

The Adaptability of Career Decision-Making Profiles

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The *Career Decision-Making Profiles* questionnaire (CDMP; Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010) uses a new model for characterizing the way individuals make decisions based on the simultaneous use of 11 dimensions. The present study investigated which pole of each dimension is more adaptive. Using the data of 383 young adults who were about to make a career choice, we assessed the individuals' decision status and the associations of the dimensions Emotional and Personality-related Career decision-making Difficulties (EPCD; Saka, Gati, & Kelly, 2008) and personality factors (NEO Personality Inventory-Revised; Costa & McCrae, 1992). The results suggest that, as hypothesized, comprehensive *Information gathering*, analytic *Information processing*, a more internal *Locus of control*, more *Effort invested*, less *Procrastination*, greater *Speed of making the final decision*, less *Dependence on others*, and less *Desire to please others* were more adaptive in making career decisions. However, contrary to our hypotheses, high *Aspiration for an ideal occupation* was more adaptive for the decision-making process, *Willingness to compromise* was not associated with more adaptive decision making, and the results regarding *Consulting with others* were mixed. Gender differences in the CDMP dimensions and counseling implications are discussed.

Keywords: career decision making, career decision-making styles, career indecision, career indecisiveness, career decision-making profiles

Career decisions can be regarded as a special case of decision making in general (e.g., Gati, 1986; Krieshok, Black, & McKay, 2009; Sauer mann, 2005). From this perspective, one of the main roles of career counselors is to guide their clients through the decision-making process, helping them make their decisions more effectively (Annastasi, 1979; Gati & Tal, 2008). Therefore, in addition to identifying deliberating individuals' career decision-making difficulties (Brown & Rector, 2008; Gati, Krausz, & Osipow, 1996) and decision goals (Sauer mann, 2005), decision-oriented career counseling needs to assess the way individuals approach the career-decision process, namely, their career decision-making *style* (Harren, 1979; Kelly & Gunn, 2006; Phillips & Paziienza, 1988) or *profile* (Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010).

Previous studies of career decision-making styles have yielded mainly taxonomies based on the assumption that decision-making style is a fairly stable personality trait (e.g., Harren, 1979; Scott & Bruce, 1995). Research in this field has typically focused on the classification of individuals into a "type," based on a single dominant characteristic (e.g., rational; Arroba, 1977). However, studies using these taxonomies to investigate individuals' decision making have revealed that this approach only partially accounts for individual differences (Shiloh, Salton, & Sharabi, 2002), and may be insufficient for diagnosing individuals in a way that can help them advance in their career decision-making process (Singh & Greenhaus, 2004). Moreover, the many different taxonomies attest to the existence of a vast number of characteristics that can be used to describe individuals' decision-making style (Gati et al., 2010).

On the basis of the limitations of the single-most-dominant-trait approach to decision-making styles, Gati and his colleagues (2010) proposed an alternative, multidimensional model focusing on *career decision-making profiles* (CDMP) rather than *career decision-making styles*. The 11 dimensions of the CDMP model used for describing individuals' career decision making were derived from a systematic analysis of the literature on career decision-making styles. Gati et al. (2010) first located 40 labels used to describe career decision-making styles in previous research; they then classified each of these 40 styles into one of 16 prototypes. Next, the common and distinctive characteristics of the 16 prototypes were analyzed so as to further reduce the list and reveal the basic dimensions distinguishing them. This analysis resulted in 11 dimensions relevant for characterizing career decision making, each representing a continuum on a bipolar scale:

Information gathering (comprehensive vs. minimal)—the degree to which the individual is thorough in collecting and organizing information.

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Information processing (analytic vs. holistic)—the degree to which the individual analyzes information into its components and processes the information according to these components.

Locus of control (internal vs. external)—the degree to which individuals believe they control their occupational future and feel that their decisions affect their career opportunities.

Effort invested in the process (much vs. little)—the amount of time and effort the individual invests in the decision-making process.

Procrastination (high vs. low)—the degree to which the individual avoids or delays beginning or advancing through the career decision-making process.

Speed of making the final decision (fast vs. slow)—the length of time individuals need to make their final decision once the information has been collected and compiled.

Consulting with others (frequent vs. rare)—the extent to which the individual consults with others during the various stages of the decision process.

Dependence on others (high vs. low)—the degree to which individuals accept full responsibility for making their decision, as opposed to expecting others to make the decision for them.

Desire to please others (high vs. low)—the degree to which the individual attempts to satisfy the expectations of significant others (e.g., parents, partner, friends).

Aspiration for an ideal occupation (high vs. low)—the extent to which individuals strive for an occupation that is perfect for them.

Willingness to compromise (much vs. little)—the extent to which individuals are willing to be flexible about their preferred alternative when they encounter difficulties in actualizing it.

The CDMP model was developed on the basis of the following seven claims (Gati et al., 2010): (1) Individuals make career decisions in different ways; (2) an individual's approach to the career decision-making process can be described better by a multidimensional profile than by a single dominant trait (or style); (3) each dimension of the CDMP model represents a continuum between two poles along which individuals can be characterized; (4) although the dimensions are not independent, each contributes to the description of the way individuals make their career decisions; (5) as with many personality-related measures, the dimensions cannot be combined to generate a single total score; (6) depending on the dimension, one pole is often more adaptive for decision making than the other; and (7) whereas some dimensions are mainly personality related, others are more situational (i.e., affected mainly by the specific decision task the individual is facing).

On the basis of the proposed model, Gati et al. (2010) developed the CDMP questionnaire. In a series of studies (Gati et al., 2010), the model's internal consistency reliability and cross-cultural equivalence were supported by both the Hebrew and the English versions of the CDMP questionnaire. Previous research (Gati et al., 2010; Gati & Levin, in press) supported the first five claims underlying the model as well as its convergent and incremental validity in comparison to previous models of career decision-making style (Gati, Gadassi, & Mashiah-Cohen, 2012). The claim regarding the adaptability of the dimensions, which has not been tested before, was the focus of the present research.

The Adaptability of the CDMP Dimensions

Career adaptability has a number of definitions. It is generally defined as the ability to change so as to fit into new career-related circumstances (cf. Koen, Klehe, Van Vianen, Zikic, & Nauta, 2010). Savickas (1997, 2005) claims that career adaptability consists of looking ahead to one's future career (planning), knowing what career to pursue (decision making), looking around at various career options (exploration), and having a feeling of self-efficacy for successfully executing the activities needed to achieve one's career goals (confidence). In the present study, we focus specifically on the adaptability of the way individuals make career decisions rather than on the more general construct of career adaptability. We defined *career decision-making adaptability* as the ability to make career decisions after sufficiently considering information needed for the decision, without unnecessary delays in either entering or completing the process.

Previous research has claimed that decision-making styles differ in their adaptiveness (e.g., rational and intuitive styles are adaptive, whereas a dependent one is not; Phillips & Paziienza, 1988; Singh & Greenhaus, 2004). Similarly, one pole of a CDMP dimension may be more adaptive than the other. The goal of the present study was to test which pole of each dimension is the more adaptive.

We used three criteria to determine which poles of the CDMP dimensions are more adaptive. The first criterion was the dimension's correlations with the factors in the *Emotional and Personality-related Career decision-making Difficulties* (EPCD) questionnaire (Saka & Gati, 2007; Saka, Gati, & Kelly, 2008). The EPCD includes three factors that are considered to lead to pervasive, chronic difficulties in career decision making: *Pessimistic Views*, *Anxiety*, and *Uncrystallized Self-concept and Identity*. Each of these factors is represented by a cluster of statements. The *Pessimistic Views* cluster involves negative cognitive biases and perceptions associated with the decision-making process and the world of work, as well as pessimistic views of the individual's control over the process, the choice, and the outcomes. The *Anxiety* cluster includes statements that describe the individual's anxiety about the decision-making process and its outcomes. The third cluster, *Self-concept and Identity*, includes statements describing difficulties in forming a stable, independent vocational identity.

Previous research has repeatedly shown that higher levels of emotional and personality-related difficulties, as measured by the EPCD, hinder the career decision-making process (Gati, Asulin-Peretz, & Fisher, 2012; Saka & Gati, 2007) and are associated with lower levels of career decision-making self-efficacy, a more external locus of control, and being less advanced in the career

decision-making process (Gati et al., 2011). Therefore, we hypothesized that a negative correlation with the EPCD would indicate that the higher pole of the dimension is the more adaptive one.

Our second criterion for assessing the adaptiveness of the CDMP dimensions was the NEO Personality Inventory (NEO-PI), based on the Big Five model of personality factors (Costa & McCrae, 1992). This model consists of five factors along which an individual's personality can be characterized (Costa & McCrae, 1989, 1992): (a) The *Neuroticism* factor indicates an individual's tendency to experience psychological distress and emotional instability; (b) the *Extraversion* factor includes various traits such as sociability, activity, and the tendency to experience positive emotions such as joy and pleasure; (c) the *Openness to Experience* factor includes a tendency toward artistic and intellectual curiosity, as well as behavioral and interpersonal flexibility; (d) the *Agreeableness* factor indicates an individual's tendency to be trusting, sympathetic, and cooperative; and (e) the *Conscientiousness* factor indicates an individual's tendency to orderliness, self-discipline, deliberation, dependability, and competence.

We located only one study that directly assessed the association between the Big Five personality factors and career decision-making styles. Specifically, Chartrand, Rose, Elliot, Marmarosh, and Caldwell (1993) found that higher levels of Neuroticism were associated with higher levels of the dependent and intuitive styles and with lower levels of the rational style; higher levels of Extraversion were associated with higher levels of the rational style and lower levels of the dependent style (but unrelated to the intuitive style); higher levels of Conscientiousness and Agreeableness were associated with higher levels of the rational style and lower levels of the intuitive and dependent styles; and higher levels of Openness to Experience were associated with lower levels of the dependent style (but unrelated to the rational and intuitive styles).

In contrast to the dearth of research on personality factors and career decision-making styles, there has been much research on the associations between the Big Five personality factors and a number of variables involved in the career decision-making process and its outcomes (e.g., career indecision, Kelly & Shin, 2009; career decidedness, Lounsbury, Hutchens, & Loveland, 2005). Specifically, previous research has shown that higher levels of career indecision are associated with higher levels of Neuroticism (Gati et al., 2011; Jackson, Furnham, & Lawty-Jones, 1999; Kelly & Shin, 2009; Lounsbury et al., 2005; Lounsbury, Tatum, Chambers, Owen, & Gibson, 1999; Meyer & Winer, 1993; Page, Bruch, & Haase, 2008; Pečjak & Košir, 2007) and lower levels of Extraversion (Gati et al., 2011; Page et al., 2008; Pečjak & Košir, 2007) and Conscientiousness (Gati et al., 2011; Lounsbury et al., 2005, 1999; Page et al., 2008; Pečjak & Košir, 2007; Shafer, 2000).

Whereas some studies have found that higher levels of Agreeableness are associated with lower levels of career indecision (Lounsbury et al., 2005, 1999), this finding has not been widely replicated. In fact, a recent study revealed a positive association between Agreeableness and career indecision (Gati et al., 2011). The findings for the Openness to Experience factor are also mixed. Whereas some studies found that individuals higher in Openness to Experience are less likely to engage in occupational exploration (Reed, Bruch, & Haase, 2004) and have more pessimistic views of the career decision-making process (Gati et al., 2011), others found that this factor is positively associated with career decidedness (Lounsbury et al., 2005). Therefore, in the present study, we

hypothesized that lower levels of Neuroticism and higher levels of Extraversion and Conscientiousness would indicate greater adaptability of the CDMP dimensions. We had no specific hypotheses regarding the *Agreeableness* and *Openness to Experience* personality factors.

Our third criterion for assessing the adaptiveness of the CDMP dimensions was the individual's stage in the career decision-making process. Characterizing the participants as decided, partially decided, or undecided based on their stage in the career decision-making process (based on their self-report), we hypothesized that individuals who are more decided have a more adaptive career decision-making profile, and therefore the pole of the dimension that is more salient in the more decided group is also the more adaptive.

Following the arguments of Gati et al. (2010) and the findings of Chartrand et al (1993), we hypothesized that the adaptive poles of the CDMP dimensions are as follows:

1. For the dimension of Information gathering, the comprehensive (rather than minimal) pole would be more adaptive, specifically associated with lower levels of Pessimistic Views (because individuals who feel less in control are less likely to gather much information) and with higher levels of Conscientiousness, which is defined as completing tasks more thoroughly. In addition, we hypothesized that individuals who gather more information would be more advanced in the career decision process.

2. For the dimension of Information processing, we hypothesized that the analytic (rather than holistic) pole would be more adaptive (Harren, 1979). Specifically, we hypothesized that being more analytic (which is closely associated with being more rational) is negatively associated with both Anxiety and Neuroticism and positively associated with Conscientiousness (which is associated with being more organized) and Extraversion, as well as with being more advanced in the career decision-making process. However, Krieschok et al. (2009) would probably argue that both holistic and analytic Information processing are adaptive.

3. For the dimension of Locus of control, we hypothesized that the internal (rather than external) pole is more adaptive (Friedberg & Friedberg, 1988; Taylor & Popma, 1990). Specifically, we hypothesized that a more internal locus of control would be associated with lower levels of all EPCD clusters, lower levels of Neuroticism, and higher levels of Conscientiousness. In addition, we hypothesized that individuals who have a more internal locus of control would be more advanced in the career decision process.

4. For the dimension of Effort invested in the process, we hypothesized that the greater (rather than the lesser) pole is more adaptive, and, as with the dimension of Information gathering, it would be negatively associated with Pessimistic Views and positively associated with Conscientiousness.

5. For the dimension of Procrastination, we hypothesized that the low (rather than high; Antony, Purdon, Huta, & Swinson, 1998; Flett, Hewitt, & Martin, 1995) pole would be more adaptive. Specifically, we believe that procrastination emerges from anxiety and leads to avoidance. Therefore, we hypothesize that high procrastination is associated with higher levels of all EPCD clusters (and Anxiety in particular), higher levels of Neuroticism, and (due to the procrastination) less advancement in the career decision-making process. Similarly, we hypothesized that the high (rather than the low) pole of Speed of making the final decision is the adaptive one.

6. For the dimension of Consulting with others, we hypothesized that the frequent (rather than the minimal; Malka-Gidron, 2006) pole is more adaptive. Specifically, we hypothesized that Consulting with others is more positively associated with Extraversion, as well as with more advancement in the career decision-making process.

7. For the dimensions of Dependence on others and Desire to please others, we hypothesized that the low (rather than the high) poles of these dimensions is more adaptive (Phillips, Pazienza, & Walsh, 1984; Singh & Greenhaus, 2004). Specifically, we hypothesized that higher levels of dependence on others and desire to please them is associated with uncrystallized Self-concept and identity, higher levels of Neuroticism, and lower levels of Extraversion and Conscientiousness.

8. For the dimension of Aspiration for an ideal occupation, we hypothesized that the low (rather than the high; Antony et al., 1998; Flett et al., 1995) pole of this dimension is more adaptive. Specifically, we hypothesized that greater aspiration for an ideal occupation is associated with higher levels of Anxiety (assuming that aspiring for an ideal occupation is in fact a compensation mechanism) and that such aspiration would lead to less advancement in the career decision-making process.

9. Finally, for the dimension of Willingness to compromise, we hypothesized that the high (rather than the low) pole is more adaptive (Gati, 1993; Gati & Asher, 2001). Specifically, we hypothesized that Willingness to compromise is associated with greater advancement in the career decision-making process.

Gender Differences in Career Decision Making

Previous studies of career decision making revealed significant gender differences in the way men and women approach the decision-making process (Di Fabio & Bernaud, 2008; Gadassi & Gati, 2009; Gati et al., 2010) and the degree of their career decision-making difficulties (Gati et al., 2012, 2011). Therefore, we also tested in the present study for possible gender differences in the levels of the dimensions of the CDMP.

The Present Research

To test the hypotheses regarding the adaptiveness of the CDMP dimension poles using the three criteria described above, we focused on young adults in a transition stage just prior to beginning higher education or postsecondary training. Specifically, we approached young adults before their “big backpacking trip,” which has become a traditional rite of passage in Israel between mandatory military service and academic studies or professional training (Scharf & Mayseless, 2010). This group is most likely heterogeneous in the individuals’ degree of decidedness about their occupational choice. Some of the participants in the present study may not be planning to pursue an academic degree (only about half of the high school-age students in Israel acquire a diploma, and only about half of these enroll for postsecondary education; Central Bureau of Statistics, 2005).

Method

Participants

To reach the target group of the present study (young adults who were about to start their “big backpacking trip”), advertisements

were posted on several Israeli Internet websites and online forums targeting this group. Others were posted in stores that sell hiking equipment and offer free lectures about popular destinations (e.g., South America, East Asia). These advertisements invited individuals to enter a website where they could fill out research questionnaires in return for participation in a raffle of three monetary prizes (two prizes worth \$50 and one prize worth \$100) and personal feedback about the individual’s decision-making profile.

Four hundred thirty-nine individuals filled out the research questionnaires. Of those, the replies of 56 participants (12.8% of the original sample) were not included in the data analyses for one or more of the following reasons: (a) they were under 18 or over 30 (17 participants); (b) their replies were considered unreliable due to the fact they completed the questionnaires too quickly (in less than 6 min; 14 participants); or (c) their replies to the CDMP validity items implied they had filled out the CDMP with less than desirable attention (25 participants). Of the 383 included in data analyses, 181 (47.3%) were men and 202 (52.7%) were women; their mean age was 22.8 ($SD = 2.40$); 99.2% of the participants had 12 or more years of education. We have no information about the ethnicity or race of the participants; in Israel, it is generally considered unacceptable to ask such questions.

Instruments

The CDMP (Gati et al., 2010). The CDMP is a self-report questionnaire based on the theoretical model (Gati et al., 2010) presented in the introduction. The 36-item version of the CDMP used here includes 33 statements representing the 11 dimensions of the CDMP. For example, the statement “I ultimately make the decision that people expect me to make” represents the high pole of the Desire to please others dimension. For each statement, the participants were asked to rate, on a 7-point Likert-type scale, the degree to which they agreed with each statement (1 = *do not agree at all*, 7 = *highly agree*). The CDMP also includes a “warm-up” item (“I am currently concerned about my future field of study or occupation”) and two validity items ensuring that individuals replied only after properly reading the items and considering their responses. The validity items are as follows: “I try to choose the option that is best for me” and “It makes no difference to me what career I have in the future.”

A previous study showed the CDMP to have acceptable reliability estimates (Cronbach α ranged from .72 to .92 for the 11 dimensions; the 2-week test–retest reliability estimates of the dimensions ranged from .75 to .86; Gati & Levin, in press). In the present study, the median Cronbach’s alpha internal consistency reliability estimate of the 11 dimensions was .84 (range = .77–.92; see details in Table 1). Using confirmatory factor analysis (CFA), Gati and Levin (in press) also reported that the hypothesized structure in which the dimensions are fairly independent was supported ($\chi^2/df = 1.62$ (comparative fit index [CFI] = .94, root-mean-square error of approximation [RMSEA] = .048) and that the structure was stable 1 year later ($\chi^2/df = 1.42$ (CFI = .94, RMSEA = .048). In the present sample, the fit with the hypothesized structure was slightly lower ($\chi^2/df = 2.51$ (CFI = .90, RMSEA = .063).

The EPCD (Saka, Gati, & Kelly, 2008). The EPCD is a self-report questionnaire assessing the sources of an individual’s pervasive career decision-making difficulties. The short version of

Table 1
Means and Standard Deviations of the CDMP, EPCD, and the NEO-PI Scale Scores ($N = 383$)

Measure	Scale	α	Men ($n = 181$)		Women ($n = 202$)		$t(381)$	d
			M	SD	M	SD		
CDMP	IG	.82	5.48	1.29	5.68	1.15	-1.67	0.17
	IP	.78	4.84	1.31	4.91	1.22	-0.56	0.03
	LC	.82	5.53	1.24	5.52	1.23	0.11	0.01
	EI	.82	5.23	1.14	5.50	1.12	-2.34	0.24
	PR	.84	3.76	1.48	3.82	1.67	-0.41	0.02
	SP	.84	3.55	1.49	3.01	1.39	3.67***	0.38
	CO	.88	5.28	1.48	5.70	1.36	-2.92**	0.30
	DO	.77	2.03	0.91	2.24	1.32	-1.77	0.09
	DP	.87	2.54	1.24	2.59	1.26	-0.41	0.02
	AI	.92	4.50	1.50	4.59	1.66	-0.56	0.03
EPCD	WC	.88	3.56	1.35	3.33	1.46	1.62	0.08
	PV	.65	3.62	1.32	3.79	1.30	-1.27	0.06
	An	.90	4.22	1.88	5.21	1.95	-5.07***	0.52
NEO-PI	SI	.66	3.75	1.02	4.08	1.17	-2.96**	0.30
	N	.85	2.26	0.67	2.74	0.68	-6.99***	0.72
	E	.79	3.51	0.54	3.46	0.59	0.73	0.04
	O	.67	3.36	0.56	3.47	0.52	-1.90	0.10
	A	.72	3.58	0.50	3.67	0.52	-1.65	0.08
	C	.82	3.78	0.56	3.84	0.62	-0.90	0.05

Note. CDMP = Career decision-making Profiles questionnaire; EPCD = Emotional and Personality-related Career decision-making Difficulties; NEO-PI = NEO Personality Inventory; IG = Information gathering; IP = Information processing; LC = Locus of control; EI = Effort invested; PR = Procrastination; SP = Speed of making the final decision; CO = Consulting with others; DO = Dependence on others; DP = Desire to please; AI = Aspiration for an ideal occupation; WC = Willingness to compromise; PV = Pessimistic Views; An = Anxiety; SI = Self-concept and Identity; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness. Significant t tests are in bold.

** $p < .01$. *** $p < .001$.

the EPCD was used, with 25 items (Gati et al., 2011). After a "warm-up" item, each of the 11 difficulty categories is represented by two statements in the questionnaire. In addition, two validity items were embedded into the questionnaire to ensure that individuals reply only after properly reading the items and considering their responses. For each statement, participants were asked to rate the extent to which the statement described them on a 9-point scale ranging from 1 (*does not describe me at all*) to 9 (*describes me well*); a higher rating indicates a higher level of difficulty. Previous studies support the construct, convergent, concurrent, and predictive validity of the EPCD (Gati et al., 2012; Saka & Gati, 2007; Saka et al., 2008).

The 25-item version of the EPCD has adequate Cronbach's alpha internal consistency reliability estimates (.72, .89, and .84 for Pessimistic Views, Anxiety, and Self-concept and Identity, respectively, and .90 for the total score; Gati et al., 2011). In the present study, Cronbach's alpha internal consistency reliability estimates of the three major clusters were .65, .90, and .66 for Pessimistic Views, Anxiety, and Self-concept and Identity, respectively, and .90 for the total score.

The NEO Personality Inventory-Revised (NEO-PI-R; Costa & McCrae, 1992). The NEO-PI-R represents the Big Five personality model. The short version (used in the present study) consists of 60 statements, 12 for each personality factor: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. The items are rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Information on the reliability and validity of the original instrument is reported in the NEO-PI manual (Costa & McCrae, 1992). Previous studies supported the reliability and validity of the NEO-

PI's scales and its internal structure, as well as its cross-cultural equivalence (cf. McCrae, Kurtz, Yamagata, & Terracciano, 2011).

The Hebrew version of the questionnaire was used, for which the internal consistency Cronbach's alpha reliability estimates were .84, .71, .70, .72, and .79 for Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness, respectively (Gati et al., 2011). In the present study, the internal consistency reliability estimates of the five factors were .85, .79, .67, .72, and .82, respectively.

Range of Considered Alternatives (RCA; Gati, Kleiman, Saka, & Zakai, 2003; Saka & Gati, 2007). The participants' decision status was evaluated by the RCA, a self-report measure aimed at assessing the degree to which individuals have narrowed down the range of occupational alternatives under consideration. Participants are required to choose one statement that best describes their career decision status: (1) "I do not even have a general direction"; (2) "I have only a general direction"; (3) "I am deliberating among a small number of specific occupations"; (4) "I am considering a specific occupation, but would like to explore other options before I make my decision"; (5) "I know which occupation I am interested in, but I would like to feel sure of my choice"; and (6) "I am already sure of the occupation I will choose." The RCA has been found useful in measuring advancement toward making a career decision (Saka & Gati, 2007) and assessing the effects of career intervention (Gati et al., 2003). Because the six response options cannot be regarded as constituting a linear scale (Gati et al., 2003), the participants were assigned to three groups according to their decision status as derived from their responses on the RCA. Responses 1, 2, and 3 were classified

as undecided ($n = 160$), Responses 4 and 5 as partially decided ($n = 106$), and Response 6 as decided ($n = 117$).

Procedure

The research questionnaire was embedded in the *Future Directions* website (a free, anonymous, career-planning website, developed at the Hebrew University as a public service to facilitate individuals' career decisions). All the participants filled out the CDMP first and the RCA question last; 225 (58.7%) of the participants filled out the NEO-PI second and the EPCD third, and 158 (41.3%) filled out the EPCD second and the NEO-PI third. Analyses revealed no statistically significant order effects. After completing the three research questionnaires, the participants received brief personal feedback based on their responses on the CDMP.

Results

Preliminary Analyses

Gender differences. To test for gender differences, we first conducted a one-way multivariate analysis of variance (MANOVA), with gender as the independent factor and the 11 CDMP dimensions as the dependent variables. A significant effect emerged for gender (Wilks's $\Lambda = .95$), $F(11, 367) = 1.85$, $p = .045$, $\eta^2 = .05$; Table 1 presents the means and standard deviations of the CDMP dimensions, separately, for men and women as well as the results of the t tests comparing them. After applying the Bonferroni correction for multiple comparisons (corrected $\alpha = .004$), two significant gender differences emerged: Men's scores were higher than women's on the dimension Speed of making the final decision, whereas women's scores were higher than men's on the dimension Consulting with others. These results are in line with previous findings for the CDMP showing that women get higher scores for Consulting with others, whereas men get higher scores for Speed of making the final decision (Gati et al., 2010).

Next, we conducted a one-way MANOVA, with gender as the independent factor and the three EPCD clusters as the dependent variables; significant gender differences emerged (Wilks's $\Lambda = .93$), $F(3, 379) = 10.00$, $p < .001$, $\eta^2 = .07$. Table 1 presents the results of t tests (corrected $\alpha = .017$), indicating that there were gender differences in the Anxiety and Self-concept and Identity clusters; again, these results are in line with previous findings (Gati et al., 2012).

Finally, a one-way MANOVA with gender as the independent factor and the five NEO-PI factors as the dependent variables revealed significant gender differences (Wilks's $\Lambda = .84$), $F(5, 377) = 14.52$, $p < .001$, $\eta^2 = .16$. Five t tests (corrected $\alpha = .01$) comparing men and women on the five NEO-PI factors revealed only one difference (see Table 1): Women's Neuroticism score was higher than men's. We also tested for possible gender differences in the associations between the CDMP, on the one hand, and the NEO-PI-R and the EPCD, on the other. Only seven of the 88 correlations were significantly different, and none remained statistically significant after applying the Bonferroni correction. The results are therefore reported across gender.¹

Decision status. We tested whether being in a more advanced decision-status group indicates higher levels of adaptability, con-

ducting two MANOVAs with decision status as the independent variable. The first MANOVA included the three EPCD clusters as the dependent variables and revealed a significant difference between the three decision-status groups in the combination of the three cluster scores (Wilks's $\Lambda = .76$), $F(6, 756) = 18.08$, $p < .001$, $\eta^2 = .12$. The second MANOVA included the five NEO-PI factors as the dependent variables and revealed a significant difference between the three decision-status groups in the combination of the five factors (Wilks's $\Lambda = .91$), $F(10, 752) = 3.65$, $p < .001$, $\eta^2 = .05$. Subsequently to the significant MANOVAs, we conducted eight one-way analyses of variance (ANOVAs) and post hoc Tukey's tests, with decision status as the independent variable and the five NEO-PI factors and three EPCD clusters as the dependent variables. As can be seen in the Appendix, all three EPCD clusters, as well as the Neuroticism and Conscientiousness factors, were significantly different in the three decision-status groups. As hypothesized and previously found (e.g., Gati et al., 2011; Pečjak & Košir, 2007), individuals who were more advanced in the decision-making process had higher levels of Conscientiousness, lower levels of Neuroticism, and lower EPCD scores than individuals who were less advanced in the process. We therefore considered our criterion of being more advanced in the process to be valid.

Curvilinear associations between the dimensions and the adaptability criteria. As part of the preliminary data analysis, we tested the possibility of nonlinear, curvilinear associations between the CDMP dimensions and the adaptability criteria used—specifically, the possibility that the intermediate levels of the dimensions are the most adaptive ones. However, inspection of the scatterplots ruled out curvilinear associations; as can be seen in Table 2, all significant group differences indicate a linear trend in the association between the scores on the dimensions and the adaptability criterion.

The Adaptability of the CDMP Dimensions

To assess which pole of the CDMP dimensions is more adaptive, we used three criteria for adaptability: (a) positive correlations of the CDMP dimensions with the NEO-PI factors of Extraversion and Conscientiousness and negative correlations with Neuroticism and (b) negative correlations of the CDMP dimensions with the EPCD. The correlations of the 11 CDMP dimensions with the EPCD clusters and NEO-PI factors are presented in Table 3. To test the third criterion of (c) being more advanced in the decision-making process, we conducted a MANOVA, with decision status as the independent factor and the 11 CDMP dimensions as the dependent variables; this analysis revealed a significant difference between the three decision-status groups in the combination of the 11 dimensions (Wilks's $\Lambda = .72$), $F(22, 740) = 6.12$, $p < .001$, $\eta^2 = .15$. The means and standard deviations of the 11 CDMP dimensions for the three decision-status groups and the results of the subsequent one-way ANOVAs and Tukey's post hoc tests of the differences among the means of the three decision-status groups are presented in Table 2.

Table 4 presents a summary of the results with respect to the hypotheses. As can be seen in Table 4, four hypotheses were

¹ A detailed description of the gender differences may be obtained from Itamar Gati.

Table 2
Means and Standard Deviations of the 11 CDMP Dimensions According to Decision-Status Group

CDMP	Decision status						ANOVA	
	Undecided (n = 160)		Partially decided (n = 106)		Decided (n = 117)			
	M	SD	M	SD	M	SD	F(2, 380)	η^2
IG	5.32 _a	1.28	5.65	1.15	5.89 _a	1.13	7.68**	.04
IP	4.60 _a	1.34	4.86	1.14	5.20 _a	1.20	6.20**	.03
LC	5.39 _a	1.29	5.44	1.23	5.79 _a	1.12	4.02*	.02
EI	5.16 _a	1.15	5.43	1.09	5.60 _a	1.12	5.18**	.03
PR	4.29 _a	1.40	4.22 _b	1.48	2.73 _{a,b}	1.38	47.64***	.20
SP	3.13 _a	1.50	3.00 _b	1.33	3.67 _{a,b}	1.45	6.96**	.04
CO	5.64 _a	1.34	5.61	1.31	5.20 _a	1.62	3.74*	.02
DO	2.32 _a	1.22	2.10	1.09	1.92 _a	1.04	4.44*	.02
DP	2.48	1.23	2.76	1.27	2.50	1.27	1.84	
AI	4.24 _a	1.56	4.34 _b	1.43	5.14 _{a,b}	1.59	12.88***	.06
WC	3.62	1.38	3.38	1.33	3.25	1.50	2.48	

Note. CDMP = Career decision-making Profiles questionnaire; ANOVA = analysis of variance; IG = Information gathering; IP = Information processing; LC = Locus of control; EI = Effort invested; PR = Procrastination; SP = Speed of making the final decision; CO = Consulting with others; DO = Dependence on others; DP = Desire to please; AI = Aspiration for an ideal occupation; WC = Willingness to compromise. Means with the same subscript are statistically different (Tukey's post hoc test, $p < .01$).

* $p < .05$. ** $p < .01$. *** $p < .001$.

supported by all three criteria, four hypotheses were supported by two criteria, and three hypotheses were not supported by even one of the three criteria. Because of the large sample size, we did not rely only on statistical significance to see whether our predictions were supported by the correlations; rather, we considered only correlations greater than |.20| as supporting our hypotheses (because correlations less than |.20| are considered negligible; Cohen, 1992). Specifically, as hypothesized, comprehensive Information gathering, lower levels of Procrastination and Dependence on others, and higher levels of Speed of making the final decision were found to be more adaptive by all three criteria, and thus fully supported. Moreover, Procrastination was highly negatively asso-

ciated with decision status and explained 20% of the variance among the decision-status groups, whereas each of the other dimensions accounted for only 2%–6% of the variance. The same poles of these dimensions tended to be associated with having lower levels of emotional and personality-related career decision-making difficulties. In addition, (a) for Procrastination, Dependence on others, and Speed of making the final decision (but not for Information gathering), the adaptive pole was associated with lower levels of Neuroticism; (b) for Information gathering, Procrastination, Dependence on others, and Speed of making the final decision, the adaptive pole was associated with higher levels of Conscientiousness. Extraversion was negatively associated with

Table 3
Correlations of the CDMP Dimensions With EPCD and the NEO-PI (N = 383)

CDMP	NEO-PI					EPCD		
	N	E	O	A	C	PV	An	SI
IG	-.09	.10*	.03	.01	.35***	-.22***	-.15**	-.18**
IP	-.08	.10	.06	.03	.32***	-.04	-.01	-.08
LC	-.15**	.03	.02	.07	.09	-.29***	-.16**	-.22***
EI	-.02	.16**	.05	.12*	.38***	-.08	.00	-.04
PR	.29***	-.24***	-.02	-.03	-.40***	.42***	.48***	.48***
SP	-.34***	.09	-.01	-.08	.12*	-.30***	-.45**	-.37***
CO	-.02	.16**	.03	.25***	-.03	.00	.05	.10
DO	.22***	-.03	-.07	-.02	-.14**	.29***	.32***	.34***
DP	.08	-.02	-.16**	.07	.02	.26***	.24***	.28***
AI	-.05	.24***	.02	-.03	.20***	-.20***	-.14**	-.14**
WC	-.10	.05	-.06	.09	-.07	.09	-.00	.06

Note. CDMP = Career decision-making Profiles questionnaire; EPCD = Emotional and Personality-related Career decision-making Difficulties; NEO-PI = NEO Personality Inventory; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness; PV = Pessimistic Views; An = Anxiety; SI = Self-concept and Identity; IG = Information gathering; IP = Information processing; LC = Locus of control; EI = Effort invested; PR = Procrastination; SP = Speed of making the final decision; CO = Consulting with others; DO = Dependence on others; DP = Desire to please; AI = Aspiration for an ideal occupation; WC = Willingness to compromise.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
An Overview of the Research Hypotheses and Results According to the Three Adaptiveness Criteria

CDMP	Hypothesis (adaptive pole)	1st criterion: NEO-PI	2nd criterion: EPCD	3rd criterion: decision status	Conclusion
IG	Comprehensive	+ ^a	+	+	Fully supported ^b
IP	Analytic	+	–	+	Partially supported
LC	Internal	–	+	+	Partially supported
EI	Much	+	–	+	Partially supported
PR	Low	+	+	+	Fully supported
SP	Fast	+	+	+	Fully supported
CO	Frequent	–	–	–	Not supported
DO	Low	+	+	+	Fully supported
DP	Low	+	+	–	Partially supported
AI	Low	–	–	–	Not supported
WC	Much	–	–	–	Not supported

Note. CDMP = Career decision-making Profiles questionnaire; EPCD = Emotional and Personality-related Career decision-making Difficulties; NEO-PI = NEO Personality Inventory; IG = Information gathering; IP = Information processing; LC = Locus of control; EI = Effort invested; PR = Procrastination; SP = Speed of making the final decision; CO = Consulting with others; DO = Dependence on others; DP = Desire to please; AI = Aspiration for an ideal occupation; WC = Willingness to compromise.

^a + denotes support of the hypothesis; – denotes no support of the hypothesis. ^b *Fully supported* indicates that the findings were consistent with the hypothesis in all three adaptability criteria; *Partially supported* indicates that the findings were consistent with the hypothesis in two of the three criteria; *Not supported* indicates that the findings were not consistent with the hypothesis in all criteria.

Procrastination, as hypothesized, indicating that individuals who put off entering the decision process are more introverted than those who do not.

Higher levels of Effort invested, a more analytic type of Information processing, a more internal Locus of control, and lower levels of Desire to please others were found to be more adaptive according to two of the three criteria, thus partially supporting the hypotheses. Analytical rather than holistic Information processing was associated with being more advanced in the career-decision process. Furthermore, as hypothesized, analytical Information processing was positively correlated with Conscientiousness, but unrelated to Neuroticism. Contrary to our hypothesis, however, Desire to please others was negatively correlated with Openness to Experience, and was not associated with Neuroticism.

Our hypotheses that lower levels of Aspiration for an ideal occupation, more frequent Consulting with others, and higher levels of Willingness to compromise would be found more adaptive were not supported by the data. Instead, *higher* levels of Aspiration for an ideal occupation were found to be more adaptive according to all three criteria: They were positively correlated with Extraversion and Conscientiousness, negatively correlated with the EPCD cluster scores, and associated with more progress in the decision-making process. Willingness to compromise was not associated with any of the NEO-PI factors or EPCD clusters, nor did it differ among the decision-status groups. The findings for Consulting with others were mixed. Contrary to our hypothesis, higher levels of Consulting with others were associated with being less advanced in the career decision-making process. However, more frequent Consulting with others was positively associated with Extraversion, thus suggesting that this is the adaptive pole, but this correlation was negligible in size, thus not meeting our criterion. Finally, more frequent Consulting with others was not significantly associated with any of the EPCD clusters.

Discussion

The present research is the first to investigate the adaptiveness of the CDMP dimensions, specifically, which pole of each dimen-

sion is the more adaptive one. The focus on the adaptiveness of *specific dimensions* rather than on a *global style* is especially important considering recent evidence for the CDMP's unique contribution to the understanding of progress in the career decision-making process in comparison to the traditional instruments assessing career decision-making styles (Gati et al., 2012). The question of adaptiveness was investigated in a sample of young adults in a gap period between their mandatory military service and their postsecondary training or studies. The three criteria for the adaptability of the CDMP's dimensions were the direction of the associations with (a) the EPCD and (b) the NEO-PI factors, and (c) the participants' stage in the career decision-making process.

Table 4 presents a summary of the results in relation to the research hypotheses. As can be seen in Table 4, the majority of our hypotheses about which of the poles of each dimension are adaptive were fully or partially supported by the results. Specifically, more comprehensive Information gathering, more analytic Information processing, a more internal Locus of control, more Effort invested, lower levels of Procrastination, greater Speed of making the final decision, less Dependence on others, and less Desire to please others were found to be the adaptive poles. However, the strength of the associations of the dimensions with personality factors (with the exception of Conscientiousness), although significant and generally in line with our hypotheses, were rather weak. This indicates that general personality factors (as measured by the NEO-PI) are less important in the career decision-making process than personality factors specifically associated with the career decision-making process (as measured by the EPCD). This finding, although not surprising, highlights the importance of using career decision-making-specific instruments in the career counseling process.

For three of the dimensions, however, our hypotheses were not supported. First, higher (rather than the predicted lower) levels of Aspiration for an ideal occupation were found to be more adaptive. This pattern of results suggests that *Aspiration for an ideal occupation*, rather than reflecting individuals' perfectionism or unreal-

istic views of their possible occupational choices, in fact reflects their confidence in their ability to achieve their occupational choice. The findings of the present study suggest that Aspiration for an ideal occupation should be conceptualized not as resulting from perfectionism, but rather as reflecting self-confidence. Second, we did not find an adaptive pole for Willingness to compromise, which was surprising because of its inherent role in career decisions (Gati, 1993; Gottfredson, 2002). Future research may uncover the reasons for this null finding as well as factors associated with willingness to compromise. Finally, the results for the dimension of Consulting with others were mixed: Although greater frequency of Consulting with others was negatively associated with progress in the decision process, there was no evidence from the other criteria suggesting that this level is maladaptive. Arguably, our results, based on concurrent data, only show that individuals who are more advanced in the decision process reported less consultation with others, perhaps because they had already made up their mind. Longitudinal research is needed to better understand the importance of this dimension.

Gender Differences

The present study revealed significant gender differences. As previously found (Gati et al., 2012), women had higher levels of EPCDs—specifically, higher levels of Anxiety and Self-concept and Identity difficulties, but not of Pessimistic Views. More important for the present research, significant gender differences emerged in the CDMP. First, women reported a greater willingness to consult with others about the decision-making process; this finding is in line with previous findings for the CDMP (Gati et al., 2010) as well as with the more general finding that women are more inclined to seek help than men (Di Fabio & Bernaud, 2008). Second, women reported themselves to be slower in making the final decision than did men, as has also been observed in previous research (Gati et al., 2010). Although it is outside the goal and scope of the present research to investigate the antecedents and implications of these gender differences, the findings support the importance of paying attention to gender differences in career decision making (Gadassi & Gati, 2009).

Limitations and Future Research

The present research has three main limitations. First, a few of the measures used as criteria for career decision-making adaptability had low internal consistency reliability (e.g., .65 for Pessimistic Views and .66 for Self-Concept and Identity clusters of the EPCD, and .67 for Openness to Experience of the NEO-PI), somewhat limiting the generalizability of our findings. Nevertheless, the results for these measures (specifically for the EPCD scales of Pessimistic Views and Self-concept and Identity) were consistent with our findings based on the other, more reliable measures (e.g., the EPCD Anxiety scale). Second, the criteria for adaptability of the dimensions were assessed concurrently; therefore, our conclusions about the adaptability of the measures cannot address the directionality of the associations between the CDMP and the criteria measures; longitudinal research is needed to further test the adaptability of the dimensions. Finally, our findings may be specific to the Israeli setting. However, previous studies comparing Israeli and North American samples show that both the tem-

porary and the pervasive career decision-making difficulties in these two cultures are quite similar (Gati et al., 1996; Saka et al., 2008), as are young adults' career decision-making profiles (Gati et al., 2010). We therefore believe that our results about which pole of each dimension is more adaptive can be generalized at least to other Western countries, at least tentatively. Future studies are needed to investigate whether the adaptability of the CDMP dimensions is different in Eastern cultures; for example, in Eastern cultures, the dimensions of Consulting with others and Desire to please others may reflect the typical societal norms and therefore characterize the career decision-making profile of most individuals.

Counseling Implications

Implementing the findings of the present study for career counseling can assist counselors in several ways in planning career interventions. First, the present study provides career counselors with information about which of the poles (if any) of each dimension is more adaptive, and therefore which strategy is best to direct the client to use (e.g., because Procrastination was found to be associated with Dependence on others and Desire to please others, it could be helpful to address these two traits for the purpose of helping the client avoid procrastination). The information about the adaptability of the dimensions may be directly presented to educate the client on career decision making.

Second, our unexpected findings that Willingness to compromise and Aspiration for an ideal occupation are in fact indicative of individuals' self-efficacy could be an important insight for career counselors. Specifically, career counselors encountering individuals who have what may seem to be overly perfectionist aspirations should consider interpreting these characteristics not as maladaptive, but as a reflection of the individuals' great confidence in their own ability to achieve their occupational goal. In such cases, the counselors should try to find out whether these clients' abilities do indeed match their self-confidence.

Previous research suggests that career counseling interventions tailored to individuals' career decision-making style can facilitate the decision-making process (Phillips & Jome, 2006; Tinsley, Tinsley, & Rushing, 2002) and thus presumably lead to better decisions (Phillips & Paziienza, 1988). Being aware of a client's career decision-making profile makes it possible to tailor counseling interventions to the specific client more sensitively (Gati et al., 2010).

References

- Annastasi, A. (1979). *Fields of applied psychology* (2nd ed.). New York, NY: McGraw-Hill.
- Antony, M. M., Purdon, C. L., Huta, V., & Swinson, R. P. (1998). Dimensions of perfectionism across the anxiety disorders. *Behavior Research and Therapy*, *36*, 1143–1154. doi:10.1016/S0005-7967(98)00083-7
- Arroba, T. (1977). Styles of decision making and their use: An empirical study. *British Journal of Guidance and Counselling*, *5*, 149–158. doi: 10.1080/03069887708258110
- 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* (pp. 392–407). Hoboken, NJ: Wiley.

- Central Bureau of Statistics. (2005). *Postsecondary education among high-school graduates in Israel* (in Hebrew). Jerusalem, Israel: Author.
- Chartrand, J. M., Rose, M. L., Elliot, T. R., Marmarosh, C., & Caldwell, C. (1993). Peeling back the onion: Personality, problem solving, and career decision-making style correlates of career indecision. *Journal of Career Assessment, 1*, 66–82. doi:10.1177/106907279300100107
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155–159. doi:10.1037/0033-2909.112.1.155
- Costa, P. T., & McCrae, R. R. (1989). *The NEO PI/FFI manual supplement*. Odessa, FL: PAR.
- Costa, P. T., & McCrae, R. R. (1992). *Manual of the Revised NEO Personality Inventory*. Odessa, FL: Psychological Assessment Resources.
- Di Fabio, A., & Bernaud, J. C. (2008). The help-seeking in career counseling. *Journal of Vocational Behavior, 72*, 60–66. doi:10.1016/j.jvb.2007.10.006
- Flett, G., Hewitt, P., & Martin, T. (1995). Dimensions of perfectionism and procrastination. In S. Ferrari, J. Johnson, & W. McCown (Eds.), *Procrastination and task avoidance: Theory, research and treatment* (pp. 113–136). London, England: Plenum Press.
- Friedberg, R. D., & Friedberg, B. A. (1988). Correlates of career indecision. *Journal of Human Behavior and Learning, 5*, 40–43.
- Gadassi, R., & Gati, I. (2009). The effect of gender stereotypes on explicit and implicit career preferences. *The Counseling Psychologist, 37*, 902–922. doi:10.1177/0011000009334093
- 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. (1993). Career compromises. *Journal of Counseling Psychology, 40*, 416–424. doi:10.1037/0022-0167.40.4.416
- Gati, I., & Asher, I. (2001). The PIC model for career decision making: Prescreening, in-depth exploration, and choice. In F. T. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology* (pp. 7–54). Mahwah, NJ: Erlbaum.
- Gati, I., Asulin-Peretz, L., & Fisher, A. (2012). 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., 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., 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., Kleiman, T., Saka, N., & Zakai, A. (2003). Perceived benefits of using an internet-based interactive career planning system. *Journal of Vocational Behavior, 62*, 272–286. doi:10.1016/S0001-8791(02)00049-0
- 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. (in press). The stability and structure of career decision-making profiles: A one-year follow-up. *Journal of Career Assessment*.
- 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. doi:10.1007/978-1-4020-6230-8_8
- Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 85–148). San Francisco, CA: Jossey-Bass.
- 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
- Jackson, C. J., Furnham, A., & Lawty-Jones, M. (1999). Relationship between indecisiveness and neuroticism: The moderating effect of a tough-minded culture. *Personality and Individual Differences, 27*, 789–800. doi:10.1016/S0191-8869(99)00027-6
- Kelly, K. R., & Gunn, J. E. (2006). *How decision-making style affects the career decision process*. Paper presented at the NCDA Career Development across America conference, Chicago, IL.
- Kelly, K. R., & Shin, Y.-J. (2009). Relation of neuroticism and negative career thoughts and feelings to lack of information. *Journal of Career Assessment, 17*, 201–213. doi:10.1177/1069072708329029
- Koen, J., Klehe, U. C., Van Vianen, A. E. M., Zikic, J., & Nauta, A. (2010). Job-search strategies and reemployment quality: The impact of career adaptability. *Journal of Vocational Behavior, 77*, 126–139. doi:10.1016/j.jvb.2010.02.004
- 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
- Lounsbury, J. W., Hutchens, T., & Loveland, J. M. (2005). An investigation of the Big Five personality traits and career decidedness among early and middle adolescents. *Journal of Career Assessment, 13*, 25–39. doi:10.1177/1069072704270272
- Lounsbury, J. W., Tatum, H. E., Chambers, W., Owens, K. S., & Gibson, L. W. (1999). An investigation of career decidedness in relation to "Big five" personality constructs and life satisfaction. *College Student Journal, 33*, 646–652.
- Malka-Gidron, T. (2006). *The association between personality and emotional career decision-making difficulties and change of majors among university students*. Unpublished paper, School of Education, Hebrew University of Jerusalem (in Hebrew).
- McCrae, R. R., Kurtz, J. E., Yamagata, S., & Terracciano, A. (2011). Internal consistency, retest reliability, and their implications for personality scale validity. *Personality and Social Psychology Review, 15*, 28–50. doi:10.1177/1088868310366253
- Meyer, B. W., & Winer, J. L., (1993). The Career Decision Scale and neuroticism. *Journal of Career Assessment, 1*, 171–180. doi:10.1177/106907279300100206
- Page, J., Bruch, M. A., & Haase, R. F. (2008). Role of perfectionism and Five-Factor model traits in career indecision. *Personality and Individual Differences, 45*, 811–815. doi:10.1016/j.paid.2008.08.013
- Pečjak, S., & Košir, K. (2007). Personality, motivational factors and difficulties in career decision-making in secondary school students. *Psiholojske teme, 16*, 141–158.
- Phillips, S. D., & Jome, L. M. (2006). Career decision-making styles. In J. H. Greenhaus & G. A. Callanan (Eds.), *Encyclopedia of career development* (pp. 95–97). Thousand Oaks, CA: Sage.
- Phillips, S. D., & Paziienza, N. J. (1988). History and theory of the assessment of career development and decision making. In W. B. Walsh & S. H. Osipow (Eds.), *Career decision making* (pp. 1–31). Hillsdale, NJ: Erlbaum.
- Phillips, S. D., Paziienza, N., & Walsh, D. (1984). Decision-making styles and progress in occupational decision making. *Journal of Vocational Behavior, 25*, 96–105. doi:10.1016/0001-8791(84)90039-3
- Reed, M. B., Bruch, A. M., & Haase, F. R. (2004). Five factor model of personality and career exploration. *Journal of Career Assessment, 12*, 223–238. doi:10.1177/1069072703261524
- Saka, N., & Gati, I. (2007). Emotional and personality-related aspects of persistent career decision-making difficulties. *Journal of Vocational Behavior, 71*, 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
- Sauermann, H. (2005). Vocational choice: A decision making perspective. *Journal of Vocational Behavior, 66*, 273–303. doi:10.1016/j.jvb.2004.10.001
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly, 45*, 247–259. doi:10.1002/j.2161-0045.1997.tb00469.x
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, NJ: Wiley.
- Scharf, M., & Mayselless, O. (2010). Finding the authentic self in a communal culture: Developmental goals in emerging adulthood. *New Directions for Child and Adolescent Development, 2010*, 83–95. doi:10.1002/cd.283
- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement, 55*, 818–831. doi:10.1177/0013164495055005017
- Shafer, A. B. (2000). Relation of the Big Five to Biodata and aspects of the self. *Personality and Individual Differences, 28*, 1017–1035. doi:10.1016/S0191-8869(99)00126-9
- Shiloh, S., Salton, E., & Sharabi, D. (2002). Individual differences in rational and intuitive thinking styles as predictors of heuristic responses and framing effects. *Personality and Individual Differences, 32*, 415–429. doi:10.1016/S0191-8869(01)00034-4
- Singh, R., & Greenhaus, J. H. (2004). The relation between career decision-making strategies and person–job fit: A study of job changers. *Journal of Vocational Behavior, 64*, 198–221. doi:10.1016/S0001-8791(03)00034-4
- Taylor, K. M., & Popma, J. (1990). An examination of the relationships among career decision making self-efficacy, career salience, locus of control, and vocational indecision. *Journal of Vocational Behavior, 37*, 17–31. doi:10.1016/0001-8791(90)90004-L
- 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

Appendix

Means and Standard Deviations of the EPCD Clusters and the NEO-PI Factors According to Decision-Status Group ($N = 383$)

Measure	Scale	Decision status						ANOVA		
		Undecided		Partially decided		Decided		F	df	η^2
		M	SD	M	SD	M	SD			
EPCD	PV	3.98 _a	1.34	3.96 _b	1.21	3.11 _{a,b}	1.17	19.54***	(2, 380)	.09
	An	5.23 _a	1.84	5.31 _b	1.74	3.56 _{a,b}	1.85	35.86***	(2, 380)	.16
	SI	4.32 _a	1.08	4.18 _b	0.99	3.14 _{a,b}	0.85	53.24***	(2, 380)	.22
NEO-PI	N	2.61 _a	0.74	2.58 _b	0.71	2.33 _{a,b}	0.66	5.84**	(2, 380)	.03
	E	3.51	0.58	3.39	0.55	3.54	0.56	2.22	(2, 380)	
	O	3.45	0.54	3.38	0.55	3.41	0.53	0.58	(2, 380)	
	A	3.60	0.48	3.69	0.48	3.60	0.58	1.23	(2, 380)	
	C	3.71 _a	0.55	3.77 _b	0.60	3.99 _{a,b}	0.61	8.57***	(2, 380)	.04

Note. EPCD = Emotional and Personality-related Career decision-making Difficulties; NEO-PI = NEO Personality Inventory; ANOVA = analysis of variance; PV = Pessimistic Views; An = Anxiety; SI = Self-concept and Identity; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness. Means with the same subscript are statistically different (Tukey's post hoc test, $p < .01$).

** $p < .01$. *** $p < .001$.

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