

## Chapter 10

# **FACILITATING the TRANSITION from SCHOOL to WORK with a CAREER DECISION-MAKING APPROACH: Process-Related Assessments and the PIC Model**

by **Nimrod Levin and Itamar Gati**

Individuals seek career counseling to facilitate their career development and make career decisions during different life transitions. One such transition that requires increasingly more careful planning nowadays is the transition from school to work. To help counselors provide services tailored to the needs of each individual client during this transition, we review two assessments intended to measure characteristics of individuals that involve the process of making a career decision: the Career Decision-Making Profile (CDMP) questionnaire and the Career Decision-Making Difficulties Questionnaire (CDDQ). In contrast to assessments of content (typically measuring abilities or vocational interests and preferences), the CDMP and CDDQ assess the process of making the decision. To demonstrate the use of the CDMP and CDDQ, we present a case study of the transition from school to work. We conceptualize career decision-making during this transition using the Prescreening, In-depth exploration, and Choice (PIC) model. The incremental value of using assessments of the decision-making process and relying on the PIC model for the transition from school to work is discussed.

Instability may have become one of the core features of the 21st century labor market. One manifestation of this increasing instability has been new graduates' inability to secure jobs in their fields of study, with young adults' unemployment rates reaching 16% in the USA and up to 56% in some European countries (McKinsey, 2014). To address this challenge, career counselors have proposed new theories and intervention models to help individuals plan their careers (Krieshok, Motl, & Rutt, 2011; Levin & Gati, in press; Pryor & Bright, 2011; Savickas et al., 2009). The common principle underlying many of these new theoretical and practical developments is that of replacing the notion of a single career choice with the idea of ongoing career management. Indeed, in the first half of the 20th century, a single career choice leading to a typical career trajectory

was often enough. This trend changed in the second half of the century, and now, in the 21st century, the focus is more often on helping clients with short-term decisions, acknowledging that it is practically impossible to predict the long-term career outcomes of a single decision (e.g., Krumholtz, 2009; Pryor & Bright, 2011). In addition, if counselors are to deal with the greater variety of short-term career decisions their clients face, they need to be informed about the vocational and employment situations each client faces, while adapting their approach to a variety of cases. In the present paper, we focus on the complexity involved in counseling for today's transition from school to work. Relying on the career decision-making perspective and specifically the PIC model (Gati, 2013; Gati & Asher, 2001), and viewing career counseling as aimed at facilitating the client's career decision-making (Gati & Levin, 2014b), we present and discuss the case of Nora, a college student majoring in political science and economics, who is at the end of her junior year and contemplating what to do after graduation. We begin with the presentation of Nora's dilemma and the assessment of how she makes career decisions (using the Career Decision-Making Profile Questionnaire [CDMP]; Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010; Gati, Gadassi, & Mashiah-Cohen, 2012) and the foci of her career indecision (using the Career Decision-making Difficulties Questionnaire [CDDQ]; Gati, Krausz, & Osipow, 1996). After describing why and how the CDMP and CDDQ can be incorporated into counseling, we review the Prescreening, In-depth exploration, and Choice (PIC) model (Gati & Asher, 2001), and discuss how it may be adapted for today's decisions that involve the transition from school to work.

### **Nora's Challenge: Coping with the School-to-Work Transition**

Nora is a student at the end of her junior year at a large state university majoring in political science and economics. She has not yet made up her mind about what she would like to do after graduation. Nora was happy with her choice of college majors: she was receiving a broad education that helped her understand and evaluate the global political and economic changes occurring in the second decade of the 21st century, as well as acquiring skills that she believed employers were seeking in new recruits. Furthermore, she was able to maintain a high grade point average and had an active social life that satisfied her. Like many of her classmates at the end of the junior year, Nora felt that she was approaching a critical point in her career. She was concerned that time was running out and that she needed to formulate a career plan soon.

In the months following spring break, Nora was considering three primary options to pursue upon graduation. One was to look for a job in the financial sector. However, in light of what she heard from her friends and

the headlines on the news, she was unsure whether she would be able to secure a job that would meet her expectations. Another option was to apply for an unpaying internship in one of the major financial firms or non-governmental organizations (NGOs), believing that this would be an essential stepping-stone to realizing her childhood dream of working for the UN. However, Nora would not be able to manage for another year without any income. The third option that Nora was considering was applying for an MBA program. While she was fortunate in having parents who paid for her undergraduate studies, the MBA program, would entail taking on a student loan that might take her years to repay. Furthermore, Nora knew that if she wanted to apply for such a program she would need to spend the summer months studying for the admission tests. None of the three options emerged as clearly better than the others, and Nora was frustrated because she was unable to make up her mind about what to do next.

As the summer vacation was approaching, Nora's sense of urgency due to her need to make a decision increased, leading to anxiety attacks. Consequently, her parents suggested seeking career advice at her college's counseling services. Although Nora had initially thought that counseling services only help students with their choice of academic major, the receptionist at the counseling office's front desk told her that she could also discuss her post-graduation career plans with a counselor. In preparation for the first face-to-face counseling session, the receptionist asked Nora to fill out an online assessment that the center uses for students at her career stage (i.e., approaching the transition from school to work). The initial assessments. The introduction to the online assessment stated that it is aimed at measuring the unique way in which Nora typically makes career decisions (using the Career Decision-Making Profiles questionnaire, CDMP; Gati et al., 2010; Gati et al., 2012) and locating the specific foci of Nora's career decision-making difficulties (using the Career Decision-making Difficulties Questionnaire, CDDQ; Gati et al., 1996). When a prominent tendency to indecisiveness is found in the analyses of the client's responses to the CDDQ, an additional measure is presented for locating the sources of this indecisiveness (the Emotional and Personality-related Career Decision-making Difficulties questionnaire, EPCD; Gati & Levin, 2014a; Saka, Gati, & Kelly, 2008). Nora was informed that after she had completed the online assessment, a copy of the results would be sent to the counselor assigned to deal with her case, and a counseling session would be scheduled.

### **Rationale: Assessing how Clients Make Career Decisions**

To help clients deal with the difficulties involved in career choice, both in general and in the transition from school to work in particular, career

counselors could begin by assessing their clients' characteristics and specific needs (Gati & Levin, 2014a; 2014b). Typically, counselors assess their clients' characteristics, namely their career-related preferences, interests, values, and abilities (Levin & Gati, in press). The goal of such assessments is to locate career alternatives that are compatible with the client's characteristics and thus that are more likely to increase the client's career-related success and satisfaction.

In the transition from school to work, however, most individuals have already taken into account their preferences and abilities in their choice of academic major or occupation. As a result, we (the authors) recommend at this point assessing each client's current needs to help him or her advance in the career decision-making process. Specifically, assessing the client's needs in this stage should involve identifying the specific challenges each client is facing or is likely to face. Some clients, for example, seek counseling to find out which occupations are more likely to satisfy them or which academic majors to choose, while others need help clarifying what they are looking for in terms of specific desirable characteristics (e.g., helping people, using verbal ability) or what they want to avoid (i.e., working outdoors, using numerical ability); some may seek guidance on how to increase the chances of actualizing specific career goals that they have already outlined for themselves. Revealing each client's needs and goals is essential for the success of counseling.

Another way to distinguish between the assessment of clients' characteristics and their needs is by distinguishing assessments of content from assessments of processes. Assessments of content involve measuring the client's preferences, abilities, and other characteristics, to provide the base for locating promising career options that can be put on the client's short list (Gati & Asher, 2001; Levin & Gati, in press). Assessments of processes, in contrast, involve aspects pertaining to the career decision-making process itself, including the foci or sources of clients' career indecision, stage in the career decision-making process, and career decision-making profiles (Gati & Levin, 2014a). Since Nora sought career counseling after having chosen a career path that seemed to fit her preferences and abilities, but was unsure about how to advance her career plans, assessments of the decision-making process were used in her case.

### **The Career Decision-Making Profile and Career Decision-Making Adaptability**

Individuals make career decisions in different ways (Gati et al., 2010; Harren, 1979). The Career Decision-Making Profile (CDMP) questionnaire was developed to assess the unique way each individual typically makes a career decision. It is based on a multidimensional taxonomy that acknowledges the effect of both personality and situational factors on the

career decision-making process (Gati et al., 2010). In contrast to previous career decision-making typologies, which highlight the individual's dominant career decision-making style (e.g., rational, intuitive, or dependent; Harren, 1979), the theoretical approach underlying the CDMP proposes that an individual's career decision-making behavior is multifaceted and should be addressed accordingly. Based on preceding theoretical accounts and subsequent empirical tests (Gati et al., 2010; Gati et al., 2012; Gati & Levin, 2012), the following 12 dimensions were suggested as comprising individuals' 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), consulting 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). The individual's score for each dimension is computed as the mean of the three items comprising each scale.

Although the CDMP dimensions are conceptually independent, previous research has shown that for six of the 12 CDMP dimensions, one pole is more adaptive – in terms of the associations between the CDMP scores, on the one hand, and in terms of personality dimensions regarded as adaptive, more advanced decision status, and fewer emotional and personality-related decision-making difficulties (Gadassi, Gati, & Dayan, 2012; Gadassi, Gati, & Wagman-Rolnick, 2013), on the other. Based on these findings, a global Career Decision-Making Adaptability (CDA) score is computed as the mean score of six of the 12 dimensions (Gati & Levin, 2012): Comprehensive information gathering, an internal locus of control, less procrastination, greater speed of making the final decision, less dependence on others, and less desire to please others were found to be more adaptive using these criteria, and thus a composite of the scores in these six dimensions constitutes the CDA score.

Previous validation studies have supported the psychometric properties of CDMP questionnaire and its derived scores (for a recent review see Gati & Levin, 2014a). In particular, the internal reliability, the two-week test-retest and the one-year temporal stability of the CDMP and its scores were supported (Gati & Levin, 2012). Recent studies have supported the cross-cultural validity of the CDMP in both Eastern and Western cultures (e.g., Gati et al., 2010; Tian et al., 2014). Furthermore, the incremental validity of the CDMP over other decision-making styles typologies was also demonstrated (Gati et al., 2012).

Nora's CDMP Results. Nora's responses to the CDMP indicated that she is comprehensive in information gathering (mean score on this scale was 6.0 on the 7-point scale) and analytical in information processing (M = 5.7). Her locus of control is mostly internal (M = 5.3), and she invests much effort in the process (M = 6.3). She is low in procrastination (M = 1.7) but slow in speed of making the final decision (M = 2.3). In addition, Nora tends to frequently consult with others (M = 6.3), and while her score in the desire to please others dimension is high (M = 5.0), she is low in her dependence on others (M = 2.0). She has a very high aspiration for an ideal occupation (M = 6.3) and a low willingness to compromise (M = 3.0). She had a moderate score in the using intuition dimension (M = 4.7). Finally, her CDA score was moderate (M = 4.9), reflecting that the way she tends to make career decisions can be improved. After reviewing Nora's results in the CDDQ, we describe how the CDMP assessment was integrated into her counseling sessions.

### **Career Decision-Making Difficulties**

Gati, Krausz, and Osipow (1996) developed the CDDQ to locate the foci of clients' career decision-making difficulties and assess their severity. In contrast to many previously developed measures of career indecision, which provide only a single overall career indecision score, the CDDQ is based on a multidimensional taxonomy that consists of ten specific difficulty categories that can be combined into three major clusters. The first cluster includes career decision-making difficulties that typically arise prior to engaging in the decision-making process, due to Lack of Readiness: lack of motivation, general indecisiveness, and dysfunctional beliefs. The second and third clusters include difficulty categories that typically arise during the process. The second cluster – Lack of Information – comprises four difficulty categories all involving lack of information about the career decision-making process, the self, occupations and majors, and ways of obtaining additional information and help. The third cluster – Inconsistent Information – comprises difficulties that involve the use of information due to Inconsistent Information: unreliable information, internal conflicts, and external conflicts.

Previous validation studies have supported the psychometric properties of CDDQ and its derived scores (for a recent review see Gati & Levin, 2014a). In particular, the internal reliability of the CDDQ scores were supported in both an Israeli and US samples by Gati and his colleagues (1996). Additional studies have lent support to the psychometric properties as well as the construct, content, and predictive validities in numerous cultural settings (Gati et al. 1996; Gati, Osipow, Krausz & Saka, 2000; Gati & Saka, 2001a, 2001b; Kelly & Lee, 2002; Mau, 2001; Osipow & Gati, 1998).

Nora's CDDQ Results. Nora's responses to the CDDQ indicated that overall she has a moderate level of career indecision. Her results in the Lack of Readiness cluster did not indicate that she was experiencing difficulties involving general indecisiveness; however, she did have a high score in the dysfunctional beliefs difficulty category (mean scale score of 6.8 on the 9-point scale). Similarly, her results for Lack of Information suggested difficulties involving lack of knowledge about how to make career decisions ( $M = 7.3$ ) and a high level of lack of information about occupations ( $M = 7.0$ ). Finally, her results in the Inconsistent Information cluster revealed a moderate level of difficulties involving internal and external conflicts ( $M = 5.2$ , and  $5.5$ , respectively). She did not report experiencing difficulty in the other five categories.

### **Incremental Value of the CDMP and CDDQ for Career Counseling**

The integration of the CDMP into career counseling can contribute in at least two ways (Gati & Levin, 2014a; 2014b). First, the CDMP helps career counselors identify their clients' maladaptive career decision-making strategies (Gadassi et al., 2012; Gadassi et al., 2013; Tian et al., 2014). For example, the CDMP may show that a client is unwilling to make any compromises or consider alternatives that do not perfectly match his or her aspirations. In such a case, the counselor should devote time for explaining why compromises are inevitable, as ideal jobs unfortunately exist only in dreams. Second, career counselors should tailor their counseling approach to each client's unique career decision-making characteristics, as studies have shown that this leads to better counseling outcomes (Amit & Gati, 2013; Mau, 1995; Tinsley, Tinsley, & Rushing, 2002; Zakay & Tsal, 1993). For example, clients who make decisions more analytically respond better to interventions that break down the process of career choice into smaller steps, as opposed to a more holistic approach. Thus, integrating the information from the CDMP into career counseling is expected to increase its efficiency and effectiveness.

Using the CDDQ, career counselors can obtain a reliable and valid assessment of their clients' foci of career indecision on three levels: in terms of the ten difficulty categories, the three major difficulty clusters, and a global assessment of the severity of clients' career indecision. Being multidimensional, the CDDQ enables career counselors to assess the degree to which career indecision is a major issue to be addressed during interventions, and also provides information about the specific factors contributing to this indecision and the relative severity of each factor. Some individuals suffer from chronic indecisiveness, which differs from career indecision that is regarded as a normal phase that most individuals undergo during career development (Brown & Rector, 2008; Gati & Levin, 2014a). While nine of the CDDQ categories assess career indecision, the CDDQ category of general indecisiveness focuses on chronic

indecisiveness. When a client's score in the CDDQ's general indecisiveness category is high, we recommend using the Emotional and Personality-related Career Decision making questionnaire (EPCD, Saka et al., 2008) as well. Since this was not an issue in the case of Nora, we will not further review the EPCD and its merits here. Interested readers are encouraged to see a review of the EPCD with a relevant case study (Gati & Levin, 2014a).

Finally, simultaneously integrating both the CDMP and CDDQ into counseling as primary assessments contributes in two principal ways to intervention planning (Gati & Levin, 2014a; 2014b). First, this integration allows the counselor to efficiently assess a variety of factors contributing to career indecision and maladaptive career decision-making behavior, and thus indicating which factors should be dealt with during counseling. Second, counselors can use the scores to rank-order the various issues that should be addressed according to the specific needs of each client. Breaking the general task into smaller components, and assessing the contributions of each factor to clients' difficulties allows counselors to decide which issue should be dealt with first and how to sequence later issues. In Nora's case, based on her results, we recommend beginning with the more general issue of dysfunctional beliefs, then discussing the steps involved in making career decisions, followed by explicating and dealing with Nora's internal and external conflicts.

### **Interpreting Nora's Results: Moderately Adaptive but also Moderately Indecisive**

Nora's results in the CDMP indicated that she is moderately adaptive in career decision-making. In addition, her CDDQ results highlighted the foci of her career indecision. For seven scales (out of 22 measured in both the CDMP and the CDDQ), she reported having career decision-making related issues that should be discussed in the counseling sessions: her low speed of making the final decision and high desire to please others as indicated by her CDMP scores, as well as the dysfunctional beliefs, lack of knowledge about how to make career decisions, lack of information about occupations, and internal and external conflicts difficulty categories that emerged as salient in her CDDQ assessment. As mentioned, a general picture emerged: Nora is likely to benefit from a career intervention that will (1) allow her to acquire a better ability to cope with the influence of significant others, (2) help her dismantle and reframe her dysfunctional beliefs, and (3) provide her with a better understanding of ways to evaluate and assess the three options she is deliberating about as part of the Choice stage, based on comprehensive information. Nora's scores in the CDMP's desire to please others dimension and the CDDQ's dysfunctional beliefs category suggest that she holds some beliefs about



the role that significant others should play in her career development, impeding her ability to make satisfying decisions. Believing that her choice should satisfy significant others in her life is an example of a dysfunctional belief that could lead Nora to avoid attempting to pursue the option she would otherwise favor. This is, however, an imagined hurdle that is constructed by one's thoughts (Levin & Gati, in press). It is the counselor's task to empower clients with ways to make the best decision.

Once the counselor has helped Nora construct a better picture of how careers should be planned and developed, the next issue that should be dealt with is her lack of knowledge about the steps involved in making career decisions. To deal with this difficulty, the counselor should introduce Nora to the three stages of the PIC model described in the next section. Nora's difficulties involving internal conflicts suggest that she has conflicting preferences: she would like to enter an MBA program, but would also like to get a taste of the real world with an internship in an NGO. Counselors can help their clients deal with such conflicts by systematically comparing the alternatives in terms of their advantages and disadvantages, taking into account the relative importance of the factors involved in the comparison.

Clients should also be encouraged to give more weight to information gathered from reliable sources. Indeed, a crucial role of career counselors is directing clients to relevant sources of information and enhancing their ability to evaluate the quality of these sources. The way to address informational discrepancies and inconsistencies is discussing them with clients and suggesting ways of resolving them on the basis of their underlying causes. By such a discussion Nora would be likely to experience less difficulty involving lack of information about occupations. Finally, her lack of information about occupations is probably also associated with being unsure what her best course of action is. Specifically, Nora is deliberating among trying to find a paying job, seeking an unpaid internship, or applying to graduate school. Each alternative has its own advantages and disadvantages, but the process of finding the best course of action could be made easier if she had more accurate information about the three options. Furthermore, as we discuss in the following section on the PIC model, Nora would benefit from comparing specific career alternatives instead of merely considering general options.

### **Summary of Nora's Case.**

Nora approached career counseling at a point when she was involved in choosing her next professional step, after having chosen her academic majors (political science and economics) and being satisfied with that choice. As a consequence, assessment of her abilities and preferences would be unlikely to add much information to help her planning her next

steps. Asking Nora about her academic experience and accomplishments would be more relevant at this point. Furthermore, while in most cases career counselors help their clients choose a career profession that is likely to satisfy them, in today's transition from school to work, counselors should also help clients understand the possibilities for their future career development (based on their previous education).

### **Decision Theory: Adapting the PIC Model to the Transition from school to work**

In the previous section, we demonstrated why and how the CDMP and CDDQ can be incorporated into career counseling for a client approaching the transition from school to work. We argued that at the time of this transition, assessments of the process may be more relevant to facilitate career development than assessments of content (i.e., clients' preferences and abilities). The goal of the present section is to show how assessments of the decision-making process facilitate this process in accordance with the PIC model (Gati & Asher, 2001). Following a brief explanation of the career decision-making perspective, we present the PIC model, as a prescriptive career decision-making model (Gati, 2013), and demonstrate how to implement it with clients approaching the transition from school to work, in general, and for Nora in particular.

Career-counseling interventions typically occur toward or during career transitions, when clients are facing a decision about their next step. Choosing among different educational alternatives, professional training programs, or various jobs, to name only a few examples, are the types of decisions many clients face. Clients expect counselors to help them choose the best alternative, often expressing this notion as the desire to discover oneself (Levin & Gati, in press). From such a standpoint, it may be argued that career counseling has two complementary goals: facilitating the process of making the decision and maximizing the desirable outcomes of the choice.

The purpose of career counseling during transition from school to work is specifically helping clients move from the core role of a student to that of a working individual (Savickas et al., 2009; Super, 1980). Such a transition requires adapting to the world of work, which most individuals are still only partially acquainted with at that point. We consider adapting to the world of work, in this respect, as the ability to quickly choose and secure a position in the labor market that will satisfy the client in the present and will contribute to his or her later career development. To do this, clients need to be informed about what their options are, how to gather new relevant information, and how to make a choice that integrates what the client knows about his or her self and the world of work. Conceptualized in this way, the transition from school to work can also

be addressed as a decision-making problem. The *career decision-making approach* is the general term used to denote a group of theories and practices that have been developed on the basis of general decision theory but adapted to the context of career decisions (Gati, 2013; Gati & Tal, 2008). From a career decision-making perspective, the goal of career counseling is to help clients make a career choice that will be most satisfying. A more modest goal is to help clients make better career decisions (Gati & Levin, 2014b). Since the world of work has a great variety of complex alternatives, career decision-making models are needed to help analyze the relevant data systematically and synthesize it to facilitate locating the best alternative(s). One such model is the PIC model, introduced by Gati and Asher (2001).

### **The PIC model.**

Due to the complexity involved in making career decisions, dividing the process into distinct stages can facilitate its completion. The PIC model breaks down the process into three distinct and sequential stages: prescreening, in-depth exploration, and choice (Gati & Asher, 2001). The PIC model was introduced primarily to facilitate career decisions, namely as a means of organizing information about the large number of occupations and career paths. In this section, we show how the PIC model can also be useful for the transition from school to work in general, and in helping Nora with her decision in particular. The desirable outcome of the prescreening stage is a small number of promising career alternatives. Clients approaching the transition from school to work should be informed about the various types of career alternatives that they might choose to pursue at this point (e.g., graduate school, internships, short-term and long-term jobs). For prescreening, a systematic search that takes into account a wide range of factors and aspects (e.g., one's sources of financial support, location, prospects for advancement) is suggested. By considering a wider range of career-related factors and aspects, clients are more likely to discover promising career alternatives that will satisfy them. Eventually, up to 5-7 specific career alternatives should be located by the end of this stage. The goal of the in-depth exploration stage is to thoroughly compare the career alternatives that were identified as promising in the previous stage. This involves focusing on each of these alternatives, and checking whether it is compatible with the client's characteristics and whether the client is compatible with the core characteristics of the considered career (e.g., need to relocate, working only outdoors). This will probably reduce the number of apparently suitable options. In the third and last stage of the PIC model, clients are expected to reach a choice that they are interested in implementing. After the alternatives that emerged as potentially promising in the prescreening stage have been systematically investigated in the in-depth exploration stage,

a final short list of 2-4 alternatives should be systematically compared at the choice stage. The outcome of this stage should be a rank-order of the suitable alternatives based on their relative advantages and disadvantages. Rather than choosing only one of the alternatives, the client should rank-order several suitable alternatives according to their desirability, as this would make it easier to see what the next option should be in case the first one cannot be actualized.

### **Implementing the PIC model in Nora's Case.**

Nora approached counseling when she was considering three general courses of actions (i.e., a paying job, an internship, or graduate school). These should not, however, be considered only as three alternatives, but rather as three types of career alternatives. If Nora perceives each of these general possibilities as realistic based on her in-depth exploration, she should focus on finding specific career alternatives within each of these general types. Then she should gather information about specific career alternatives (e.g., graduate programs, job openings in particular companies, available internships). Finally, as the core of the choice stage, she should compare the options systematically, considering their relative advantages and disadvantages. This involves taking into account the relative importance of the factors considered in the comparison, and the degree of fit between her desired characteristics (e.g., no need to relocate) and the respective characteristic of each of the alternatives, for each of the relevant factors. A decision-support module (e.g., [www.cddq.org/choice](http://www.cddq.org/choice), retrieved September 30, 2014), which guides the client through the steps of such a systematic comparison, can facilitate the comparison. Nevertheless, the career counselor can ask Nora to explicate her intuitions about what seems to her the best alternative before she compares them systematically. If the results of the systematic comparison match the alternative Nora selected intuitively as best, Nora's (as well as her counselor's) confidence that it is indeed the best option is likely to increase. If there is a discrepancy, however, the counselor can help Nora to explore its potential sources: perhaps some factors taken into account in Nora's intuitive choice were not taken into account in the systematic comparison, or vice versa.

### **Summary**

In the present paper, we focused on ways for career counselors to help clients with their transition from school to work. Career counseling for such clients may often involve helping them choose among distinct clusters of professional paths, such as finding a paying job, locating an internship to gain more professional experience, or going on to graduate studies to acquire more professional skills. Considering the increased complexity of the decision at this stage, we demonstrate the benefits of a career decision-making approach to career counseling. Given that career

counseling at this stage is intended for clients who have already chosen their college major or type of professional training, and since many of them are probably interested in pursuing a related career, the relevant range of career alternatives excludes certain fields, and so career counseling at this stage should focus on making a career decision grounded in previous ones.

## References

- Amit, A., & Gati, I. (2013). Table or circles: A comparison of two methods for choosing among career alternatives. *Career Development Quarterly* **61**, 50-63. doi:10.1002/j.2161-0045.2013.00035.x
- Brown, S. D., & Rector, C. C. (2008). Conceptualizing and diagnosing problems in vocational decision making. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 392-407). Hoboken, NJ, US: John Wiley & Sons Inc, xv.
- 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
- Gadassi, R., Gati, I., & Wagman-Rolnick, H. (2013). The adaptability of career decision-making profiles: Associations with self-efficacy, emotional difficulties, and decision status. *Journal of Career Development* **40**, 490-507. doi:10.1177/0894845312470027
- Gati, I. (2013). Advances in career decision making. In B. W. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology* (4th ed., pp. 183-215). New York: Routledge.
- Gati, I., & Asher, I. (2001). Prescreening, In-Depth Exploration, and Choice: From decision theory to career counseling practice. *Career Development Quarterly* **50**, 140-157. doi:10.1002/j.2161-0045.2001.tb00979.x
- 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., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in 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., & Levin, N. (2014a). Counseling for career decision-making difficulties: Measures and methods. *The Career Development Quarterly* **62**, 98-113. doi:10.1002/j.2161-0045.2014.00073.x
- Gati, I., & Levin, N. (2014b). Making better career decisions. In P. J. Hartung, M. L. Savickas, & B. W. Walsh (Eds.), *Handbook of career intervention: Vol. 2. Applications* (pp. 193-207). Washington, DC: American Psychological Association.
- Gati, I., Osipow, S. H., Krausz, M., & Saka, N. (2000). Validity of the career decision-making difficulties questionnaire: Counselors' versus career counselors' perceptions. *Journal of Vocational Behavior* **56**, 99-113. doi:10.1006/jvbe.1999.1710
- Gati, I., & Saka, N. (2001a). High school students' career related decision-making difficulties. *Journal of Counseling and Development* **79**, 331-340. doi:10.1002/j.1556-6676.2001.tb01978.x
- Gati, I., & Saka, N. (2001b). Internet-based versus paper-and-pencil assessment: Measuring career decision-making difficulties. *Journal of Career Assessment* **9**, 397-416. doi:10.1177/106907270100900406
- 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.
- 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
- Kelly, K. R., & Lee, W.C. (2002). Mapping the domain of career decision problems. *Journal of Vocational Behavior* **61**, 302-326. doi:10.1006/jvbe.2001.1858
- Krieshok, T. S., Motl, T. C., & Rutt, B. T. (2011). The evolution of vocational psychology: Questions for a postmodern applied discipline. *Journal of Career Assessment* **19**, 228-239. doi:10.1177/1069072710395530.
- Krumboltz, J. D. (2009). The happenstance learning theory. *Journal of Career Assessment* **17**, 135-154. doi:10.1177/1069072708328861
- Levin, N., & Gati, I. (in press). Imagined and unconscious career barriers: A challenge for career decision making in the 21st century. In K. M. & A. D. Fabio (Eds.), *Exploring new horizons in career counselling:*

*Converting challenges into opportunities* (pp. xx-xx). Rotterdam, The Netherlands: Sense Publishers.

Mau, W.C. (1995). Decision-making style as a predictor of career decision-making status and treatment gains. *Journal of Career Assessment* **3**, 89-99. doi:10.1177/106907279500300107

Mau, W. C. (2001). Assessing career decision-making difficulties: A cross-cultural study. *Journal of Career Assessment* **9**, 353-364. doi:10.1177/106907270100900403

McKinsey (2014). *Education to employment: Getting Europe's youth into work*. [http://www.mckinsey.com/insights/social\\_sector/converting\\_education\\_to\\_employment\\_in\\_europe](http://www.mckinsey.com/insights/social_sector/converting_education_to_employment_in_europe), retrieved September 1, 2014.

Osipow, S. H., & Gati, I. (1998). Construct and concurrent validity of the career decision-making difficulties questionnaire. *Journal of Career Assessment* **6**, 345-363. doi:10.1177/106907279800600305

Pryor, R., & Bright, J. (2011). *The chaos theory of careers: A new perspective on working in the twenty-first century*. New York and London: Routledge.

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

Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Daurte, M. E., Guichard, J., Soresi, S., Esbroeck, R. V., & Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior* **75**, 239-250. doi:10.1016/j.jvb.2009.04.004

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior* **16**, 282-298. doi: 10.1016/0001-8791(80)90056-1.

Tian, L., Guan, Y., Chen, S. X., Levin, N., Hou, F., Chen, P., Cai, Z., Zhu, C., & Zhang, S. (2014). Predictive validity of career decision-making profiles over time among Chinese college students. *Journal of Career Development* **41**, 282-300. doi:10.1177/0894845313495590

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

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.396006010

## About the authors



**Nimrod Levin, MA**, is a PhD student at the Edmond and Lily Safra Center for Brain Sciences (ELSC), at the Hebrew University of Jerusalem. He earned the BA in Psychology and in the Amirim Interdisciplinary Honors Program, Hebrew University of Jerusalem, 2012; the MA in Brain Research: Computation and Information Processing, in 2014. He teaches at the Amirim Interdisciplinary Honors Program and at Lafer Center for Women and Gender Studies, at the Hebrew University of Jerusalem. He is the recipient of a number of prestigious awards and fellowships, including the Amirim fellowship for outstanding students (2009-2012), the Zlotowski Center for Neuroscience fellowship (2011), the Tikvah-Princeton University fellowship (2012), and the ELSC fellowship (2012-present). To date, he coauthored four journal articles and two book chapters. Contact him as follows: ***Nimrod Levin, MA, School of Education, Hebrew University, Jerusalem 90905, ISRAEL. Tel: +972-54-637-1010, e-mail: Levin.nimrod@gmail.com.***



**Itamar Gati, PhD**, is Samuel and Esther Melton Professor at the Departments of Psychology and Education, at the Hebrew University of Jerusalem. He earned the BA in Psychology and Economics, Hebrew University, 1972; MA in Psychology, Hebrew University, 1975; PhD in Psychology Hebrew University, 1978. Post-Doc at Stanford University 1978-1979, Visiting professor at the OSU 1986-1987. Faculty member at the Hebrew University from 1979; Head, Department of Education at the Hebrew University, 1991-1994. Fellow of APA Div 17 (Counseling Psychology) and Div 52 (International Psychology), Fellow of the NCDA, Eminent Career Award from the NCDA 2010, Lifetime Achievement Award from the International Section of Division 17 of APA 2010. He has authored or co-authored over 120 publications and delivered more than 100 international presentations related to career development. He is the developer of [www.cddq.org](http://www.cddq.org), a free, anonymous, evidence-based career planning system. He is on the editorial boards of the Career Development Quarterly, Journal of Counseling Psychology, and the Journal of Career Assessment. Coauthor of career decision-making-process-related assessments, including the Career Decision-Making Difficulty Questionnaire (that was adopted and adapted in 41 countries), the Emotional and Personality-Related Career Decision Difficulties, The



Career Decision-Making Profile questionnaire, and head of development teams of Internet-based, Self-help, Interactive Career Assessment and Guidance, anonymous and free websites([www.cddq.org](http://www.cddq.org) in English, [www.kivunim.com](http://www.kivunim.com) in Hebrew).

Contact him as follows:

***Itamar Gati, PhD, Professor of Psychology  
School of Education, Hebrew University  
Jerusalem 90905, ISRAEL  
Tel: +972-2-5882170  
e-mail: [itamar.gati@huji.ac.il](mailto:itamar.gati@huji.ac.il)***