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The Career Decision-Making Difficulties Questionnaire: A Case for Item-Level

Interpretation

Shékina Rochat

Vaud State Office of Career Counseling, Lausanne, Switzerland

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Correspondence concerning this article should be addressed to Shékina Rochat, Vaud State Office of Career Counseling, Rue de la Borde 3d, CH-1014 Lausanne. Email: shekina@icloud.com

Abstract

The Career Decision-Making Difficulties Questionnaire (CDDQ; Gati, Krausz & Osipow, 1996) has long been demonstrated as a useful instrument for career counseling practice. Several case studies have demonstrated how and why using the CDDQ facilitates the career counseling process. The present study explores how an in-depth analysis of a case study conducted at the item level can provide career counselors with a richer understanding of their clients' needs. The case study also emphasizes how administering and providing feedback on the CDDQ in career counseling sessions is likely to foster working alliances. The study concludes by presenting an intervention map based on the CDDQ taxonomy.

***Key words:* Career decision-making; Career Decision-Making Difficulties Questionnaire; career decision-making difficulties; case study; working alliance; intervention map.**

The Career Decision-Making Difficulties Questionnaire: A Case for Item-Level Interpretation

Career counseling aims to help clients make better career decisions (Gati, 1996). This is often achieved initially through an attempt to understand what hinders clients' career decision-making processes (Gati & Levin, 2014). To this end, Gati, Krausz, and Osipow (1996) developed a comprehensive taxonomy of the difficulties that may impede the career decision-making process or lead to a less-than-optimal choice. They suggested that indecision is not a single problem with different symptoms but that it may be the consequence of various problems; thus, indecision is a multidimensional construct. Relying on this assumption, Gati et al. (1996) developed 44 specific difficulties representing ten difficulty categories. Career decision-making difficulties may arise prior to engagement in the career decision-making process (lack of readiness) or during the process (lack of information or inconsistent information). The taxonomy they proposed led to the development of the Career Decision-Making Difficulties Questionnaire (CDDQ). The present study aims to explore how an in-depth analysis of the CDDQ at an item level can enhance understanding of clients' career decision-making difficulties. This, in turn, could foster the working alliance and guide the career counselor in selecting the appropriate career counseling interventions.

CDDQ: Description and Counseling Use

The CDDQ aims to identify the sources of clients' core difficulties before or during their career decision-making process. The CDDQ comprises three major difficulty clusters: (1) lack of readiness, comprising lack of motivation, general indecisiveness, and dysfunctional beliefs; (2) lack of information, encompassing lack of information regarding career choice process, the self, occupations, and how to obtain additional information; and (3) inconsistent information, including unreliable information, internal conflicts, and external conflicts (see Table 2 for more

information on the content of the subscales). The original 44 statements representing difficulties were later reduced to 32 items to shorten the questionnaire, representing 10 categories and three major difficulty clusters.

Since its initial development, the CDDQ has been translated into more than 50 languages and adopted for practice and research purposes in more than 60 countries. For example, the CDDQ has been used to identify most prevalent vocational difficulties (e.g., Gati & al., 1996; Gati & Amir, 2008), discriminate decided from undecided students (Osipow & Gati, 1998), assess the efficacy of career counseling interventions (e.g., Gati, Kleiman, Saka, & Zakai, 2003; Masdonati, Massoudi & Rossier, 2009; Rochat & Rossier, 2009) and to gain insight into the relation between indecision and other vocational development variables, such as career decision-making self-efficacy (e.g., Betz & Voyten, 1997). More recently, the CDDQ has been used to determine the differentiation and consistency of interests (Atitsogbe, Moumoula, Rochat, Antonietti, & Rossier, 2018). The CDDQ has been suggested as a useful tool for planning and guiding career interventions (e.g., Gati & Amir, 2000; Gati & Levin, 2014). CDDQ results directly show clients' most salient difficulties thereby allowing career counselors to better understand why the client seeks career counseling and then to prioritize the most relevant interventions (Gati & Levin, 2014).

Several studies conducted in collaboration with experienced career practitioners have demonstrated that the CDDQ is a valuable complement to other career assessments. For example, Gati, Osipow, Krausz, and Saka (2000) showed good convergence between counselors' clinical judgement and their clients' responses on the CDDQ for half of the difficulties (lack of motivation, general indecisiveness, dysfunctional beliefs, lack of information about the self, and external conflicts), although lower correlations were found for the other difficulties. Gati and colleagues demonstrated that the CDDQ may facilitate the career counseling process by

providing a faster and somewhat more accurate diagnosis. In addition, Amir and Gati (2006) assessed convergences between clients' self-reported difficulties and those assessed with the CDDQ. Results indicated that clients have a good perception of their difficulties but tend to overestimate certain types of difficulty (inconsistent information) and underestimate others (general indecisiveness and dysfunctional beliefs). Therefore, the CDDQ appears to add value to clients' spontaneously self-reported difficulties. Overall, the CDDQ "may help fill a void for both clinicians and researchers in terms of diagnosing career decision-making difficulties" (Whiston & Oliver, 2005, p. 171).

Interpreting CDDQ Scores

Amir, Gati, and Kleinman (2008) suggested a four-step procedure for interpreting CDDQ scores: (1) appraise credibility of the client's responses, (2) assess score differentiation, (3) locate the most salient difficulties, and (4) estimate overall degree of confidence in the results. They illustrated this procedure using two case examples selected from a sample of students. Subsequently, Gati and Levin (2014; Levin & Gati, 2014) demonstrated the usefulness of CDDQ in practice with two case studies providing information about how CDDQ scores can help identify salient difficulties within one-to-one career counseling sessions. In these reports, they demonstrated that the CDDQ offers valuable information about clients' career decision-making difficulties on three levels: (1) total indecision score, (2) three major difficulty clusters, and (3) ten specific difficulties. Because the CDDQ comprises 32 specific career decision-making difficulties, it is likely that a fourth level of information could be useful. This fourth level based on a 32 item-level analysis could enrich information about clients' career decision-making difficulties. More specifically, interpretation at the item level can provide additional insight in selecting the appropriate career counseling interventions. Therefore, additional research is needed

to determine the relevance and incremental value of conducting an in-depth analysis of the clients' responses to individual CDDQ items.

Purpose of the Study

The aim of the present study was to provide support for item-level interpretation of the CDDQ using a case study analysis. The interpretation procedure developed by Amir et al. (2008) for the CDDQ will be applied to the case of Lucas (a pseudonym) who responded to the CDDQ. An interpretation of Lucas' CDDQ scores will be complemented by an in-depth analysis of his scores at the item level. The case study analysis aims to show how an interpretation of the CDDQ at the item level can deepen understanding of clients' career decision-making difficulties and foster a working alliance. Application of the in-depth procedure will lead to the proposition of a "map" of possible career counseling interventions that can be used to address each of the 32 specific career decision-making difficulties.

Method

Participant

Lucas, a 16-year-old high-school student of middle-class socio-economic status, sought career counseling at the career counseling service of a university in Lausanne, . For purposes of this case study, client-related information was altered in accord with the American Psychological Association's (2010) ethical standards. Lucas and his parents signed a consent form allowing the recording of meetings and the use of the collected data for research purposes. Part of this material was used in a previous study (Rochat & Rossier, 2016). Lucas's counselor was a Ph.D. student in vocational psychology at the same University who worked previously as a career counselor for young people who were not in education, employment, or training.

Procedure

Lucas's career counseling intervention followed a standard procedure of three phases (e.g., Masdonati et al. [2009]: (1) initial interview, (3) assessment, and (3) decision-making) spread over four sessions. During the initial interview, the aim was to investigate the client's problems and to set goals for the interventions, as well as to obtain a clear picture of his history and current situation. During the first session, Lucas explained that he asked for career counseling because he was very anxious about not knowing which occupation to pursue in the future. He indicated that the goal of the career intervention should be to help him choose a university major, although he still had two years to make that decision.

At the beginning of the second session, Lucas indicated that a more meaningful goal for him would be to know himself better so that he could be more confident making decisions. In fact, during the first session, Lucas indicated that he regularly encountered major difficulties in making decisions, even casual ones, such as having to choose between a croissant or chocolate bread at the bakery. Recently, these recurring difficulties in making decisions had caused him to be dissatisfied with his current high school major (Spanish) that he had selected based on the advice of friends. The investigation into Lucas's story during the first session also highlighted his interests and skills in a number of areas, including academic and athletic, but he had very little vocational experience.

Measures

Interests, personality, and values. During the assessment phase, quantitative instruments were used to evaluate Lucas' interests (revised form of the Rothwell-Miller Interests Blank; Bernaud & Priou, 1994), personal characteristics (self-report on a list of adjectives) and values (Work Value Questionnaire; Super, 1990). Finally, the decision-making phase included feedback that his assessment results were consistent with Holland's (1997) investigative-realistic type. This

last phase also comprised an exploration of relevant career alternatives, and planning of the next steps to take. The CDDQ was administered to Lucas prior to the assessment phase.

Career decision-making difficulties. The French version of the CDDQ was used to assess Lucas's career decision-making difficulties. The CDDQ is a 34-item self-report measure that includes two control items rated on a 9-point Likert-type scale ranging from 1 (does not apply to me) to 9 (fully applies to me)—higher score indicating more difficulty on the associated career decision-making difficulty. The CDDQ assesses 10 types of career decision-making difficulties that can provide a total indecision score or be grouped into three higher-order categories. The French version of the CDDQ demonstrated good internal consistency ($\alpha = .93$) for the CDDQ total score, and weak to good consistency for the three higher-order categories ($\alpha = .57$ to $.93$; $Mdn = .87$) as well as for the ten types of difficulties ($\alpha = .58$ to $.87$; $Mdn = .78$; Authors, under revisions). The structure of this French version was found to be relatively similar to the original version (Gati & al., 1996; Gati & al., 2000).

Results

Standard CDDQ Interpretation

In a previous article, Amir et al. (2008) suggested beginning the interpretation of clients' CDDQ scores by assessing the credibility of responses to the entire questionnaire, based on analysis of the quality of clients' responses on the two validity items (items 7 and 12). Following the judgment of experienced career counselors, the authors suggested thresholds to assess such credibility (see Table 1). At the beginning of the interpretation, career counselors are encouraged to verify clients' answers to these validity items and to compare them to the proposed benchmarks to estimate the credibility of responses to the entire questionnaire.

Lucas's response to item 7 ("I like to do things my own way") was "2" (typically considered "not credible"), and his response to item 12 ("I always do what I am told to do, even if it goes against my own will") was "4" (credible), resulting in a "doubtful" overall assessment of the credibility. This result is surprising given that Lucas showed great care while completing the questionnaire, including asking questions when he was not sure that he understood the statements properly. Item 7 rates how much an individual likes to do things his or her way; a low score usually is not credible, as most people enjoy doing things their own way. However, considering Lucas's difficulties in making decisions, defining what "his way" was and acting accordingly could have been stressful for him, which gives coherence to his low rating. Therefore, Lucas's case emphasized the need to take into consideration clients' particular stories when assessing the credibility of their responses, especially when they are doubtful or not credible, and to ask for clients' feedback on these assumptions.

Following Amir et al.'s (2008) interpretation procedure, the next task involved an evaluation of the scores' differentiation, based on the standard deviation scores of the 10 scales. A standard deviation is considered differentiated when it is greater than or equal to 1, partially differentiated when it ranges from 0.75 to 1, and undifferentiated when it is less than 0.75. Lucas' between-scale standard deviation was differentiated ($SD = 1.52$) but was lower than the mean of the within-scale standard deviation (2.70). These results indicated that most salient difficulties could be located but that the feedback should be considered with reservations due to the high variance in the responses within scales. The third step of the procedure involved locating the salient difficulties. According to Amir et al. (2008), expressed difficulties can be considered "negligible" when they range between 1 and 2, "moderate" when they range between 3 and 5, and "salient" when they reach 5 and above. Figure 1 shows at one glance Lucas's profile of career decision-making difficulties on the global, cluster, and 10-item scale levels.

Although Lucas rated his general degree of difficulty in making a vocational choice a “7”, the mean of his difficulties appeared to be moderate (4.18). Among these difficulties, general indecisiveness appeared to be the most salient (7.33) and was consistent with Lucas’s history of general difficulty in making decisions. A lack of information about occupations (5.33) and how to obtain more information (5.00) emerged as the next salient difficulties. Finally, in the fourth step, all this information was taken into consideration to estimate the degree of confidence in the feedback. Based on the above information, it appeared that Lucas’s results would have to be considered with certain caution due to his response to one of the validity items and the relatively large variance in the ratings of items within the scales.

CDDQ Item-Level Interpretation

A closer look at the CDDQ structure and its construction reveals that each item represents a specific career decision-making difficulty (Gati & al., 1996). Therefore, a high degree of variance within the scale should not necessarily be considered “noise” that precludes the accuracy of the assessment (Amir et al., 2008). Instead, it may reveal that the person has provided differentiated responses to specific difficulties that have been grouped together. Due to this specific feature, clinical use of the CDDQ should also include an analysis of the responses at the item level. In fact, such differentiated responses seem to be the rule rather than the exception. For instance, Gati and Amir’s (2010) application of Amir et al.’s (2008) systemic procedure to four cohorts of American undergraduate college students (freshman, sophomore, junior, and senior) shows that the mean of the within-scales standard deviation — as computed from the values indicated by the authors in their second table — for all of these groups ($SD = 1.89$) was higher than the mean of between-scales standard deviation (1.54). These considerations tend to indicate that individuals do answer in a differentiated manner to the scale items, which provides a strong case for looking at the clients’ responses at the item level when interpreting CDDQ results.

More specifically, interpretation at the item level can give insight into the client's core difficulties. For example, when a client rates a difficulty at "9", he or she is telling the career counselor "look, this is my real problem!" For instance, in his questionnaire (see Table 2 that lists Lucas's CDDQ item ratings), Lucas rated three items as "9" (items 4, 17, and 28) and one as "8" (item 15). Thus, what he was saying can be described as follows: "It is usually difficult for me to make decisions. Moreover, I find it difficult to make a career decision because I am not sure about my preference. Yet, I am equally attracted to a number of occupations, and it is difficult for me to choose among them. In addition, I don't truly know how to apply the information I have about myself and the information I have about the different alternatives." Therefore, such an in-depth interpretation allowed pinpointing Lucas's core difficulties and formulating a working hypothesis on the relations among the different kinds of expressed difficulties.

This in-depth analysis also underlines the limitation of an interpretation conducted only at the 10-scale level or at the 3-cluster level. In fact, Lucas's case shows that the lack of information about his preferences was a core problem for him but that this problem was not properly reflected at the scale level because the scale score is a composite of item scores. In contrast, the lack of information about occupations appeared to be a core difficulty at the scale level, while it mostly concerns a lack of information about the available alternatives (and not their characteristics, for example), and Lucas rated this concern was only at 7. This difference between the difficulties emphasized at the scale level and the actual rating of each item is mostly due to the variance in the number of items per scale (ranging from 2 — external conflicts and lack of information about ways to obtain additional information to 5 — internal conflicts).

Discussion

Providing Feedback

Overall, the case of Lucas emphasizes the need for the career counselor to investigate the client's responses at the item level to gain a better understanding of the client's needs and reason for seeking counseling. However, regarding giving feedback to the client, counselors may want to use the graphical illustration of the results at the cluster and scale levels to synthesize the information for the clients through visual supports. Therefore, the career counselor can present the results of the 10-item scales while using his or her in-depth understanding of the underlying specific difficulties to illustrate the results of the different scales. These results can then be connected to the client's story or preceding a reflective question. For example with Lucas, "The results show that you expressed a high score on 'general indecisiveness', an item that assesses difficulties in making decisions in many areas of life. In fact, you indicated having difficulties in making decisions in general and often needed to rely on someone else's help to make them. It reminded me of your statement regarding your difficulties in making casual decisions, such as what to choose at the bakery. The need to rely on someone else's help can also highlight why you sought career counseling" or "The analysis of your responses indicated a moderate score on the item 'lack of information about the career choice process.' You seem to be well aware of the factors that should be taken into consideration when making a career decision; however, you reported having difficulties in knowing how to apply this information to make an actual decision. What do you already know about the factors that have to be taken into consideration when making a career choice?"

Fostering a Working Alliance

Investigating clients' responses on the item level may foster the working alliance that is critical to career counseling efficacy (Whiston, Rossier, Baron & Hernand, 2016). According to Bordin (1979), the working alliance comprises three key factors: (1) agreement on the goals, (2) agreement on the tasks to achieve that goal, and (3) the emotional bond between counselor and

client. Therefore, precisely describing clients' current career decision-making difficulties and conveying empathy for the impact of these difficulties in the client's life, helps the career counselor to bond with the client. Moreover, while highlighting the difficulties that have to be overcome in order to make a career decision, the career counselors is indirectly shedding light on the goal of the career counseling process. Similarly, indicating the career intervention that could serve to overcome these challenges can help the career counselor to reach an agreement with the client on the tasks to complete in order to achieve those goals. In fact, Levin and Gati (2014) suggested that clients' CDDQ scores could help the career counselor to select the most appropriate interventions for the career counseling process. Therefore, giving feedback on CDDQ results is likely to be an important way to promote the working alliance and thereby the efficacy of the career counseling process.

Administering the CDDQ

In the case of Lucas, the career counselor provided him with feedback about his CDDQ scores just prior to giving feedback on other quantitative assessments. The CDDQ results thus provided a consistent rationale for how the feedback on vocational interests, personality characteristics, and values could help provide Lucas with more information regarding his preferences (response to item 17). Moreover, the counselor was able to explain how this new information could be applied to career opportunities (response to item 15) and help solve his dilemma (response to item 28), which thus helps him learn to make decisions (response to item 4). The counselor also administered the CDDQ at the end of the career counseling intervention to assess the efficacy of the overall career counseling intervention (see Rochat & Rossier, 2016, for detailed results). This procedure has already been adopted in research (e.g., Gati & al., 2003; Masdonati & al., 2009; Rochat & Rossier, 2016) but should not be limited to this domain. In fact, career counselors are often left without concrete feedback on the effectiveness of the intervention

they provided, which can be disheartening in the long run. By administering the CDDQ at the end of the intervention, they can obtain valuable feedback on the decrease in their clients' difficulties. A second administration can also be useful to help the client estimate the efficacy of the process they have been through.

Mapping Career Interventions

Lucas's case provides a rationale for how investigating CDDQ responses at the item level can help target appropriate career counseling interventions. Previously, Levin and Gati (2014) illustrated how CDDQ assessments can aid the selection of appropriate career interventions, but only at the scale level. A useful extension would be to provide a "map" suggesting different interventions relevant to addressing the specific career decision-making issues expressed at the item level. In fact, several authors (e.g., Savickas, 1996) have highlighted the need to provide practitioners with a map for orchestrating different career interventions. According to Leong (1996), such a map should be based on the clients' difficulties. Due to its multidimensional and multilevel properties, the CDDQ appears to provide a useful basis for conceiving such a map. Table 3 presents an initial illustration of such a map, where selected interventions are proposed in response to each of the difficulties expressed by the 32 items. The benefits of using such a map suggest starting counseling interventions by administering the CDDQ to the client and then adapting the intervention according to the most salient located difficulties (see Gati, Amir & Landman, 2010) at the item level or at the scale level when these do not have a large variance.

In the latter case, career counselors can rely on the results of Gati, Amir and Landman's (2010) study, which show that, according to the judgment of 28 expert career counselors, the difficulties that should be addressed with the highest priority, if the client faces them, are (1) lack of motivation, (2) lack of information about the self and dysfunctional beliefs, (3) lack of information about the process, (4) general indecisiveness, (5) internal conflicts, and (6) external

conflicts. In a more collaborative way, the salient difficulties can be presented to the client as a “menu” of possible targets for interventions among which he or she can choose which to address first. The career counselor can then describe the steps that can be taken to solve this particular problem and solicit the client’s permission to proceed in that way. When this particular difficulty has been resolved, the career counselor and the client can return to this menu to choose the next most pressing issue.

Implications for Practice

The aim of this study was to provide a rationale for interpreting CDDQ results at the item level that could aid in providing appropriate counseling. The case of Lucas showed that the interpretation procedure suggested by Gati and Amir (2010) provided good insights for an initial diagnosis of the client’s most salient difficulties at the overall, cluster, and scale levels. In fact, Osipow and Gati (1998) previously showed the incremental benefit of the CDDQ compared with unidimensional assessments of indecision in career decision-making difficulties, such as the Decision Scale (Osipow, Carney, & Barak, 1976). However, due to the special features of the CDDQ, Lucas' case showed that richer information can be derived from an in-depth analysis conducted at the item level. The case illustration thus highlights how considering clients’ responses to an item can increase the utility of this instrument for career practitioners, as clients may show a recurrent pattern of varied responses at this level. However, any particular rating to a single item can be unreliable, which stresses the importance of verifying the client’s intention when responding to an item prior to interpreting it.

Although this in-depth analysis is probably longer than the usual interpretation procedure, especially when the instrument is administered in group settings, it may help career counselors gain a better understanding of their clients’ needs in terms of interventions. This additional value is illustrated by the proposed “map for interventions.” Such a map can facilitate delivery of career

counseling interventions that clearly focus on the clients' needs. Moreover, it can help synthesize existing interventions in the field and structure an integrative approach. This, in turn, is likely to strengthen the career counselors' self-confidence in providing the appropriate intervention to address a peculiar issue. Naturally, the suggested interventions are not exhaustive, and the proposed map in Table 3 should be continuously enriched with new intervention and instruments. A short manual for all of the proposed interventions is also likely to facilitate their appropriate use by practitioners. The integration of techniques from other fields, such as motivational interviewing (Miller & Rollnick, 2002, 2013) and cognitive behavior therapy (Burns, 1980), could also contribute to highlighting the potential of this map to promote an integrative approach. However, such interventions should not be carried out in a mechanical way. Career counselors should use their best clinical judgment about when to provide these approaches in a way that is adapted to their client's characteristics (e.g., Whiston & Rose, 2015) and career decision-making style or profile (Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010).

Implications for Research

The above considerations tend to highlight the benefit of using the CDDQ in clinical practice and to advocate for an in-depth analysis of clients' responses. Interestingly, this finding also has implications for the research field as it strongly encourages researchers to go beyond the study of indecision at an overall and cluster level (e.g., Sovet & Metz, 2014) or at the scale level (e.g., Morgan & Ness, 2003). In fact, when investigating indecision, the item level must be considered to more fully embrace the complexity of this construct. Researchers should also assess the stability of responses to single items using test-retest designs with an interval of a few days. The impact of using the CDDQ on the quality of the working alliance during the career counseling process should also be assessed through working alliance questionnaires—such as the Working Alliance Inventory (Horvath & Greenberg, 1989). Finally, the suggested “map for

interventions” will benefit from empirical validation and further elaboration and development. For example, the specific impact of all of the suggested interventions on the associated difficulties could be verified. However, following the work of Amir and colleagues (2008), a first step in the empirical validation of such a map could consist of asking experienced career counselors to pair the proposed intervention with the identified difficulties.

Conclusion

In addition to being a useful tool for research, the CDDQ appears to be an effective instrument for practice. To fully benefit from its richness, counselors are encouraged to conduct an in-depth analysis of responses at the item level to gain a better understanding of clients’ intervention needs and to provide more effective counseling. The CDDQ also seems relevant for fostering the working alliance between career counselors and their clients and providing a concrete “map for interventions.” Further empirical validation is needed to support use of the CDDQ for these purposes.

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Table 1

Credibility of Responses According to Amir et al. (2008) when Simultaneously Considering Answers to Control Items 7 and 12

		Item 7		
		1-2: Not credible	3-4: Doubtful	5-9: Credible
Item 12	1-5: Credible	Doubtful	Credible	Credible
	6-7: Doubtful	Not credible	Doubtful	Credible
	8-9: Not credible	Not credible	Not credible	Doubtful

Figure 1

Lucas' profile of career decision-making difficulties.

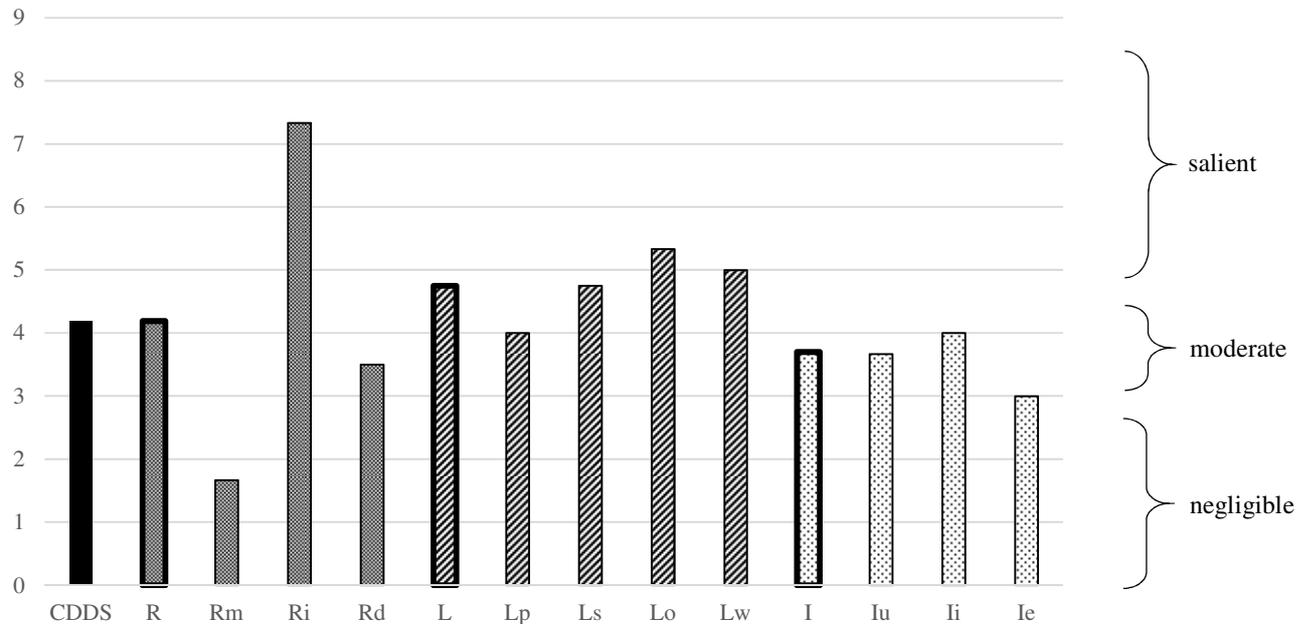


Figure 1. Lucas' Career Decision-Making Difficulties Profile.

Note. CDDS = total score of the CDDQ; R = lack of readiness; Rm = lack of motivation; Ri = general indecisiveness; Rd = dysfunctional beliefs; L = lack of information; Lp = lack of information about the process; Ls = lack of information about the self; Lo = lack of information about the occupations; La = lack of information about where to obtain additional information; I = inconsistent information; Iu = unreliable information; Ii = internal conflicts; Ie = external conflicts. Threshold values for the difficulty level (salient, moderate, and negligible) refer to the criteria proposed and tested by Amir et al. (2008).

Table 2

CDDQ Item Content

Item	Content	Lucas' Rating
Lack of motivation		
Item 1	General lack of motivation regarding the career choice	2
Item 2	Low priority for making a career choice compared to others' life motivations	1
Item 3	Low priority of for making a choice in terms of timing	2
General Indecisiveness		
Item 4	General difficulties in making decisions	9
Item 5	Need for help from significant others	7
Item 6	Fear of failure	6
Item 7	Liking to do things in one's way (validity item)	2
Dysfunctional beliefs		
Item 8	Believing that a career can solve personal problems	5
Item 9	Believing that there is only one career that fits	1
Item 10	Believing that a career will fulfill all aspirations	6
Item 11	Believing that a career choice is made once in a lifetime	2
Item 12	Doing what we are told to even if it his again one's will (validity item)	4
Lack of information about the process		
Item 13	Not knowing what the steps are	2
Item 14	Not knowing which factors should be taken into consideration	2
Item 15	Not knowing how to apply the information	8
Lack of information about the self		
Item 16	Doubts regarding one's current preferences	5
Item 17	Doubts regarding one's future preferences	9
Item 18	Doubts regarding one's current aptitudes and/or personality traits	3
Item 19	Doubts regarding one's future aptitudes and/or personality traits	2
Lack of information about career's alternatives		
Item 20	Not knowing what the existing alternatives are	7
Item 21	Not knowing what the characteristics of these alternatives are	3
Item 22	Not knowing what the future alternatives will be	6
Lack of information about ways to obtain additional information		
Item 23	How to obtain information about oneself	7
Item 24	How to obtain information about alternatives	3
Unreliable information		
Item 25	Changing preferences	6
Item 26	Conflicting information about the self	2
Item 27	Conflicting information about alternatives	3
Internal conflicts		
Item 28	Similarly attractive alternatives	9
Item 29	Similarly repulsive alternatives	1

Item 30	Ambivalence regarding one particular alternative	2
Item 31	Too many preferences	7
Item 32	Aptitudes not matching preferences	1
External conflicts		
Item 33	Conflict between oneself and significant other(s)	1
Item 34	Conflict between significant others	5

Table 3

Examples of Suggested Interventions based on Elevated CDDQ Item Scores.

Item	Interventions
Lack of motivation	
Item 1	Using motivational interviewing (Miller & Rollnick, 2013)
Items 2-3	Using the rules of change (Miller & Rollnick, 2013)
General Indecisiveness	
Item 4	Adminstrating the Emotional and Personality-related Career Decision-making questionnaire (Saka, Gati & Kelly, 2008)
Items 5-6	Using vertical arrow (Burns, 1980) or worst scenario methods (Miller & Rollnick, 2013)
Dysfunctional beliefs	
Item 8-11	Applying the love metaphor (Nevo, 1986) or administering the Dysfunctional Career Decision-Making Belief questionnaire (Hechtlinger, Levin & Gati, 2017)
Lack of information about the process	
Item 13	Introducing the PIC model (Gati & Asher, 2001)
Item 14	Introducing Parson's (1909) model
Item 15	Introducing Holland's (1997) and Dawis and Loftquist's (1986) models
Lack of information about the self	
Items 16-17	Proceeding to quantitative or qualitative assessment of personality traits, interests, values, needs and work roles (see Gati, 1998)
Items 18-19	Highlighting the three facets of abilities (measured, self-estimated, and the willingness to use that ability in one's occupation or job (Gati, Fishman-Nadav, & Shiloh, 2006)
Lack of information about the alternatives	
Item 20-21	Giving information about or guiding the client to relevant sources of information
Item 22	Referring to the happenstance learning theory (Krumboltz, 2009)
Lack of information about ways to obtain additional information	
Item 23	Explaining the benefits of quantitative or qualitative career assessment
Item 24	Giving information about or guiding the client to relevant sources of information
Unreliable information	
Item 25	Referring to items 17 and 19 to identify the possible source of difficulties
Item 26	Referring to items 16-19 and 23 to identify the possible source of difficulties
Item 27	Referring to items 20-21 and 24 to identify the possible source of difficulties
Internal conflicts	

Item 28 Suggesting a balance sheet (Janis & Mann, 1977) or using humor
Items 29-32 Facilitating career compromise (Rochat, 2017)

External conflicts

Items 33-34 Using “My system of career influences” (McMahon, Watson & Patton,
2005) or the “Career-O-Gram” (Thorngren & Feit, 2001)
