A Taxonomy of Difficulties in Career Decision Making

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A general theoretical taxonomy of career decision-making difficulties, based on decision theory, has been developed. To examine the proposed taxonomy empirically, a questionnaire was constructed in which the various possible difficulties in the theoretical model were represented by respective statements. The questionnaire was administered to a sample of 259 young Israeli adults who were at the beginning of their career decision-making process and to an American sample of 304 university students. The observed relations among the 10 scales, which represent the 10 theoretical categories of difficulties, and those among the items within 2 selected categories, were similar in the 2 samples and compatible with the expected relations derived from the theoretical model. The implications for career counseling and research are discussed.

The growing rate of change in the world of work increases the number of career transitions individuals make during their lifetime. The quality of the career decisions made during these transitions is significant for both the individual and society. Making a career decision is, however, a complex process. Although some people make such decisions easily, at least apparently, others face difficulties in making their career decisions, and many seek professional help. One of the central aims of career counseling is to facilitate the career decision-making process of counselors and, in particular, to help them overcome the difficulties they encounter during this process. Therefore, identifying the unique difficulties that prevent individuals from reaching a decision is an essential step in providing them with the help they need.

The construct of career indecision has been used to refer to the problems individuals may have in making their career decision (for a review, see Slaney, 1988). Because of its recognized significance, career indecision is one of the central research issues of career psychology (Betz, 1992; Fouad, 1994; Meier, 1991; Tinsley, 1992). Indeed, research on career development and choice has devoted much attention to the categorization of various problems related to indecision. However, some of these discussions have been purely theoretical, without any empirical testing (e.g., Campbell & Cellini, 1981; Miller, 1971), whereas others have had mainly an empirical focus in attempting to develop various measures of career indecision. Furthermore, it appears that these two lines of research, the theoretical and the empirical, have been conducted independently of one another and by different groups of investigators.

In his introduction to the special issue on indecision in the Journal of Vocational Behavior, Tinsley (1992, p. 211) suggested that "efforts to relate research on career indecision to the decision making process and to develop a theoretical context for the construct of indecision will lead to important advances in our research on these constructs." The present article attempts to meet this challenge. Specifically, the goal of this article is to present a new theoretical model of difficulties in career decision making based on an adaptation of decision theory to the context of career decisions and to report an empirical test of this model in two different samples.

Career Indecision

Various theoretical approaches have been used to deal with career indecision, each emphasizing a different aspect. For example, the psychodynamic approach (e.g., Bordin & Kopplin, 1973) tried to classify the individual's problems according to their internal sources instead of their observed symptoms. The developmental approach (e.g., Osipow & Fitzgerald, 1996; Super, 1953) suggested that the typical problems faced during the decision process correspond to the normal stages of career development, highlighting in particular the concept of vocational maturity (Crites, 1978). The vocational interests approach (e.g., Holland, 1985; Roe, 1956; Salomone, 1982) proposed that insufficient crystalli-
zation of interests is among the major factors preventing the individual from reaching a decision. Because each of these theoretical approaches (as well as some others) has focused on a single major facet of the process of career decision making, their categorizations are limited to the particular facet adopted and hence are neither comprehensive nor inclusive (Rounds & Tinsley, 1984). Furthermore, in many cases, the empirical tests of these theoretical approaches have supported them only partially.

The empirical research on career indecision has focused on developing various measures for examining individual differences in career indecision. These measures include the Career Decision Scale (CDS; Osirow, Carney, & Barak, 1976; Osirow, Carney, Winer, Yano, & Koschier, 1987; Osirow & Winer, 1996); the My Vocational Situation Scale (MVS; Holland, Daiger, & Power, 1980); the Vocational Decision Scale (VDS; Jones & Chenery, 1980); the Career Decision Profile (CDP, a revision of the VDS; Jones, 1989); the Behavioral Indecision Scale (BIS; Fuqua & Hartman, 1983); the Career Decision Making Self-Efficacy Scale (CDMSE; Taylor & Betz, 1983); the Career Decision Diagnostic Assessment (CDDA; Bansberg & Sklare, 1986; Larson, Busby, Wilson, Medora, & Algood, 1994); the Career Factors Inventory (CFI; Charttrand, Robbins, Morrill, & Boggs, 1990); the Career Barriers Inventory (Swanson & Tokar, 1991); and the Career Belief Inventory (CBI; Krumblitz, 1991, 1994). Most of the research involving these measures has been carried out independently of theoretical conceptualizations (Tinsley, 1992).

The state of affairs reflected in this concise review of the theoretical and empirical research has led us to the conclusion that a new framework, which combines a theoretical analysis and empirical tests, may provide a unique and significant contribution to research on career indecision.

Decision Theory and Career Decision Making

Decision theory, on which the proposed taxonomy of difficulties relies, has been playing an increasingly important role in understanding the processes involved in career decision making (e.g., Brown, 1990; Gati, 1986; Jepsen & Dilley, 1974; Katz, 1966; Mitchell & Krumblitz, 1984; Neimeyer, 1988; Osirow, 1987; Osirow & Fitzgerald, 1996; Phillips, 1994; Pit & Harren, 1980; Walsh & Osirow, 1988). According to the normative theory of decision making, the best decision is the one that best helps to achieve the decision maker’s goals. These goals are represented by the individual's preferences with respect to the various attributes of the alternatives under consideration. A rational career decision maker should choose the alternative with the highest utility, where the utility of each alternative is a function of the perceived gap between the individual's preferences and the alternative's characteristics in each of these attributes. Utility theory is a normative model that may be regarded as a prescription for the best method for making decisions (Baron, 1988; Brown, 1990).

Career decisions have the following features: There is an individual who has to make a decision, there are a number of alternatives to select from, and there are many attributes or aspects that are considered in the comparison and evaluation of the various alternatives. In addition to these characteristics, which are common to many decisions, career decisions also have certain unique features. First, the number of potential alternatives is often fairly large (e.g., the number of occupations, colleges, majors, or potential employers). Second, there is an extensive amount of information available on each alternative. Third, a large number of aspects (e.g., length of training, degree of independence, type of relationship with people) is required to adequately characterize the occupations and the individual's preferences in a detailed and meaningful way (e.g., Gati, Garty, & Fassa, 1996; Gati, Osirow, & Givon, 1995; Katz, 1993; Loquist & Dawis, 1978). Fourth, uncertainty plays a major role with respect to both the individual's characteristics (e.g., present and future preferences) and the nature of future career alternatives (Gati, 1990; Gelatt, 1989).

Proposed Taxonomy

Assumptions Underlying the Proposed Taxonomy

Relying on decision theory, we first developed a model of an "ideal career decision maker." This term refers to a person who is aware of the need to make a career decision, is willing to make it, and is capable of making the "right" decision (i.e., a decision using an appropriate process and most compatible with the individual's goals). The complexity of the process of career decision making, as noted earlier, makes it difficult for most people to be ideal career decision makers. We define any deviation from the ideal career decision maker as a potential problem that may affect the individual's decision process in one of two possible ways: (a) by preventing the individual from making a decision or (b) by leading to a less than optimal decision.

The process of career decision making can be separated into distinct components (e.g., Brown, 1990; Gati, Fassa, & Houminer, 1995; Katz, 1966; Pit & Harren, 1980), each of which presumably involves different kinds of difficulties. Therefore, the various possible difficulties the individual may face during the process of career decision making can be classified into distinct categories such that difficulties with common features are included in the same category (Campbell & Cellini, 1981). Specifically, the classification of the difficulties into categories was based on the following criteria: (a) belonging to the same stage or component of the process of career decision making; (b) having the same assumed source; (c) having similarity in the hypothesized possible impact of the difficulty (i.e., halting the process or leading to a less than optimal decision); and (d) having similarity in the type of intervention needed to overcome it.

Furthermore, we assume that the individual may have a single difficulty or a combination of them (Campbell & Heffernan, 1983) and that these difficulties may be located in one or several categories. However, we expect that the difficulties within each category will co-occur more often than those from different categories. On the other hand,
problems from different categories can also be associated in certain cases because, as Campbell and Heffernan (1983) pointed out, problem categories cannot and should not be completely independent of each other.

Features of the Proposed Taxonomy

The proposed taxonomy was developed through interaction and sequential interplay between theoretical considerations and empirical testing. Specifically, to ensure the comprehensiveness of the proposed model, as well as its relevance for real-life contexts, we elicited descriptions of career decision difficulties from 200 career counselees and 10 expert career counseling psychologists. We compared these lists with the theoretical model to ensure that it included all important and relevant difficulties and introduced a few changes in the set of difficulties included in the categories.

The proposed taxonomy itself is hierarchic (Fleishman & Quaintance, 1984), in which broad categories of difficulties are separated into categories and then subcategories based on finer distinctions. Accordingly, during the diagnostic process each difficulty of an individual can be classified as to its major category and then into finer categories and subcategories (Campbell & Heffernan, 1983). Specifically, in the proposed taxonomy the difficulties are divided into three major categories. The first, Lack of Readiness, includes four categories of difficulties that precede the engagement in making a specific career decision. Each of the other two major categories, Lack of Information and Inconsistent Information, includes three categories of difficulties that arise during the actual process of career decision making. The three major categories of difficulties and the 10 specific categories of the proposed taxonomy are summarized in Figure 1.

The 10 Difficulty Categories

Within the major category of Lack of Readiness, a distinction was made between two pairs of categories. One pair includes difficulties that are related to lack of motivation to engage in the career decision process and general indecisiveness concerning all types of decision making. The other pair includes difficulties related to dysfunctional myths (e.g., irrational expectations) about the process of career decision making and lack of knowledge about the steps involved in this process.

Within the major category of Lack of Information, a distinction was made among three categories: lack of information about self, lack of information about occupations, and lack of information about ways of obtaining additional information. We assume that, because the last two categories refer to external, objective information, they are more closely related to each other than to the first one (which involves the individual).

Within the major category of Inconsistent Information, a distinction was made among three categories: unreliable information, which includes difficulties related to unreliable or fuzzy information; internal conflicts, which include conflicts within the individual; and external conflicts, which include conflicts involving the influence of significant others. Here too, we assume that the last two categories of conflict are more closely related to each other than to the first.

Figure 1. The initial theoretical taxonomy of career decision-making difficulties.
Specific Difficulties Within Categories

The elaborated theoretical model, which includes 44 specific difficulties representing the various categories (and subcategories), is presented in the Appendix. Each of these 44 specific difficulties represents a distinct type of problem, where these distinctions are based on both theoretical considerations and apparent practical significance. It is important to note that the degree of differentiation is not equal across the 10 categories. Rather, the six categories associated with the difficulties that arise during the engagement in the process were refined by a systematic division into subcategories, whereas the four categories included in the major category of Lack of Readiness were not (for lack of theoretical rationale or practical need).

Specifically, within the category of lack of information about self, a distinction was made between lack of information regarding preferences ("What do I want?") and lack of information regarding the individual's perceived capabilities ("What can I do?"). Each of these two subcategories was further divided into difficulties associated with lack of information at present and difficulties associated with uncertainty about the future. Similarly, within the category of lack of information about occupations, a distinction was made between lack of information about the very existence of occupational alternatives and lack of information about the characteristics of the alternatives. Each of these two subcategories was further divided into lack of information at present and lack of information about the future. Within the category of lack of information about ways of obtaining additional information, a distinction was made between ways of obtaining information about the self (e.g., career counseling services) and ways of obtaining information about the occupations (e.g., career information centers).

Within the category of unreliable information, a distinction was made among three subcategories, according to the different kinds of unreliable information. Such unreliability may be related to (a) the individual's preferences, (b) his or her perceived capabilities, or (c) the occupational alternatives regarded as relevant. Within the category of internal conflicts, a distinction was made between conflicts associated with incompatible preferences and those arising from the gap between preferences and capabilities. The first subcategory was further divided into conflicts among preferred aspects, conflicts among occupations, and conflicts between an occupation and a desirable aspect (e.g., between the desire to be a nursery school teacher and to have a very high income). The second subcategory was further divided into insufficient abilities and abilities higher than required. Finally, within the category of external conflicts, a distinction was made between conflicts among external sources (e.g., between two significant others) and conflicts between the individual and an external source. Each of these subcategories of conflicts was further divided into conflicts expressed in terms of relevant aspects (i.e., what criteria or factors to take into consideration in the decision) or in terms of alternatives (i.e., what careers the individual should choose).

Note that important distinctions that underlie decision theory are represented explicitly in the proposed taxonomy. These distinctions are (a) between alternatives (i.e., careers) and the characteristics (i.e., aspects) that can be used to compare and evaluate them; (b) between specific missing information and the possible ways of obtaining that information; (c) between preferences and capabilities; and (d) between lack of information about the present and lack of information about the future (explicitly representing the uncertainty involved).

Implementation Issues

We did not include in the proposed taxonomy problems related to the implementation of the decision made because we believe that such problems typically have antecedents in the process of career decision making. Thus, lack of implementation is assumed to stem from the fact that the process by which the decision was reached was problematic, and certain difficulties were not dealt with adequately. For example, lack of means to realize a plan may stem from the fact that the issue of financial resources to implement the decision was not dealt with adequately; lack of information about how to realize a preferred alternative may stem from lack of information about that alternative or additional sources of information; delaying the implementation of a preferred alternative may stem from lack of confidence in the process of career decision making, which, in turn, may be associated with lack of knowledge about the steps and characteristics of this process.

Goals of This Research

In this research we tested the hypothesis that the empirical structure of career decision difficulties conforms to the theoretical model. However, because of the complexity of the proposed model and its multilevel nature, we decided to separate the test into two parts. First, we examined whether the empirical relations among the 10 categories conform to their theoretical structure. That is, we examined whether the 10 categories of difficulties are divided into the hypothesized three major categories (Lack of Readiness, Lack of Information, and Inconsistent Information) and whether the structure within each major category conforms to the expected pattern of relations among them. Second, we examined whether the structures of difficulties within two of the categories—lack of information about the self and inconsistent information—conform to their hypothesized internal structure. These two categories were selected for three reasons: (a) We believe that dealing with difficulties in these two categories is significant for the career counseling process; (b) their internal structure is systematic and well defined; (c) the number of difficulties included in each of these categories (8 and 6, respectively) makes such a test possible (when only 3 difficulties are included in a category, its internal structure cannot vary much).

To conduct these tests, we developed a questionnaire that includes 44 statements corresponding to the 44 difficulties in career decision making included in the theoretical model.
and defined 10 scales corresponding to the 10 categories. This questionnaire was administered in two different cross-cultural contexts: an Israeli sample of young adults who were at the beginning of their process of career decision making and an American sample of university students. The use of two culturally distinct samples enabled us to examine the generality and stability of the proposed taxonomy. After a discussion of the results of these two samples, the implications for theory, research, and the career counseling practice are explored.

**Method**

The questionnaire used in this study was developed especially for the purpose of testing the proposed taxonomy. Hence, before using it to test the theoretical taxonomy, we had to carry out a number of steps to ensure that it adequately represents the model and that its psychometric properties are satisfactory. We begin by briefly describing the development of the questionnaire, then turn to our main goal of testing the model itself: The initial constructions of the questionnaire as well as its pretests were carried out in Israel (in Hebrew), and only the last version was administered in both Israel and the United States (after translation into English).

**Development of the Career Decision Difficulties Questionnaire (CDDQ)**

**Initial construction of the questionnaire.** On the basis of the theoretical taxonomy, we constructed a set of items, each of which corresponds to one of the 44 difficulties in the theoretical model. We decided to use only one representative item for each difficulty in order to prevent cognitive overload and motivational decrease (due to an overly long questionnaire). Then, to test the correspondence between the items in the questionnaire and the difficulties in the theoretical model, we asked five experienced career counseling psychologists (3 MA and 2 PhD) to match each of the items in the questionnaire with one particular difficulty from those included in the theoretical model. Mismatched items were revised, reworded, or replaced. Next, on the basis of the proposed 10 categories of difficulties, we defined 10 scales, each of which is based on the particular set of items representing the set of difficulties included in that category.

**Revisions of the questionnaire on the basis of empirical data.** We asked 200 young adults, ages 20 to 22 years, who were at the end of their obligatory military service and thus about to make their first major career decision, to complete the questionnaire. Their responses were analyzed to ensure that the psychometric properties of the questionnaire were satisfactory. Specifically, we first computed the mean and standard deviation of the responses for each item to ensure differentiation. Second, we computed the score of each scale, where this score was defined as the mean of the responses to the items included in that scale. Then we computed the item–scale correlation (excluding the item itself) and the item–other scales correlations (i.e., the correlations between the item and the scores of the scales to which the item does not belong). Problematic items were located using the criteria proposed by Meir and Gati (1981). Third, we carried out a cluster analysis of the intercorrelation matrix among the responses to the 44 items. Fourth, we assessed the scale reliabilities (Cronbach’s alpha), as well as the reliability of the complete questionnaire. Finally, using retest data from the same group of participants, we examined the test–retest reliability of the items, the scales, and the whole questionnaire. Some of the items were revised on the basis of these analyses.

Using the revised questionnaire, we collected additional data from another group of approximately 200 young adults whose characteristics were similar to those of the first group. We then analyzed their responses to the revised questionnaire in the same manner and made the necessary revisions in the questionnaire. This process was repeated four times (with different versions of the questionnaire and different groups of about 200 young adults) until the psychometric properties of the questionnaire were found satisfactory and its internal structure had been consolidated.

**Last Round of Data Collection**

**Participants.** Two different cross-cultural samples participated in the research: an Israeli sample and an American sample. The Israeli sample consisted of 147 men and 112 women, ages 19 to 23 years ($\text{Mdn} = 21, \text{M} = 20.68, \text{SD} = 0.74$), who were nearing the end of their military service. Ninety-eight percent of the participants had 12 years of schooling. The questionnaires of two older participants (25 and 28 years) were not included in the analyses. The American sample included 304 students (186 men and 118 women; 13 did not indicate gender) at a large midwestern university in the United States. The age range was 17 to 23 years ($\text{Mdn} = 18, \text{M} = 18.70, \text{SD} = 1.10$). Most participants (74%) were freshmen, 18% were sophomores, and 6% were juniors. Within the population from which the sample was drawn, the majority are Caucasian (71%); other ethnic groups include Asian Americans (15%), African Americans (6%), Hispanic Americans (1%), Native Americans (1%), and others (those of mixed race and non-Americans: 5%).

**CDDQ.** The first page of the questionnaire included general background information: age, sex, years of education, present job, the degree to which the participant is considering a career decision (very, little, not at all), whether the participant has some career alternative in mind, and his or her degree of confidence in that alternative (on a 9-point scale). The following pages included 44 items, each one corresponding to a particular difficulty. The participants were asked to rate (on a 9-point scale) the degree to which the difficulty represented by each item (e.g., “It is usually difficult for me to make a decision”) described them (from 1 = does not describe me to 9 = describes me well). Finally, the participants were asked to rate the overall severity of their difficulties in making a career decision (from 1 = not severe at all to 9 = very severe) and to list additional difficulties preventing them from making a career decision.

Because the research questionnaire was developed in Israel (in Hebrew), it had to be translated into English for the American sample. The questionnaire was first translated in Israel by a native Hebrew speaker and then examined by three other native Hebrew speakers; all four are bilingual. Next, the translation was examined by a native English speaker who lives in Israel and after 20 years may be regarded as bilingual as well. Finally, the English version of the questionnaire was edited in the United States by a native English speaker.

**Procedure.** The Israeli participants responded to the questionnaire at the beginning of a 3-day workshop called “Orientation to Civilian Life,” organized by the Israeli Veterans Administration. In responding to the questionnaire, participants gave their consent to use their responses in the research. Fewer than 5% did not return the questionnaire. To allow us to assess test–retest reliability, we asked the participants to complete the questionnaire again on the third day of the workshop. Because at the end of the workshop the soldiers would return to their original unit and could not be
reached, we had only this short interval for the test–retest estimates. After responding the second time (n = 164), the participants were given an orientation lecture geared toward making career decisions and were given an explanation for being asked to fill in the questionnaire twice. The American participants responded to the questionnaire in groups of 15 to 25 students, as part of the course requirement in introductory psychology. All participants returned their questionnaires.

Analyses. First, the psychometric properties of the questionnaires were examined, focusing in particular on the scales’ means, standard deviations, scale intercorrelations, Cronbach alpha, and test–retest reliability. The cross-cultural comparison made it possible to test the psychometric equivalence of the questionnaires (Fouad, 1993). Second, to derive the empirical structure of the 10 scales and the empirical internal structure of the two selected categories, we used cluster analysis. Cluster analysis is used to partition the stimuli of a given data set into relatively distinct groups. One of its prevalent uses is to test a particular psychological classification on the basis of prior knowledge or theory (Borgen & Barnett, 1987).

In this study we used a clustering algorithm called ADDTREE (Sattath & Tversky, 1977). ADDTREE is especially attractive because it represents the proximity matrix in the form of an additive or “path length” tree, in which the variables are divided into clusters and subclusters according to the proximity between them (as reflected in the degree of correlation between them). Thus, the clustering analysis by ADDTREE of the intercorrelations among the 10 scales and the intercorrelations among the difficulties within the two selected categories allowed us to directly compare the empirical structures with the hypothesized theoretical structures. Another advantage of ADDTREE is that, unlike many other clustering programs available as part of standard statistical packages (e.g., SAS, SAS Institute, 1982; SPSSx, SPSS, Inc., 1986), no decisions about the method or technique of clustering are needed (i.e., single linkage, complete linkage, average linkage, or Ward’s, 1963, minimum variance technique). For additional details on ADDTREE, see Sattath and Tversky (1977); for the results of its applications to a variety of datasets, see Tversky and Hutchinson (1986).

Results

Because there were no systematic or meaningful differences between men and women in the scale scores, and the pattern of correlations among the scales was highly similar for men and women (Spearman’s r = .89 and .90 for the Israeli and the American samples), we report only the aggregated results.

Psychometric Properties of the Questionnaire

Israeli sample. The means, standard deviations, and reliabilities of the scale scores in the Israeli sample are presented in the left-hand side of Table 1. The table also presents the number of items per scale. The intercorrelations among the scale scores in the Israeli sample are presented in Table 2, above the diagonal. During the initial phases of these analyses (as well as in those of the previous versions of the questionnaire) we found that, unlike the structure in Figure 1, the category of lack of knowledge about the process was much closer to the three categories in the major category of Lack of Information than to the three categories in the major category of Lack of Readiness. Hence, in the following analyses this category was regarded as belonging to the difficulties of the major category of Lack of Information. As can be seen in Table 1, the standard deviations of the scale scores show an acceptable variability, and the correlations among the scale scores (Mdn = .37 and range = .06–.78) indicate an adequate differentiation among them.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Israeli sample</th>
<th>American sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Number of items</td>
<td>M</td>
</tr>
<tr>
<td>Lack of Readiness</td>
<td>3</td>
<td>2.80</td>
</tr>
<tr>
<td>Lack of Motivation</td>
<td>4</td>
<td>3.80</td>
</tr>
<tr>
<td>Indecisiveness</td>
<td>3</td>
<td>4.52</td>
</tr>
<tr>
<td>Dysfunctional Myths</td>
<td>3</td>
<td>4.04</td>
</tr>
<tr>
<td>Lack of Information</td>
<td>8</td>
<td>3.44</td>
</tr>
<tr>
<td>Lack of Knowledge About the Process</td>
<td>4</td>
<td>4.62</td>
</tr>
<tr>
<td>Lack of Information About Obtaining Additional Information</td>
<td>2</td>
<td>3.52</td>
</tr>
<tr>
<td>Inconsistent Information</td>
<td>6</td>
<td>3.12</td>
</tr>
<tr>
<td>Internal Conflicts</td>
<td>7</td>
<td>3.42</td>
</tr>
<tr>
<td>External Conflicts</td>
<td>4</td>
<td>2.28</td>
</tr>
<tr>
<td>Lack of Readiness</td>
<td>10</td>
<td>3.71</td>
</tr>
<tr>
<td>Lack of Information</td>
<td>17</td>
<td>3.84</td>
</tr>
<tr>
<td>Inconsistent Information</td>
<td>17</td>
<td>3.04</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>3.49</td>
</tr>
</tbody>
</table>
The reliability (Cronbach alpha) of the scales varies significantly, as can be seen in Table 1. The reliability of the scale of Dysfunctional Myths (Rd) is very low, revealing that a positive endorsement of a particular dysfunctional myth is not associated with the endorsement of other myths. This finding was consistent across the various versions of the questionnaire and replicates those of Gati (1996b). Other scales had moderate-to-high reliabilities, ranging from .66 for the scale of Lack of Motivation to .90 for Lack of Information About Occupations (the median scale reliability was .78). The low reliability of Dysfunctional Myths contributed to the relatively low reliability of the major category of Lack of Readiness (.70); the reliabilities of the two other major categories were much higher: Lack of Information (.77); and Inconsistent Information (.89). The reliability of the whole questionnaire was .95. The similarity between the Cronbach alpha reliabilities obtained in the two samples is reflected in a Spearman rank-order correlation of .94 for the 10 scales. This similarity indicates that the variance in reliabilities is inherent to the scales and not especially associated with the different procedures and settings in which the two data sets were collected. Furthermore, the rank order of the correlations between the 10 scales in the two studies was .90 (which is reflected in the similarity of Figures 2 and 3), indicating a stable pattern of relations among them across cultures. Finally, the rank-order correlation between the scale means was .85, reflecting the similarity in the relative severity of the difficulties in the two samples.

Empirical Structure of the 10 Scales

Israeli sample. Figure 2 presents the empirical structure of the 10 scales obtained by an ADDTREE analysis of the intercorrelation matrix shown in Table 2. The clustering structure in Figure 2 adequately summarized the empirical relations among the scales: The linearly accounted-for variance by the distances in the clustering structures was 94%. The distance between any pair of scales in this clustering structure is represented by the sum of the horizontal segments on the shortest path connecting them. Thus, scales within the same cluster are generally more closely related than those belonging to different clusters.
DIFFICULTIES IN CAREER DECISION MAKING

Figure 2. The empirical structure of the 10 difficulty categories—Israeli sample (n = 259). R = Readiness; LoI = Lack of Information; II = Inconsistent Information.

As can be seen in Figure 2, the 10 scales are grouped into three clusters corresponding to the three major categories: Lack of Readiness, Lack of Information, and Inconsistent Information. Furthermore, there is a distinction between the first category, which includes difficulties arising prior to the beginning of the process of career decision making, and the last two categories, which include difficulties arising during the decision-making process. The cluster of Lack of Readiness includes, as expected, the scales of Lack of Motivation, Indecisiveness, and Dysfunctional Myths, although in a different internal arrangement. However, the scale of Lack of Knowledge About the Process joined the cluster of Lack of Information instead of the cluster of Lack of Readiness. As stated, this finding also emerged in the previous versions of the questionnaire. The cluster of Lack of Information includes, in addition to this scale, the scales of Lack of Knowledge About the Process, Lack of Information About Occupations, and Lack of Information About Additional Sources of Information, as suggested by the theoretical model. The third cluster, Inconsistent Information, includes, as hypothesized, the scales of Unreliable Information, Internal Conflicts, and External Conflicts.

American sample. Figure 3 presents the empirical structure of the 10 scales, obtained by the ADDTREE analysis of the intercorrelation matrix shown in Table 2. The clustering structure in Figure 3 adequately summarizes the empirical relations among the scales: The linearly accounted-for variance of the data by the distances in the clustering structure is 98%.

As can be seen from Figure 3, the empirical structure of the 10 scales in this sample is similar to that in the Israeli sample. First, as for the Israeli sample, there is a distinction between the difficulties that arise prior to beginning the process of career decision making and those arising during this process. Second, the cluster of Lack of Readiness includes the scales of Lack of Motivation, Indecisiveness, and Dysfunctional Myths, and, again, the last two are paired together. Third, the cluster of Lack of Information includes the same four scales as in the Israeli sample, with a similar internal structure. Specifically, Lack of Knowledge About Occupations and Lack of Information About Ways of Obtaining Additional Information are paired with each other and separated from the other two scales—Lack of Knowledge About the Process and Lack of Information About Self. It is important to note that Lack of Knowledge About the Process is located in the cluster of Lack of Information rather than in the Lack of Readiness cluster, just as in the Israeli sample; in this both samples differ from the theoretical model.

Figure 3. The empirical structure of the 10 difficulty categories—American sample (n = 304). R = Readiness; LoI = Lack of Information; II = Inconsistent Information.
irical model. Finally, the scales of Unreliable Information and Internal Conflicts are grouped in the major cluster of Inconsistent Information. However, in contrast to what we expected, the scale of External Conflicts is located not in this major cluster, as in the Israeli sample, but rather in the Lack of Readiness cluster.

Empirical Structure of Difficulties Within Categories

Israeli sample. Figure 4a presents the empirical structure of the eight difficulties within the category of lack of information about self, obtained by an ADDTREE analysis of the intercorrelations between the responses to the eight items representing the eight difficulties related to this category in the Israeli sample. As expected, the difficulties in this category were grouped into two subclusters: lack of information about preferences ("What do I want?") and lack of information about capabilities ("What can I do?"). In each of the two clusters, the two difficulties representing lack of information at present are found together (Difficulties 16 and 17, and 14 and 15, respectively; see Appendix), as proposed in the theoretical model. However, the respective two difficulties concerning the future constitute a well-defined pair only in the cluster of preferences (Difficulties 20 and 21).

Figure 4b presents the empirical structure of the six difficulties related to the category of unreliable information in the Israeli sample. Compatible with the theoretical model, the difficulties in this category were grouped into three pairs: (a) inconsistency about preferences (about desirable aspects, or preferred careers), (b) inconsistent information about capabilities (abilities and personality traits), and (c) inconsistent information about the occupational alternatives (what careers there are and what they are like).

American sample. Figure 5a presents the empirical structure of the eight difficulties within the category of lack of information about self in the American sample. The empirical structure supports the distinction between lack of information about preferences ("What do I want?") and lack of information about capabilities ("What can I do?"). Furthermore, in each of these clusters there is a pair of difficulties representing lack of information at present (Difficulties 16 and 17, and 14 and 15, respectively; see the Appendix) and a pair of difficulties related to lack of information concerning the future (Difficulties 20 and 21, and 18 and 19, respectively). Thus, the internal structures of lack of information about self in both studies are highly similar, but only that of the American sample is fully compatible with the theoretically expected structure.

Figure 5b presents the empirical structure of the six difficulties associated with unreliable information in the American sample. The structure reveals three pairs of difficulties: (a) unreliable preferences, (b) unreliable information about capabilities, and (c) unreliable information about career alternatives. This structure is nearly identical to that

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**Figure 4.** The structure of difficulties within categories—Israeli sample. Cap = Capabilities; Pr = Preferences; Occ = Occupations.
a. Within the category of lack of information about the self

```
Cap
\|-- Present
| \-- Abilities
| \-- Personality traits

Future
\|-- Abilities
| \-- Personality traits

Pr
\|-- Present
| \-- Occupations
| \-- Aspects

Future
\|-- Occupations
| \-- Aspects
```

b. Within the category of unreliable information

```
Cap
\|-- Abilities
| \-- Personality traits

Pr
\|-- Occupations
| \-- Aspects

Occ
\|-- Existence
| \-- Characteristics
```

Figure 5. The structure of difficulties within categories—American sample. Cap = Capabilities; Pr = Preferences; Occ = Occupations.

obtained in the Israeli sample data and compatible with the expected theoretical structure.

Discussion

The central aim of this research was to develop and empirically test a taxonomy of difficulties in career decision making. In the initially proposed taxonomy, outlined in Figure 1 and elaborated in the Appendix, the 44 difficulties were expressed in terms of concepts adopted from decision theory and then adapted to the area of career decisions. The basic distinction in the proposed taxonomy was between difficulties arising prior to the beginning of the process of career decision making and those arising during this process. The major category of difficulties that arise prior to the beginning of the process, which was defined as Lack of Readiness, included four categories: lack of motivation, indecisiveness, dysfunctional myths, and lack of knowledge about the process. The difficulties arising during the process were divided into two major categories: Lack of Information, which included three categories (lack of information about self, lack of information about occupations, and lack of information about ways of obtaining additional information) and Inconsistent Information, which also included three categories (unreliable information, external conflicts, and internal conflicts). Six of the 10 categories were further divided into more refined subcategories; these subcategories and the 4 other categories were broken down into 44 specific difficulties, each representing a distinct type of problem.

To test the proposed taxonomy, we constructed the CDDQ, in which each of the 44 difficulties was represented by one respective item. On the basis of the theoretical model, 10 scales were defined for the questionnaire, each including the set of items corresponding to the specific difficulties constituting the respective category. This questionnaire was then administered to two samples from different social-cultural contexts: an Israeli sample of young adults at the beginning of their process of career decision making and a sample of American university students. Two levels of the proposed taxonomy were tested: the relations among the 10 categories and the relations among specific difficulties that compose two selected categories.

The empirical pattern of relationships among the 10 scales, which represent the 10 difficulty categories in the theoretical model, was generally similar to the hypothesized pattern in both the Israeli and the American samples, with one clear deviation involving the scale of Lack of Knowledge About the Process. In the proposed taxonomy this category was located in the major category of Lack of Readiness because we assumed that this type of difficulty arises before the individual needs to make a particular
career decision and can be prevented by appropriate preparation. Empirically, however, this category was consistently included in the cluster of Lack of Information in both samples. Two reasons may account for this deviation from the theoretical model. First, although knowledge of the steps involved in career decision making may be acquired prior to beginning the process of career decision making, one need not apply this knowledge until the process has actually begun. Accordingly, the participants probably felt a need for knowledge of the steps involved in the process only when they actually started the process of making a particular decision and not before. Second, this knowledge has a cognitive basis (such as lack of information about the self or occupations), whereas the other categories in the cluster of Lack of Readiness are more emotionally based. In light of this consistent and reasonable pattern of relations, we introduced the relevant changes in the theoretical taxonomy; the revised taxonomy, which we now believe to be more adequate, is presented in Figure 6.

**Differences Among the Difficulty Categories**

As can be seen from the list of difficulties in the Appendix, certain parts of the taxonomy are refined more than others. Two factors contributed to this variation in the degree of refinement. First, our theoretical knowledge varies with respect to the different possible difficulties. For example, although we have enough knowledge about lack of information about the self to make two additional levels of within-category distinctions, for indecisiveness, as of yet at least, we do not. Second, the practical significance of such refinements seems to vary among the categories. Specifically, within some categories different difficulties require distinct courses of action (e.g., lack of information about preferences may require the help of a counselor, whereas lack of information about abilities requires relevant tests). Within other categories, however, the same type of intervention is required for all difficulties (e.g., the various dysfunctional myths may require face-to-face counseling).

Indeed, the results of this study indicate that some elaborations are justified. The empirical internal structure of the two selected categories, lack of information about self and unreliable information, was almost identical to the proposed taxonomy. The initial organization of the difficulties within each of these categories was very similar in the two samples, although the Israeli sample showed a slight deviation from the theoretical model within one of the two subcategories of lack of information about self. The compatibility of the within-category structure of the difficulties with the theoretical model in these two categories, and the consistency of the within-category structures in the two samples, increase the likelihood of locating not only difficulty categories but also more refined subcategories. Future research may contribute to the further elaboration and refinement of the difficulties within other categories as well.

Another difference among the 10 categories is the degree of co-occurrence of the difficulties belonging to them. In general, as can be seen from the medium-to-high reliabilities of the 10 scales, the specific difficulties that compose each category tend to correlate across individuals. The only exception to this rule was the scale of Dysfunctional Myths. The unique feature of this category is the very low corre-

![Figure 6. The revised theoretical taxonomy of career decision-making difficulties.](image-url)
lation between the items representing the various dysfunctional myths (range = .02-.19 and .03-.26 in the Israeli and the American samples, respectively), which results in the low scale reliability (.29 and .40, respectively). This pattern shows that the endorsement of one myth was not related to the endorsement of others. As mentioned, a similar pattern of low correlations between myths was also found by Gati (1996b). Nevertheless, in spite of the low consistency of the Dysfunctional Myths scale, we decided not to delete or change this category because of its prevalence and potential impact on the process of career decision making (Nevro, 1987). We strongly recommend, however, that the unique nature of difficulties related to this category be further investigated.

**Comparison Between the Two Samples**

The participants in the American sample differ from those in the Israeli sample in many respects, including age (and thus, presumably, maturity), language, and social-cultural-economic background. Nevertheless, the findings in these two samples almost replicated each other. Specifically, the patterns of reliabilities of the 10 scales in the two samples are very similar; the empirical structures of the 10 scales are similar in both the three main clusters and their internal structure; the structures of difficulties within the category of lack of information about self are very similar, and those within the category of unreliable information are practically identical.

However, the findings of the two samples differed in the location of the scale of External Conflicts. In light of the great overall similarity, this difference is puzzling. To find out what caused it, we reexamined the specific items representing the difficulties included in that scale and discovered a small but apparently significant inaccuracy in the translation. In the Hebrew version, the items mentioned lack of agreement between a significant other and the individual regarding some aspect of the process, whereas in the English translation, the word used was approval. Unlike agreement, which implies symmetry between the involved parties (i.e., the self and the significant other), approval implies asymmetry. Such asymmetry may imply that the individual's position is inferior relative to that of the involved significant other. Thus, in the American sample, these difficulties joined the cluster of Lack of Readiness, which is more closely related to issues of maturity, rather than Inconsistent Information cluster, which is more closely related to incompatible preferences and conflicting opinions.

Another possible explanation for this difference involves the difference in the characteristics of the participants in the two studies: The Israeli sample was composed of slightly older individuals (age 21), who were nearing the end of their 2 or 3 years of compulsory military service, a period that typically has significant effects on the young people, and during which they usually become more independent and responsible. The majority of the American sample (74%), on the other hand, was composed of college freshmen (ages 18–19), who filled out the questionnaire during their first quarter of college. It may be assumed that in this stage of life, they were just at the beginning of the process of separation from home and therefore might have been more dependent on their families than the Israelis. This may have contributed to the observed pattern that External Conflicts were associated with the Lack of Readiness cluster in the American sample, but not in the Israeli sample.

**Implications**

**Theory.** One of the questions raised by the empirical research on the various indecision measures, and on the CDS (Osipow et al., 1987) in particular, concerns the dimensionality of career indecision. Two approaches have been proposed for this issue. One considers indecision to be multidimensional, whereas the other considers it a unidimensional construct. The multidimensional approach suggests that indecision has a number of well-defined dimensions, which, in the context of the CDS, have typically been summarized by four factors: Diffusion, Support, Approach, and External Barriers (e.g., Martin, Sabourin, Laplante, & Coallier, 1991; Shimizu, Vondracek, & Schulenberg, 1994; Shimizu, Vondracek, Schulenberg, & Hostetler, 1988; Vondracek, Hostetler, Schulenberg, & Shimizu, 1990). In contrast, the unidimensional approach suggests that, due to the observed instability in the number and content of the factors underlying the various measures, there is not enough support for multidimensionality (e.g., Osipow, 1987; Savickas, Carden, Toman, & Jarjoura, 1992). This lack of consistency and stability with regard to the dimensions underlying the various indecision measures can be attributed to measurement errors and the lack of a theoretical framework. Indeed, when the question of dimensionality was examined for the rationally developed Career Factors Inventory (Chatrand et al., 1990), the results supported the hypothesized four-factor structure (Career Choices Anxiety, Generalized Indecisiveness, Need for Career Information, and Need for Self-Knowledge). Note, however, that these factors are quite different from those identified in the CDS.

The theoretical framework underlying the present research, as well as its empirical findings, suggest a new perspective concerning the dimensionality of career indecision. Instead of trying to discover dimensions in the construct of career indecision, we have suggested a taxonomy for the various difficulties constituting this construct. The assumption underlying this endeavor is that career indecision is not a single type of problem with different symptoms but rather a group of problems that typically lead to the same final outcome (i.e., the inability to make a career decision). Accordingly, to better understand this construct, it is necessary to investigate its components as well as the relationships among them (i.e., its structure). The first step in such an investigation was carried out in this research, and we regard the reported findings as promising. Specifically, we found that the various difficulties associated with indecision can be classified into 10 meaningful categories and that some of these categories can be further classified into meaningful subcategories. Moreover, these categories and
subcategories were found to have a well-defined structure that is generally compatible with the theoretical model. In light of this, we believe that future work on indecision should focus less on the question of dimensionality and more on the development of a comprehensive, theoretically sound, and practically significant taxonomy.

The proposed taxonomy of difficulties in career decision making is compatible with previous research on indecision. For example, according to Shimizu et al. (1988), diffusion (i.e., lack of confidence and structure), one of the four factors in the CDS, is related to feelings of confusion, discouragement, and lack of experience or information regarding career decision making. In the proposed model, these problems were included in the major category of Lack of Readiness and were defined as lack of motivation, indecisiveness, and dysfunctional myths. These difficulties appear to have an affective source and to be associated with low career maturity (Crites, 1978). Approach–approach conflict, another factor in the CDS, is represented by three difficulties in our category of internal conflicts: conflicts among incompatible desirable aspects, conflicts among incompatible desirable occupations, and conflicts between a desirable occupation and an incompatible desirable aspect. Lack of knowledge about self and lack of information about occupations, two of the factors in the CFI (Chartrand et al., 1990), are represented here by two categories and are further divided, systematically, into subcategories. Problems related to disapproval by significant others, one of the variables measured by the Career Barriers Inventory (Swanson & Tokar, 1991), or to authority orientation, a variable measured by one of the subscales of the CDDA (Bansberg & Sklare, 1986), are represented here by the category of external conflicts. As can be seen from these examples, the proposed taxonomy reorganizes previously encountered difficulties into theoretically based categories, elaborates and refines these categories, and includes additional difficulties that were not explicitly included in previous classifications. Moreover, although this taxonomy is cognitively oriented, it does encompass some affectively based difficulties (e.g., those included in the categories of lack of motivation, indecisiveness, and internal conflicts).

Future research. The proposed taxonomy was tested in this study by analyzing the responses of deliberating young adults from two different cross-cultural samples. Although the two samples provide important evidence for the generality of the taxonomy, it is important to replicate these tests in other samples with different characteristics, for example, a sample of adult career decision makers (ages 40–60) and samples of various racial and ethnic minorities. Another way to examine the proposed taxonomy is to elicit career counselors’ judgments about the difficulties of their counselees. Career counselors can be asked to rate the degree to which each difficulty or each of the 10 categories of difficulties is characteristic of a particular counselee. Then the structure of difficulties can be derived from these ratings by procedures similar to those used in the present research and can also be compared with the theoretical model. This may provide another perspective on the structure of difficulties and serve to validate the questionnaire.

The relationship among the various measures of career indecision has been the focus of several empirical investigations (e.g., Fuqua & Newman, 1989; Tinsley, Bowman, & York, 1989). Following this line of research, simultaneous collection of data on the CDDQ and other career indecision instruments, for example the CDS or the CFI, may make it possible to identify the major aspects of indecision tapped by the latter. For instance, data based on the last group of the American sample of participants (n = 19) reveal a high correlation (.71) between the total career indecision score on the CDS and the total CDDQ score. Further research should investigate this in a larger sample and also investigate the empirical relations between the CDDQ scales and the four suggested factors of the CDS. This may shed light, albeit indirectly, on the dimensionality of the CDS, an issue that has been the focus of many studies, with inconclusive results. Similarly, a comparison between the CDMSE (Taylor & Betz, 1983) and the CDDQ may reveal what categories of difficulties are more closely associated with self-efficacy in career decision making in general and the five dimensions underlying the CDMSE in particular. In the same time, such investigations would contribute to the validation of the CDDQ and the taxonomy underlying it.

A different program of research on indecision has focused on the classification of subtypes of individuals according to their problems in career decision making (e.g., Callanan & Greenhaus, 1992; Larson, Heppner, Ham, & Dugan, 1988; Lucas & Epperson, 1990; Rojewski, 1994; Savickas & Jarjoura, 1991). This line of research assumes that there is a systematic variance in the sets of problem combinations across individuals; however, classifying individuals into subtypes is based on the particular theoretical framework that underlies the taxonomy of the problems or difficulties. Future research should explore the contribution of the present taxonomy of difficulties to the classification of subtypes of individuals.

The categorization of the difficulties in the proposed taxonomy can be linked to the different consequences (and hence also interventions) that each difficulty may lead to. Specifically, we assume that, in general, difficulties involving lack of readiness may prevent the individual from beginning the decision-making process, difficulties involving lack of information may stop the process once it has been started, and difficulties involving inconsistent information (i.e., unreliable information that is not checked out or unresolved conflicts) may stop the process or lead to a decision that is less than optimal. The relative impact and severity of each of these major categories, as well as that of each of the 10 categories, needs to be further studied with respect to both the process of career decision making and its outcomes.

Counseling. A proper diagnosis of counselees’ problems in career decision making is necessary (although, of course, not sufficient) to provide deliberating individuals with the help they need. As mentioned earlier, the purpose of this research was to develop and test a theoretical framework for difficulties in career decision making. Nevertheless, it seems that the questionnaire developed to test the proposed taxonomy has the potential to become, after the
necessary changes, an additional important tool for individual career counseling. Specifically, the comprehensiveness and the theoretical basis of the CDDQ permits the assessment of the individual's difficulties at three different levels of specificity: (a) three major categories (i.e., Lack of Readiness, Lack of Information, and Inconsistent Information); (b) 10 categories (represented by the 10 scales); and (c) specific difficulties (at the level of specific items). Depending on the counselor's judgment, all three levels can be assessed, or the assessment can focus on only the one or two levels that seem most relevant.

Thus, the questionnaire may be used, first, for an initial screening of clients who seek career counseling, by directing the clients to the various intervention options available according to the CDDQ results. For example, those who have difficulties in dealing with conflicts could be directed to personal counseling; those who lack information about their abilities, to further assessment; and those who lack information on educational or career options, to the occupational library. Second, the information from the CDDQ administered before the first counseling session could provide relevant data about the counselee that may help the counselor plan and guide the counseling process. Third, the questionnaire may be used as a “needs assessment” instrument to collect information about the kinds of difficulties in career decision making that frequently occur in particular groups (e.g., 12th-grade students, college freshmen). This may facilitate the design of interventions that best suit the needs of each group. Finally, it may serve, like other instruments that assess career indecision, to evaluate the effectiveness of career interventions, by comparing the counselees' responses before and after the intervention. However, all these important and useful applications should be implemented only after the CDDQ is transformed from a research questionnaire aimed at testing a theoretical model into a validated clinical instrument.

**Computer-assisted career guidance systems.** The diagnosis of difficulties is also very important for computer-assisted career guidance systems. One of the problems associated with the use of these systems is that often the users do not use them effectively because they contain a great deal of information and many components, so that the user "gets lost" (Gati, 1996a). Discovering the individuals' difficulties at the beginning of their dialogue with the computerized system should make it possible to direct them to those components in the system that may provide the information or guidance they need or to recommend that they approach a career counselor in those cases in which the computerized system cannot help (e.g., solving interpersonal conflicts).

**Conclusion**

The significance of this research is linked to the changes in the world of work, a setting that is becoming increasingly dynamic. These changes imply an increase in the number of career transitions individuals make during their lifetime and therefore in the frequency with which they must make career decisions. Locating and understanding the difficulties faced by individuals during their process of career decision making thus have significant practical implications. The results of this research may contribute to the facilitation of these career decisions and hence indirectly help to increase the quality of life in one of its more significant aspects, namely, work.

**References**


manuscript, Department of Psychology, Hebrew University of Jerusalem (in Hebrew).


Appendix

The 44 Difficulties Included in the Elaborated Theoretical Taxonomy

Prior to the beginning of the process

Lack of Readiness
Lack of Motivation (Rm)
1. Unwillingness to make a career decision
2. Work is not perceived as the most important thing in life
3. Feeling that time will lead to the "right" career choice

Indecisiveness (Ri)
4. A general difficulty in making decisions
5. A general need for confirmation and support for decisions
6. A general tendency to avoid commitment
7. A general fear of failure

Dysfunctional Myths (Rd)
8. The belief that entering a career will solve personal problems
9. The belief that there is an ideal career which can fulfill all aspirations
10. The belief that a career choice is a one-time thing and a life-long obligation

Lack of Knowledge About the Process of Career Decision Making (Lp)
11. About the steps involved in making a career decision
12. About the factors to take into consideration
13. About how to combine information concerning the self and career alternatives

During the process

Lack of Information
Lack of Information About Self (Ls)
14. Lack of information about abilities
15. Lack of information about personality traits
16. Lack of information about preferred career alternatives
17. Lack of information about career-related preferences
18. Lack of information about abilities in the future
19. Lack of information about personality traits in the future
20. Lack of information about career alternatives that will be preferred in the future
21. Lack of information about career-related preferences in the future

Lack of Information About Occupations (Lo)
22. Lack of information about the variety of career or training alternatives
23. Lack of information about the characteristics of the career or training alternatives that interest the individual
24. Lack of information about the variety of future career or training alternatives
25. Lack of information about the future characteristics of the career or training alternatives

Lack of Information About Ways of Obtaining Additional Information (La)
26. Lack of information about ways of obtaining additional information about the self
27. Lack of information about ways of obtaining additional information about career and training alternatives

(Appendix continues on next page)
Appendix (continued)

Inconsistent Information

Unreliable Information (Iu)

28. Unreliable information about abilities
29. Unreliable information about personality traits
30. Unreliable information about preferred career alternatives
31. Unreliable information about career-related preferences
32. Unreliable information about the existence of a particular career or training alternative
33. Unreliable information about the characteristics of career or training alternative(s)

Internal Conflicts (Ii)

34. Unwillingness to compromise
35. Several equally attractive career alternatives
36. Dislike of accessible career alternatives
37. Something in a preferred career alternative is undesirable
38. Preferences that cannot be combined in one career alternative
39. Abilities are insufficient for the requirements of the preferred career alternative
40. Abilities exceed those required in the preferred career alternative

External Conflicts (Ie)

41. Disagreement between a significant other and the individual concerning the desirable career alternative
42. Disagreement between a significant other and the individual concerning the desirable career-related characteristics
43. Disagreement between different significant others concerning the recommended career alternative
44. Disagreement between different significant others concerning the recommended career-related characteristics

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