulties were compatible with the assessment of their clients' difficulties as measured by the CDDQ. Different counseling intervention strategies are relevant for the various difficulties clients could face during their career decision making; these strategies, for instance, include a course in career decision making or an intervention aimed at promoting emotional intelligence, which can be used for difficulties in the lack of information cluster (Di Fabio & Kenny, 2011; Fouad, Cotter, & Kantamneni, 2009).

In summary, assessing clients' career decision-making difficulties allows counselors to better understand why their clients sought out counseling (i.e., a lack of readiness, a lack of information, an inability to use the information at hand, or a combination of several difficulties). This information can facilitate the counseling process by allowing counselors to focus on issues that prevent their clients from reaching a decision independently—the issues that brought them to seek professional help in the first place.

Assessing Emotional and Personality-Related Career Decision-Making Difficulties

Nine of the 10 CDDQ dimensions involve difficulties in career decision making that have been shown to be mostly temporary (Guay, Ratelle, Senécal, Larose, & Deschênes, 2006). Such difficulties are commonly perceived to be part of a normative phase and make up what is commonly labeled *developmental indecision* (Osipow, 1999; Tinsley, 1992). In contrast, some clients' difficulties are more chronic, often referred to as *career indecisiveness*, involving severe and pervasive difficulties that impede the career decision-making process for a longer period (Holland & Holland, 1977; Meldahl & Muchinsky, 1997; Osipow, 1999). In support of this distinction, previous research has revealed that, as theorized, career indecisiveness stems from emotional and personality-related factors and is harder to overcome (Geremeijs, Verschueren, & Soenens, 2006; Kelly & Pulver, 2002; Santos, 2001).

One of the 10 CDDQ categories measures clients' tendency for general indecisiveness; however, this category does not indicate the specific issues that contribute to its prevalence. Saka and her colleagues (Saka & Gati, 2007; Saka et al., 2008) proposed a taxonomy of the possible sources of career indecisiveness that integrates previously identified prominent emotional and personality-related factors underlying indecisiveness (e.g., Chartrand, Robbins, Morrill, & Boggs, 1990; Saka et al., 2008; Tokar, Withrow, Hall, & Moradi, 2003). This taxonomy includes 11 categories grouped into three major clusters. The first cluster, pessimistic views, involves the more cognitive facets of indecisiveness, including (a) pessimistic views about the decision-making process, (b) pessimistic views about the world of work, and (c) pessimistic views about one's control over the decision-making process and its outcome. The second cluster is composed of negative ramifications of anxiety in career decision making, including (a) anxiety about the process, (b) anxiety about the uncertainty involved in choosing, (c) anxiety about making a commitment to one's choice, and (d) anxiety about the outcome. The third cluster, self-concept and identity, involves developmental and personality-related aspects,

including (a) general trait anxiety, (b) low self-esteem, (c) uncrystallized identity, and (d) conflictual attachment and separation.

The EPCD was developed on the basis of this taxonomy (see Appendix B for examples of items). The EPCD was found to be associated with other relevant emotional and personality-related measures (Braunstein-Bercovitz, Benjamin, Asor, & Lev, 2012; Gati, Gadassi, et al., 2011). In addition, higher levels of these difficulties as measured by the EPCD were shown to predict less advancement in the decision status (as defined by the range of alternatives considered by the individual) of individuals 3 years later (Gati, Asulin-Peretz, & Fisher, 2011).

The EPCD facilitates assessing the sources of clients' general indecisiveness in career decision making. In practice, counselors can first administer the CDDQ to assess whether a client seems to have career decision-making difficulties involving indecisiveness, and, in relevant cases, the EPCD can be administered to further pinpoint the sources of the client's indecisiveness (e.g., pessimistic views, anxiety, self-concept and identity). Because difficulties involving career indecisiveness are regarded by career counselors as among the most severe and require the longest intervention (Gati, Amir, & Landman, 2010), being aware of them can help counselors to better plan and tailor the intervention by targeting the sources of these difficulties.

Assessing Career Decision-Making Profiles

Another element that can facilitate a client's career decision-making process is finding out about the way the client typically makes career decisions, namely, his or her career decision-making profile (Gati, Landman, et al., 2010). For instance, some individuals rely on others or try to please significant others; other individuals may have a more independent approach to career decision making, with an internal locus of control, as well as an active engagement in collecting information. It is important for career counselors to become familiar with their clients' typical decision-making behavior so they can tailor the counseling process to the unique way each of their clients makes career decisions. Indeed, studies have shown that individuals with different approaches to career decision making tend to respond best to counseling that is tailored to their particular style (e.g., Amit & Gati, 2013; Amit & Sagiv, 2013; Mau, 1995; Tinsley, Tinsley, & Rushing, 2002; Zakay & Tsal, 1993).

Previous research has often focused on individuals' most dominant career decision-making style (e.g., rational, intuitive, dependent; Harren, 1979). On the basis of the claim that this is an oversimplification, Gati and his colleagues (Gati, Gadassi, & Mashiah-Cohen, 2012; Gati, Landman, et al., 2010) proposed an alternative approach, the CDMP, in which 12 dimensions are used to characterize the ways individuals make career decisions.

Using profile rather than style to describe the ways individuals make career decisions indicates a more complex, multidimensional construct with several characteristics and acknowledges the influence of both personality and situational factors on different decision-making tasks. On the basis of a systematic analysis of previous research that focused on styles and subsequent empirical tests (Gati et al., 2012; Gati, Landman, et al., 2010; Gati & Levin, 2012), the following 12 dimensions were identified as making

up clients' career decision-making profiles: information gathering (minimal vs. comprehensive), information processing (holistic vs. analytic), locus of control (external vs. internal), effort invested in the process (little vs. much), procrastination (high vs. low), speed of making the final decision (slow vs. fast), consultation with others (rare vs. frequent), dependence on others (high vs. low), desire to please others (high vs. low), aspiration for an ideal occupation (low vs. high), willingness to compromise (low vs. high), and using intuition (little vs. much; see Appendix C for examples of items).

The CDMP's results can contribute to the counseling process in two ways. First, previous studies have found that, for some dimensions, one pole is more adaptive; specifically, comprehensive information gathering, a more internal locus of control, less procrastination, greater speed of making the final decision, less dependence on others, and less desire to please others were more adaptive for making career decisions (Gadassi, Gati, & Dayan, 2012). Indeed, clients' career decision-making adaptability (CDA) can be assessed using the scores of these six dimensions (Gati & Levin, 2012). Previous studies had found that individuals with higher CDA scores had significantly fewer career decision-making difficulties (Gati & Willner, 2013; Tian et al., 2013). In light of these findings, an initial evaluation of clients' CDMP scores can indicate maladaptive facets of their career decision making that should be addressed during counseling sessions. Second, as noted earlier, some counseling approaches may be more suitable for certain CDMP dispositions. Knowing, for example, that a client is more analytic than holistic in the information processing dimension, or that the client has little willingness to compromise, should shape the way the counselor conveys information and communicates with the client.

Summary

The CDDQ, EPCD, and CDMP can be administered in either a paper-and-pencil version or an Internet-based version (with automated scoring). Both versions are available for free. Counselors can also incorporate the rationale underlying these assessments as part of an informal assessment during face-to-face sessions. When career counselors use these assessments to discover each client's unique characteristics, they may better plan relevant interventions and facilitate their clients' career decision making more effectively.

Incorporating Career Indecision Assessments Into Face-to-Face Career Counseling

One of the goals of career counseling is to help clients make better decisions and choose the best option in a given situation (Gati, 2013; Pitz & Harren, 1980). Often, individuals approach career counselors for help in making decisions because they feel incapable of doing this on their own. Career counselors may do well to locate the causes of this feeling and empower their clients to deal with the difficulties (Gati et al., 2000). In the following composite case study, we illustrate how the three career-indecision-related assessments reviewed earlier may effectively help in achieving this goal. Names and some details have been altered to protect confidentiality.

The Case of Jim

Jim is at the end of his sophomore year at a state university. He was recently contacted by the student administration office reminding him to declare a major for his junior year. This reminder did not surprise Jim, because deciding on a major had been a cause for concern from the beginning of his sophomore year. During his freshman and sophomore years, Jim took and enjoyed classes in philosophy and history; he also dropped three courses in mathematics and biology that he began during his freshman year. The son of a physician, Jim feels pressured by his family to choose a major that will increase his chances of admission into medical school after graduation. Concerned about disappointing his family and unsure of the merits of choosing a humanities major in terms of prospects of employment, Jim is afraid of committing to a major that he may later regret.

The career center at Jim's university is responsible for thousands of students and uses an online battery of questionnaires for the initial assessment of the foci and causes of the career indecision of undeclared students. Jim received an automatic invitation from the career center to complete online assessments, which were sent to all sophomores who had not declared a major by May. The online assessment began with the CDDQ followed by the CDMP. Because the online analysis of Jim's responses to the CDDQ revealed that his difficulties included a moderate level of general indecisiveness, the interactive assessment system directed Jim to fill out the EPCD as well.

Jim contacted the career center, as recommended at the end of the online assessment, and set up a time to meet with a career counselor. To prepare for the counseling session, Laura (his counselor) retrieved Jim's results to the three assessments. Jim's responses to the CDDQ revealed moderate scores in the lack of readiness and inconsistent information clusters; however, his responses to the questionnaire did not reflect any substantial difficulties stemming from a lack of information. Specifically, in the lack of readiness cluster, Jim seemed to have difficulties involving general indecisiveness and dysfunctional beliefs but had no difficulty regarding a lack of motivation to engage in the decision-making process. In addition, in the inconsistent information cluster, the CDDQ indicated that Jim had severe difficulty that emerged because of external conflicts. Finally, although his lack of information cluster score was low, the results indicated that Jim had moderate difficulty choosing a major because of a lack of information about occupations.

Jim's responses to the EPCD suggested that the sources of his general indecisiveness included anxiety about the uncertainty involved in choosing and about the outcome, as well as conflictual attachment and separation. His responses to the CDMP reflected a mildly maladaptive decision-making profile stemming from high levels of procrastination, a slow speed of making the final decision, a high dependence on others, and a high desire to please others.

A few days later, Jim met with Laura at the university's career center. In response to Laura's question, Jim explained that he had to declare a major and cited the recommendation at the end of the online assessment to go to the career center as the major reason that brought him to career counseling. Laura reviewed the results of the online assessments and verified that they corroborated Jim's own conception of his problem.

This allowed Laura to quickly identify Jim's core dilemma—the conflict between the major he wanted and the one his parents were encouraging. Laura recommended that Jim deal with this issue by talking to his parents and discussing his deliberations with them, telling them that he feels pressured to make a choice that would please them but might not be good for him. Specifically, Laura suggested that he discuss the disagreement with his parents in terms of specific aspects or factors (e.g., prospect of employment, expected income, working in shifts, personal responsibility, fit with his interests) rather than alternatives (e.g., physician, high school teacher, historian). In light of the good relationship that Jim had had with his parents, he felt that Laura's suggestion to talk with his parents may indeed be the right next step.

In addition, Jim had difficulties resulting from the way he gathers information on occupations (e.g., he was not sure if it is wise to choose a major such as history in light of the slowdown of the economy). Laura directed him to the career center's website, which lists reliable databases that might help him make a more informed decision. At the end of the session, Laura told Jim to contact her in 3 weeks if he was still unable to make up his mind. In the end, following a long talk with his parents and in light of the information he found, Jim decided to choose history and biology as a double track despite the extra effort required.

As this case shows, assessing the foci of clients' career decision-making difficulties—the ones preventing them from making their decision by themselves—should be among the first steps taken by career counselors. That is because doing so involves the reason that the clients sought career counseling and gives the counselor information about the sort of help they need. When relevant, the client's emotional and personality-related career decision-making difficulties can also be considered. In addition, the client's decision-making profile should be assessed to allow for the intervention to be tailored to the client's unique set of challenges and to help the client use a more adaptive decision-making process.

The Incremental Value of the CDDQ, EPCD, and CDMP

The CDDQ provides information about each client's career decision-making difficulties, both at a global level and in three major clusters and 10 specific difficulties. After the client has completed the CDDQ, the counselor should review the results obtained, verify the conclusions that emerged, and discuss their implications with the client. Because the interpretation of the CDDQ is ipsative (i.e., within each client) rather than based on norm-group comparisons, it is straightforward and shows the difficulty categories in which the client has the highest scores. The counselor can then try to enhance the client's awareness of attitudes and behaviors that could impede his or her career decision making. In addition, counselors should assess the implications of these difficulties for the counseling by estimating the effect of the overall severity of the difficulties on the expected length of counseling (Gati, Amir, & Landman, 2010). Further suggestions for dealing with career decision-making difficulties are presented by Gati (2010).

Using the EPCD (Saka & Gati, 2007) in the assessment of career indecision is not appropriate for all clients. We suggest asking clients to fill it out only if general indecisiveness has emerged as a salient or

moderate difficulty in their CDDQ results. As mentioned previously, the EPCD helps in locating the sources of the client's indecisiveness in terms of three major clusters: pessimistic views, anxiety, and self-concept and identity. Such difficulties are associated more closely with each client's personality and, hence, might require more time for treatment. Assessing the sources of a client's general indecisiveness may reveal that the client is anxious not only about making the decision, but also because of the uncertainty involved in his or her future preferences and changes in the world of work. In such cases, the counselor can devote some of the counseling sessions to discussing these issues before the client engages in a systematic decision-making process. In cases in which significant emotional or personality-related difficulties are impeding the decision process, career counselors have to decide whether they are willing to provide a longer, more intensive intervention or should refer the client to an appropriate fellow professional.

The CDMP is another tool that can assist in assessing career indecision. We suggest using it only after mapping the client's career decision-making difficulties. The client's career decision-making profile provides the counselor with information about the way the client typically deals with decision-making difficulties. For instance, a client with a high score in the procrastination dimension might benefit from a discussion that leads to uncovering the cause of this predisposition and exploring its long-term consequences. Moreover, characterizing the client's decision-making profile is a way to reveal maladaptive decision-making behaviors. Gadassi et al. (2012) showed that certain CDMP dimensions have a more adaptive pole (e.g., internal locus of control and less dependence on others); therefore, a client's high scores in maladaptive CDMP dimensions should signal the counselor to focus on additional counseling goals. For example, if a client receives a high score in the CDMP dimension desire to please others, the counselor can illustrate the importance of balancing one's own desires with those of significant others.

The case study presented reflects the merits of administering the proposed decision-theory-based assessments before initiating face-to-face counseling or at its very beginning. Administering the assessments before the first session can save time and can allow the counselor to concentrate on discussing ways to deal with career decision-making difficulties during the face-to-face sessions. In addition, the assessments under review have three major advantages: (a) all three are multidimensional; (b) the CDDQ and the EPCD involve multilevel assessment; and (c) all have cost-free, paper-and-pencil and Internet-based versions, with the latter providing automatic scoring.

On the first point, whereas several other career-indecision-related assessments provide only a global, overall appraisal (e.g., the CDS), the three reviewed assessments are multidimensional. Instead of providing only a single scale score for each of the three career decision-making constructs, they make it possible to gather more refined and detailed information on clients' difficulties and ways of making career decisions (NCDA, 2010). Second, the CDDQ and the EPCD (but not the CDMP) are multileveled, allowing (a) a global appraisal (e.g., overall level of career indecision or indecisiveness), (b) mapping of the difficulties in terms of three global clusters (i.e., lack of readiness, lack of information, and

inconsistent information in the CDDQ, and pessimistic views, anxiety, and self-concept and identity in the EPCD), as well as (c) assessments in terms of specific difficulty categories.

The third point is that these career indecision assessments are also available in an online version that makes it possible to see whether the client filled out the questionnaire attentively and suggests caution in interpretation when the client filled out the questionnaire inattentively (Amir, Gati, & Kleiman, 2008). In addition, the interpretive feedback for the CDDQ, which was developed and validated using the expert judgments of career counselors (Amir et al., 2008), highlights the client's severe and moderate difficulties and outlines suggestions and recommendations for overcoming them.

One might rightly ask why we endorse integrating structured career indecision assessments into the one-on-one counseling process. The use of assessments together with automated scoring and interpretation validated by a group of expert career counselors (e.g., Amir et al., 2008) can assist counselors by corroborating their intuitions. Thus, we believe that the reviewed multidimensional assessments can help career counselors in two main ways. First, they provide a more refined portrait of the clients' needs, and second, they can complement the counselor's intuition and thereby increase the counselor's confidence in the assessment of these needs.

Despite their advantages, the limitations in using the CDDQ, EPCD, and CDMP should be acknowledged. First, being multidimensional, these assessments provide quite a lot of information about three related facets of the career decision-making process. Thus, the use of these assessments requires counselors to have sufficient knowledge and insights about how to incorporate the data obtained with each of these measures in the counseling process, as well as how to integrate the results of all three. Second, further research is needed to test the usefulness of these assessments with specific minority groups. Although these assessments have been translated and adapted for several countries worldwide (e.g., the CDDQ for more than 30 countries), future studies should investigate the clinical utility of these assessments with clients from different minority groups and cultures.

Conclusion

Career counseling involves helping clients face one of the most important decisions of their lives and, hence, should provide the best possible professional help. As the case of Jim demonstrates, integrating decision-theory-based career indecision assessments into one-on-one career counseling can increase not only the quality of the service provided but also its efficiency, enabling career counselors to use their precious time to focus on those aspects of counseling for which no alternative is available. Furthermore, when computerized assessments are incorporated into the counseling process, both the counselor and the computer bring their unique advantages into play: Counselors use their expertise to help the client overcome emotional and personality-related difficulties, in addition to the cognitive aspects of information processing (Gati & Asher, 2001; Sampson, Reardon, Peterson, & Lenz, 2004), whereas computers can facilitate locating and analyzing relevant information.

References

Amir, T., Gati, I., & Kleiman, T. (2008). Understanding and interpreting career decision-making difficulties. *Journal of Career Assessment, 16,* 281–309. doi:10.1177/1069072708317367

Amit, A., & Gati, I. (2013). Table or circles? A comparison of two methods for choosing among career alternatives. *The Career Development Quarterly, 61,* 50–63.

Amit, A., & Sagiv, L. (2013). The PreferenSort: A holistic instrument for career counseling. *Journal of Career Assessment, 21,* 249–264. doi:10.1177/1069072712471301

Braunstein-Bercovitz, H., Benjamin, B. A., Asor, S., & Lev, M. (2012). Insecure attachment and career indecision: Mediating effects of anxiety and pessimism. *Journal of Vocational Behavior, 81,* 236–244. doi:10.1016/j.jvb.2012.07.009

Chartrand, J. M., Robbins, S. B., Morrill, W. H., & Boggs, K. (1990). Development and validation of the Career Factors Inventory. *Journal of Counseling Psychology, 37,* 491–501. doi:10.1037/0022-0167.37.4.491

Di Fabio, A., & Kenny, M. E. (2011). Promoting emotional intelligence and career decision making among Italian high school students. *Journal of Career Assessment, 19,* 21–34. doi:10.1177/1069072710382530

Fouad, N., Cotter, E. W., & Kantamneni, N. (2009). The effectiveness of a career decision-making course. *Journal of Career Assessment, 17,* 338–347. doi:10.1177/1069072708330678

Gadassi, R., Gati, I., & Dayan, A. (2012). The adaptability of career decision-making profiles. *Journal of Counseling Psychology, 59,* 612–622. doi:10.1037/a0029155

Gati, I. (1986). Making career decisions: A sequential elimination approach. *Journal of Counseling Psychology, 33,* 408–417. doi:10.1037/0022-0167.33.4.408

Gati, I. (2010, April). *Career decision-making difficulties: Assessment and treatment.* Paper presented at the VI Conference on Career Development, Minho, Portugal. Retrieved from http://www.youtube.com/watch?v=Jn3MEtJFcEI

Gati, I. (2013). Advances in career decision making. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology* (4th ed., pp. 183–215). New York, NY: Routledge.

Gati, I., Amir, T., & Landman, S. (2010). Career counsellors' perceptions of the severity of career decision-making difficulties. *British Journal of Guidance and Counselling, 38,* 393–408. doi:10.1080/03069885.2010.503700

Gati, I., & Asher, I. (2001). Prescreening, in-depth exploration, and choice: From decision theory to career counseling practice. *The Career Development Quarterly, 50,* 140–157. doi:10.1002/j.2161-0045.2001.tb00979.x

Gati, I., Asulin-Peretz, L., & Fisher, A. (2011). Emotional and personality-related career decision-making difficulties: A three-year follow-up. *The Counseling Psychologist, 40,* 6–27. doi:10.1177/0011000011398726

Gati, I., Gadassi, R., & Mashiah-Cohen, R. (2012). Career decision-making profiles vs. styles: Convergent and incremental validity. *Journal of Vocational Behavior, 81,* 2–16. doi:10.1016/j.jvb.2012.03.004

Gati, I., Gadassi, R., Saka, N., Hadadi, Y., Ansenberg, N., Friedman, R., & Asulin-Peretz, L. (2011). Emotional and personality-related aspects of career decision-making difficulties: Facets of career indecisiveness. *Journal of Career Assessment, 19,* 3–20. doi:10.1177/1069072710382525

Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of career decision making. *Journal of Counseling Psychology, 43,* 510–526. doi:10.1037/0022-0167.43.4.510

Gati, I., Landman, S., Davidovitch, S., Asulin-Peretz, L., & Gadassi, R. (2010). From career decision-making styles to career decision-making profiles: A multidimensional approach. *Journal of Vocational Behavior, 76,* 277–291. doi:10.1016/j.jvb.2009.11.001

Gati, I., & Levin, N. (2012). The stability and structure of career decision-making profiles: A one-year follow-up. *Journal of Career Assessment, 20,* 390–403. doi:10.1177/1069072712448892

Gati, I., Osipow, S. H., Krausz, M., & Saka, N. (2000). Validity of the Career Decision-Making Difficulties Questionnaire: Counselee versus career counselor perceptions. *Journal of Vocational Behavior, 56,* 99–113. doi:10.1006/jvbe.1999.1710

Gati, I., & Tal, S. (2008). Decision-making models and career guidance. In J. Athanasou & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 157–185). Berlin, Germany: Springer.

Gati, I., & Willner, T. (2013). *The associations between career decision-making profiles and career decision-making difficulties.* Unpublished manuscript, Department of Psychology, Hebrew University of Jerusalem, Jerusalem, Israel.

Gelatt, H. B. (1962). Decision-making: A conceptual frame of reference for counseling. *Journal of Counseling Psychology, 9,* 240–245. doi:10.1037/h0046720

Geremeijs, V., Verschueren, K., & Soenens, B. (2006). Indecisiveness and high school students' career decision-making process: Longitudinal associations and the mediational role of anxiety. *Journal of Counseling Psychology, 53,* 397–410. doi:10.1037/0022-0167.53.4.397

Guay, F., Ratelle, C. F., Senécal, C., Larose, S., & Deschênes, A. (2006). Distinguishing developmental from chronic career indecision: Self-efficacy, autonomy, and social support. *Journal of Career Assessment, 14,* 235–251. doi:10.1177/1069072705283975

Harren, V. A. (1979). A model of career decision making for college students. *Journal of Vocational Behavior, 14,* 119–133. doi:10.1016/0001-8791(79)90065-4

Hilton, T. L. (1962). Career decision-making. *Journal of Counseling Psychology, 9,* 291–298. doi:10.1037/h0048309

Holland, J. L., & Holland, J. E. (1977). Vocational indecision: More evidence and speculation. *Journal of Counseling Psychology, 24,* 404–414. doi:10.1037/0022-0167.24.5.404

Illouz, E. (2008). *Saving the modern soul: Therapy, emotions, and the culture of self-help.* Berkeley: University of California Press.

Kaldor, D. R., & Zytowski, D. G. (1969). A maximizing model of occupational decision-making. *The Personnel and Guidance Journal, 47,* 781–788. doi:10.1002/j.2164-4918.1969.tb03006.x

Katz, M. (1966). A model of guidance for career decision-making. *Vocational Guidance Quarterly, 15,* 2–10. doi:10.1002/j.2164-585X.1966.tb01148.x

Kelly, K. R., & Pulver, C. A. (2002). Refining measurement of career indecision types: A validity study. *Journal of Counseling & Development, 81,* 445–454. doi:10.1002/j.1556-6678.2003.tb00271.x

Krieshok, T. S., Black, M. D., & McKay, R. A. (2009). Career decision making: The limits of rationality and the abundance of non-conscious processes. *Journal of Vocational Behavior, 75,* 275–290. doi:10.1016/j.jvb.2009.04.006

Krumboltz, J. D., & Levin, A. S. (2010). *Luck is no accident: Making the most of happenstance in your life and career* (2nd ed.). Atascadero, CA: Impact.

Mau, W. C. (1995). Decision-making styles as a predictor of career decision status and treatment gains. *Journal of Career Assessment, 3,* 90–101.

Meldahl, J. M., & Muchinsky, P. M. (1997). The neurotic dimension of vocational indecision: Gender comparability? *Journal of Career Assessment, 5,* 317–331. doi:10.1177/106907279700500305

National Career Development Association. (2010). *Career counselor assessment and evaluation competencies.* Broken Arrow, OK: Author.

Osipow, S. H. (1999). Assessing career indecision. *Journal of Vocational Behavior, 55,* 147–154. doi:10.1006/jvbe.1999.1704

Osipow, S. H., Carney, C. G., & Barak, A. (1976). A scale of educational and vocational undecidedness: A typological approach. *Journal of Vocational Behavior, 9,* 233–243. doi:10.1016/0001-8791(76)90081-6

Osipow, S. H., & Gati, I. (1998). Construct and concurrent validity of the Career Decision-Making Difficulties Questionnaire. *Journal of Career Assessment, 6,* 347–364. doi:10.1177/106907279800600305

Phillips, S. D., & Jome, L. M. (2005). Vocational choices: What do we know? What do we need to know? In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology* (3rd ed., pp. 127–153). Mahwah, NJ: Erlbaum.

Pitz, G. F., & Harren, V. A. (1980). An analysis of career decision making from the point of view of information processing and decision theory. *Journal of Vocational Behavior, 16,* 320–346. doi:10.1016/0001-8791(80)90059-7

Saka, N., & Gati, I. (2007). Emotional and personality-related aspects of persistent career decision-making difficulties. *Journal of Vocational Behavior, 40,* 340–358. doi:10.1016/j.jvb.2007.08.003

Saka, N., Gati, I., & Kelly, K. R. (2008). Emotional and personality-related aspects of career decision-making difficulties. *Journal of Career Assessment, 16,* 403–424. doi:10.1177/1069072708318900

Sampson, J. P., Jr., Reardon, R. C., Peterson, G. W., & Lenz, J. G. (2004). *Career counseling and services: A cognitive information processing approach.* Pacific Grove, CA: Brooks/Cole.

Santos, P. J. (2001). Predictors of generalized indecision among Portuguese secondary school students. *Journal of Career Assessment, 9,* 381–396. doi:10.1177/106907270100900405

Sauermann, H. (2005). Vocational choice: A decision making perspective. *Journal of Vocational Behavior, 66,* 273–303. doi:10.1016/j.jvb.2004.10.001

Tian, L., Guan, Y., Chen, S. X., Levin, N., Hou, F., Chen, P., . . . Zhang, S. (2013). *Predictive validity of career decision-making profiles over time: The Chinese case.* Manuscript submitted for publication.

Tiedeman, D. V., & O'Hara, R. P. (1963). *Career development choice and adjustment.* New York, NY: College Entrance Examination Board.

Tinsley, H. E. (1992). Career decision making and career indecision. *Journal of Vocational Behavior, 41,* 209–211. doi:10.1016/0001-8791(92)90022-R

Tinsley, H. E. A., Tinsley, D. J., & Rushing, J. (2002). Psychological type, decision-making style, and reactions to structured career interventions. *Journal of Career Assessment, 10,* 258–280. doi:10.1177/1069072702010002008

Tokar, D. M., Withrow, J. R., Hall, R. J., & Moradi, B. (2003). Psychological separation, attachment security, vocational self-concept crystallization, and career indecision: A structural equation analysis. *Journal of Counseling Psychology, 50,* 3–19. doi:10.1037/0022-0167.50.1.3

Van Esbroeck, R., Tibos, K., & Zaman, M. (2005). A dynamic model of career choice development. *International Journal for Educational and Vocational Guidance, 5,* 5–18. doi:10.1007/s10775-005-2122-7

Zakay, D., & Tsal, Y. (1993). The impact of using forced decision-making strategies on post-decisional confidence. *Journal of Behavioral Decision Making, 6,* 53–68. doi:10.1002/bdm.3960060104

APPENDIX A

Examples of Items From the Career Decision-Making Difficulties Questionnaire

Cluster and Difficulty Category	Item
Lack of readiness due to	
Lack of motivation	Work is not the most important thing in one's life and therefore the issue of choosing a career doesn't worry me much.
General indecisiveness	It is usually difficult for me to make decisions.
Dysfunctional beliefs	I believe that a career choice is a one-time choice and a life-long commitment.
Lack of information	
About the decision-making process	I find it difficult to make a career decision because I do not know what factors to take into consideration.
About the self	I find it difficult to make a career decision because I do not know what my abilities and/or personality traits will be like in the future.
About occupations	I find it difficult to make a career decision because I do not have enough information about the variety of occupations or training programs that exist.
About additional sources of information	I find it difficult to make a career decision because I do not know how to obtain additional information about myself (for example, about my abilities or my personality traits).
Inconsistent information due to	
Unreliable information	I find it difficult to make a career decision because I have contradictory data about the existence or the characteristics of a particular occupation or training program.
Internal conflicts	I find it difficult to make a career decision because I do not like any of the occupations or training programs to which I can be admitted.
External conflicts	I find it difficult to make a career decision because people who are important to me (such as parents or friends) do not agree with the career options I am considering and/or the career characteristics I desire.

APPENDIX B

Examples of Items From the Emotional and Personality-Related Career Decision-Making Difficulties Questionnaire

Cluster and Difficulty Category	Item
Pessimistic views	
About the process	I can't take all the relevant considerations into account when choosing a career.
About the world of work	Few careers are really interesting.
About individual's control	Choosing the right career mainly depends on luck.
Anxiety	
About the process	I am worried about having to deal with the complex process involved in career decision making.
About uncertainty	The world changes so fast that I'm afraid to make such a major decision like choosing a career at this point.
About the choice	I am afraid to commit to a career which might not be perfect for me.
About the outcome	I am already considering a certain career, but am afraid that it might not suit my skills.
Self-concept and identity	
General anxiety	I often regret things I have done, or feel stressed about them.
Self-esteem	I often feel inferior to others.
Uncrystalized identity	I still don't know what my values are and what I believe in.
Conflictual attachment and separation	I need approval for my choices from important people in my life.

APPENDIX C

Examples of Items From the Career Decision-Making Profile Questionnaire

Dimension	Item
Information gathering[a]	I prefer to make decisions after having thoroughly examined all possible alternatives.
Information processing	I usually compare the alternatives by considering their advantages and disadvantages.
Locus of control[a]	I am not solely responsible for the results of my decisions; fate and luck will affect my future career.
Effort invested in the process	I immerse myself entirely in the decision-making process.
Procrastination[a]	I tend to put off my career decision making.
Speed of making the final decision[a]	When I get to the final stage of making a decision, I hesitate quite a bit.
Consultation with others	I do not need to consult with others to make the right decision.
Dependence on others[a]	I do not want to make the decision alone; I want to share the responsibility with others.
Desire to please others[a]	I consider it important to choose the option that will satisfy my family and close friends.
Aspiration for an ideal occupation	I am striving to find the occupation that will satisfy all my preferences.
Willingness to compromise	If I am not able to enter a degree program in my chosen field, I will compromise and look for another one that is right for me.
Using intuition	When I need to make a choice, I tend to trust my instincts.

[a]Dimensions included in the career-decision-making adaptability score.