Abstract

The aim of the research: The goal of the research is to adapt the Career Decision-Making Difficulties Questionnaire (CDDQ; Gati et al., 1996) to a sample of Hungarian secondary-school students.

Research method: The sample on which the questionnaire analysis was based included 507 Hungarian secondary-school students. Factor analysis was used in order to adapt the questionnaire and to determine the latent variables, that is, factors based on these correlations. With the help of this method, the number of original variables can be reduced and the original data described with the least possible information loss. To this end, the English-language measuring instrument was validated in this study.

A short description of the context of the issue: The exploration of career decision-making difficulties is crucial for personal fulfilment, optimal career fit, improved decision-making skills, reduced uncertainty and anxiety, avoidance of career dissatisfaction, and long-term career development. By addressing these difficulties, individuals can make more informed and satisfying career choices that align with their unique strengths, values, and aspirations.
Research findings: The study revealed that the factor structure of the CDDQ varies across different cultural contexts, a finding which suggests that cultural variations impact the underlying dimensions of the CDDQ.

Conclusions and recommendations: The utilization of the CDDQ allows counsellors and practitioners to obtain valuable insights into the career decision-making difficulties experienced by their clients. This enables them to customize their interventions and counselling approaches to better meet the specific needs of individuals. The questionnaire provides a well-organized and systematic framework for evaluating and tackling these difficulties, thereby facilitating the development of effective strategies and interventions in the counselling process. The diverse sets of factors across different cultural settings highlight the need to consider cultural influences when assessing and interpreting.

Keywords: career decision-making; career decision-making difficulties; pedagogy; career development; motivation

Introduction

The fundamental aim of career orientation counselling is to support the person asking for advice in coping with difficulties that arise during the career decision-making process. Accordingly, the essential feature of counselling is identifying those specific difficulties which inhibit the person from making a decision (Gati & Itay, 2005). Self-evaluation questionnaires and psychological tests have an equally significant role in diagnostics designed for career decision-making counselling, because they can be applied as complementary tools. Self-evaluation questionnaires are accessible to a wider range of users and help identify those individuals for whom the use of psychological tests is also justifiable. It should be noted that career orientation intervention has to be applied in view of the person’s individual needs, while considering that not everybody needs individual counselling and psychological testing.

Career development is a life-long process and it entails continuous decision-making. Throughout this process, one steadily executes a series
of information selection. Cognitive functions that are triggered during this procedure dispose the individual to make subjective and objective value judgements. When deciding on a career path, adolescents cannot yet rely on their life experience, which will be bestowed upon them over time, but their conception of their own future is primarily shaped by their family, school, and peers. When they are planning their future, they mostly take their ideas and desires into consideration. The more consciously and clearly they are able to imagine their future, the more informed decisions they are capable of making (Walsh & Osipow, 1988).

Most of the research into career decision-making focuses on cultural/ethnic and gender differences (Fouad, 1993; Meier, 1991; Tinsley, 1992). Researchers have used various theoretical approaches to examine career decision-making difficulties, each of which emphasizes different aspects. For example, the psycho-dynamic approach (e.g., Bordin & Kopplin, 1973) endeavored to classify difficulties according to the individual’s problems and internal sources instead of observed symptoms.

At the same time, empirical research into career decision-making has focused on developing an instrument that enables researchers to examine individual differences in career decision-making difficulty. These measuring methods include the Career Decision Scale, the My Vocational Situation Scale, the Vocational Decision Scale, the Career Decision Profile, which is based on a revision of the Vocational Decision Scale, the Behavioral Inhibition Scale, the Career Decision-Making Self-Efficacy Scale, the Career Decision Diagnostic Assessment, the Career Factors Inventory, its Hungarian adaptation, the Career Barriers Inventory, and the Career Belief Inventory. Most studies which used these measuring instruments were carried out independently of theoretical conceptualizations (Tinsley, 1992).

There are two reasons to apply the CDDQ. Firstly, despite the fact that the original English version of the questionnaire was published in 1996, it is still regularly used and cited (e.g., Akpochafo, 2021; Boerchi, 2020; Rochat, 2019; Abdullah, 2018; Shagini, 2018; Gati, 2014; Slaten, 2013; Williams, 2013; Di Fabio, 2009, 2011, 2012; Arulmani, 2006; Creed, 2006). A second reason to opt for this questionnaire is that it measures dimensions connected with career decision-making difficulties that other
questionnaires do not (dysfunctional beliefs and difficulties arising from inconsistent information). The investigation of these dimensions may open up new paths of exploring more subtle and age-specific decision-making difficulties.

This study summarizes the research experience related to the use and Hungarian adaptation of the Career Decision-Making Difficulties Questionnaire (Gati et al., 1996), which was designed to measure difficulties that arise during career decision-making.

**Investigation**

The validity of the Hungarian version of the Career Decision-Making Difficulties Questionnaire (Gati et al., 1996) has been examined with exploratory and confirmatory factor analysis. During the exploratory factor analysis (EFA), principal axis factoring was applied with promax and oblimin rotation. In order to determine factors, a screen plot test was performed (Cattell, 1966). The suitability of the factor structure gained by the Kaiser–Meyer–Olkin measure (KMO) for factor analysis was also studied. A KMO value above 0.9 is excellent, above 0.8 is very good, and above 0.7 is satisfactory; however, no factor analysis can be carried out if the KMO is below 0.5 (Sajtos & Mitev, 2007). Missing data were deleted (list-wise). In the case of EFA, the value of items appearing on each factor was appropriate (above 0.32). Cross-loading is when an item appears on multiple factors, and has a value over 0.32 (Tabachnick & Fidell, 2001). It is advisable to remove these variables from the factor structure because it improves the reliability and conformation of the model in question. The results of the confirmatory factor analysis (CFA) and the model’s goodness of fit were determined in accordance with the indicators used in the international literature:

- distribution of chi-square and the degree of freedom ($\chi^2$/df),
- root mean square error of approximation (RMSEA),
- 90% confidence interval of RMSEA,
• comparative fit index (CFI), and
• Tucker–Lewis Index (TLI).

In analyzing the indicators, Brown’s (2006) criteria for acceptable goodness of fit were used: RMSEA ≤ 0.06, 90%CI ≤ 0.06), CFI ≥ 0.95, and TLI ≥ 0.95. For examining the internal consistency of measuring instruments, Cronbach’s α was used, as several Hungarian and other studies have done. A value of Cronbach’s α between 0.5 and 0.7 is acceptable and one above 0.7 indicates good internal consistency (Hinton, 2004).

Sample
The questionnaire-based investigation included 507 participants who are 9th- to 12th-grade students learning in Hungarian secondary schools. To access the target group, I contacted the heads of the institutions for permission and help in the process of filling out the questionnaires. Parents consented to their children’s participation in the examination, and the adult students took part in the research as volunteers. Questionnaires were sent to the schools online or in print.

The data collection was hindered by the fact that the online inquiries were very rarely answered. This can be primarily explained by the high number of questionnaires of various topics addressed to the schools. Before distributing the questionnaires, I asked for the head teacher’s permission for filling in the questionnaires, and I provided an opportunity to share the questionnaire online so that anybody could join the research from any part of the country. The participants were assured that both the school and the respondents would remain anonymous. Before commencing the examination in the educational institution, the students, teachers, and parents were informed about the conditions and features of the investigation as well as the aims of the questionnaire.

Participation in the research was voluntary and anonymous; the students were able to withdraw even after beginning the questionnaire. The forms were filled out in the classrooms, with an online part and a smaller, pen-and-paper part. Anybody who wanted to know the results was allowed to do so.
The characteristics of the participants are presented in Table 1.

### Table 1. Features of the research sample

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age (years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.0</td>
<td>16.0</td>
</tr>
<tr>
<td>male</td>
<td>84</td>
<td>45</td>
</tr>
<tr>
<td>female</td>
<td>114</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>108</td>
</tr>
</tbody>
</table>

The study group who completed the questionnaire included 507 secondary-school students between 15 and 19 years of age (M = 16.29; SD = 1.3), with a proportion of 56.8% females (n = 292) and 42.4% males (n = 215). The secondary-school sample contained grammar school students (n = 414 [81.7%]) and vocational secondary-school students (n = 93 [18.3%]).

In sum, the members of the secondary-school sample came from two types of institutions (grammar school and vocational secondary school), mostly from provincial schools. The grade point average (GPA)
of students featuring in the sample was good. Their GPA from the previous semester was 4.06 (SD = 0.71) on a scale of 1 to 5.

Methods and instruments

The analysis of the data was carried out in IMB SPSS Statistics for Windows v.23 and SPSS AMOS v.22 statistical packages. Factor analysis was used in order to adapt the questionnaires and to determine latent variables, that is, the factors based on these correlations. With the help of this method, the number of original variables was reduced in order to describe original data with the least possible information loss. After the normality analysis, the results were evaluated with appropriate instruments.

Career Decision-Making Difficulties Questionnaire (CDDQ)

Based on the decision theory by Gati & Itay (2005), a model was worked out that would identify the “ideal career decision-maker.” This idea represents a person who is conscious about the necessity of career decision-making, ready for it, and able to make the “right decision” (one that is the most compatible with their goals and the outcome of an appropriate decision-making process). The complexity of the career decision-making process makes it difficult for most people to become an ideal career decision-maker. Any deviations from the ideal career decision-maker were interpreted as potential problems which might impact an individual’s decision-making process by (a) inhibiting the person from arriving at a decision or (b) leading to a less optimal decision.

The first version of the questionnaire contained 44 statements corresponding to the 44 career decision-making difficulties featuring in the theoretical model. Later, this number was reduced to 34 in order to improve the internal consistency of the test. Two of the 34 questions were meant to check validity. Besides the three main categories, 10 subscales were developed, corresponding to the 10 categories used in the test (see Table 2).

The proposed taxonomy can be divided into three main categories:

1. lack of readiness for career decision-making (the individual is not ready for a given decision in relation to career decision-making), which
includes three categories of difficulty that precede engagement in a given career decision,

2. *lack of information*, which involves four categories of difficulty, and

3. *inconsistent information*, which includes three categories of difficulty arising during the actual process of career decision-making.

**The ten categories of difficulty**

The main category within “lack of readiness for career decision-making” contains three additional categories. They are related to the lack of motivation to start the career decision-making process, general indecisiveness in terms of all kinds of decision-making. The remaining categories include difficulties stemming from dysfunctional beliefs (e.g., irrational expectations) and about the career decision-making process.

Within the main category of “lack of information,” four categories were differentiated: lack of knowledge about the steps required during the process, lack of information about oneself, lack of information about occupations, and lack of information about ways of obtaining additional information. I think that the last two categories are nearer to each other than to the first one, because they refer to external, objective information, while the first one points to subjective information.

Within the main category of “inconsistent information,” three categories were pinpointed:

- unreliable information categories refers to unreliable or obscure information,
- internal conflicts within the individual, and
- external conflicts involving others.

Here, it needs to be pointed out that the last two conflict categories are nearer to each other than to the first one.
Gati & Saka (2001) examined the internal consistency of the shortened questionnaire and arrived at results identical to those of the original questionnaire with 44 items. The value of Cronbach’s α for the whole questionnaire was 0.91; for the main category of “lack of readiness” it was 0.62, for the main category of “lack of information” 0.88, and for the main category of “inconsistent information” 0.87.

**Results**

**Exploratory Factor Analysis**

The originally proposed CDDQ (Gati & Saka, 2001) contained ten well-formulated factors (RM, RI, RD, LS, LP, LO, LA, II, IU, and IE), but they were not backed up by confirmatory factor analysis (CFA). Therefore, exploratory factor analysis was used in this study to examine whether the latent factors underpinning the questionnaire items correspond to those found in the English version of the CDDQ. During the EFA, principal axis factoring was carried out, so as to better estimate correlations in the background.
(Mulaik, 1972). Then, oblimin rotation was used in the original, 32-item version. This method presupposes that factors do correlate with one another, which is more characteristic of the social and behavioral sciences.

During the analysis, five factors in the sample could be differentiated, which explains 60.89% of the variance of the factor structure. Based on the scree plot test, the five-factor solution seems appropriate. The value of the KMO was 0.957, so it can be claimed that the variables are suitable for factor analysis (Sajtos-Mitev, 2007). Moreover, using varimax rotation also yields a five-factor structure.

The first factor is *difficulties arising from inconsistent information*, which includes ten items (25–34). The factor explains 41.695% of the variance. The reliability of the scale is high (Cronbach’s α = 0.920).

The second factor is *general indecisiveness*, which involves three items (4., 5., –6). The factor explains 5.981% of the variance, and its Cronbach’s α is appropriate (α = 0.721).

The third factor is *dysfunctional beliefs*, which contains four items (8., 9., 10., 11). The factor accounts for 5.412% of the total variance. The reliability of the scale is unacceptable (α = 0.460).

The fourth factor is *lack of motivation*, which includes four items (1., 2., 3 and 9). The factor explains 4.255% of the total variance. Its Cronbach’s α is acceptable (α = 0.595).

The fifth factor is *difficulties arising from insufficient information and knowledge*, which involves twelve items (13–24). The factor stands for 3.547% of the total variance. Its Cronbach’s α is barely acceptable (α = 0.944).

The previous analysis demonstrated that one item could be found in two factor structures; the value of cross-loadings was higher than 0.32. Therefore, this was removed from the second analysis. The variable in question is item 9. After re-running the analysis, five factors could be differentiated in the sample again. This factor structure accounts for 60.89% of the variance. The KMO value is 0.957, so it can be argued that the variables are suitable for factor analysis (Sajtos-Mitev, 2007). Furthermore, using varimax rotation also yielded a 5-factor structure.

The factor structure now shows goodness of fit. The variables have high factor values (0.359–0.828) and no cross-loading was found in any
of the variables. The value of the KMO is 0.958, so the variables continue to be suitable for factor analysis (Sajtos-Mitev, 2007).

- The first factor is *difficulties arising from inconsistent information*, which includes 10 items (25–34). The factor explains 42.994% of the variance. The reliability of the scale is high (Cronbach’s α = 0.920).
- The second factor is *general indecisiveness*, which contains three items (4–6). The factor accounts for 5.972% of the variance and its Cronbach’s α is also high (α = 0.721).
- The third factor is *dysfunctional beliefs*, involving three items (8, 10, and 11). The factor explains 5.152% of the total variance. The reliability of the scale is acceptable (α = 0.561) (Hinton, 2004).
- The fourth factor is *lack of motivation*, which includes three items (1–3). The factor accounts for 4.228% of the total variance and its Cronbach’s α is appropriate (α = 0.677).
- The fifth factor is *difficulties arising from insufficient knowledge and information*, containing 12 items (13–24). The factor explains 3.608% of the total variance. Its Cronbach’s α is quite good (α = 0.944).

In total, five factors were differentiated in the background of the questionnaire; one item was removed. This factor structure accounts for 61.954% of the total variance.

*Confirmatory factor analysis*

Confirmatory factor analysis is a method that is used to test an existing factor structure. The fit of the model related to the CDDQ was examined with CFA.

For the *first model*, 32 variables and five factors that were filtered through EFA were used. Considering the model’s fit, the results only partially meet the expected value (n = 507, χ²/df = 2.929, RMSEA = 0.062, CI = 0.058–0.066, CFI = 0.900, and TLI = 0.890). In regard to internal consistency, the results are adequate (Cronbach’s α for *difficulties arising from inconsistent information* = 0.920, Cronbach’s α for *general indecisiveness* = 0.721, Cronbach’s α for *dysfunctional beliefs* = 0.561, Cronbach’s α for *lack*
of motivation = 0.677, and Cronbach’s α for difficulties arising from insufficient information and knowledge = 0.944).

For the second model, 31 variables and five factors that were filtered through EFA were used. Considering the fit of the model, the RMSEA, the TLI, and the CI did not reach the desired value. The values of other indicators were as expected (N = 507, χ²/df = 2.978, RMSEA = 0.063, CI = 0.059–0.067, CFI = 0.903, and TLI = 0.894). In regard to internal consistency, the results were appropriate (Cronbach’s α for difficulties arising from inconsistent information = 0.920, Cronbach’s α for general indecisiveness = 0.721, Cronbach’s α for dysfunctional beliefs = 0.561, Cronbach’s α for lack of motivation = 0.677, and Cronbach’s α for difficulties arising from insufficient knowledge and information = 0.944).

The third model was established by running EFA and correcting the original EFA model in order to find a solution that best fits the criteria set by Hinton (2004) and that reaches the highest possible internal consistency of each factor. When re-running the EFA, it appeared that based on the modification index, five co-variance errors need to be added to the structure. Items CDDQ13–CDDQ14, CDDQ14–CDDQ15, CDDQ33–CDDQ34, CDDQ29–CDDQ30, and CDDQ27–CDDQ30 varied with one another, thus improving the goodness of fit. In this form, the model has proper fit (n = 507, χ²/df = 2.522, RMSEA = 0.055, CI = 0.051–0.059, CFI = 0.926, and TLI = 0.918).

The final five-factor model contains 31 items (see Figure 3). The first factor is difficulties arising from inconsistent information, which includes ten items (25–34). The second factor is general indecisiveness, involving three items (4–6). The third factor is dysfunctional beliefs, which contains three items (8, 10, and 11). The fourth factor is lack of motivation, including three items (1–3). The fifth factor is difficulties arising from insufficient knowledge and information, which involves 12 items (13–24). The Cronbach’s α values for the model are thus correct and the model in this form has better indicators of fit.
Among the three models – considering the criteria of EFA and CFA as well as the internal consistency of the factors – the third factor structure (containing 31 items) proves to be the most adequate in the case of the secondary-school sample.

**Characteristics of the final structure, with 31 items, of the Hungarian version of the CDDQ in the secondary-school sample**

After establishing the CFA model with 31 items and proper goodness of fit, exploratory factor analysis (EFA) was again carried out with principal axis factoring and oblimin rotation, as with the previous cases.

Again, the scree plot test indicated the appearance of five factors in the sample that account for 61.954% of the total variance of the whole structure. The EFA that was run based on CFA showed appropriate values: the structure does not contain either low loading (below 0.35) or low

---

**Table 2. Summary of the results of the three models of the CDDQ using EFA and CFA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Total explained variance</th>
<th>KMO</th>
<th>Number of items in factors</th>
<th>Cronbach’s α</th>
<th>χ²/df</th>
<th>RMSEA</th>
<th>90% CI of RMSEA</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original model (32 items) n=507</td>
<td>60.819%</td>
<td>0.857</td>
<td>EI=10, AĦ=3, KT=4, MH=4, HI=12</td>
<td>EI=0.920, AĦ=0.721, KT=0.460, MH=0.595H, HI=0.944</td>
<td>2.929</td>
<td>0.062</td>
<td>0.058–0.066</td>
<td>0.900</td>
<td>0.890</td>
</tr>
<tr>
<td>Second model (31 items) n=507</td>
<td>59.060%</td>
<td>0.838</td>
<td>EI=10, AĦ=3, KT=3, MH=3, HI=12</td>
<td>EI=0.920, AĦ=0.721, KT=0.561, MH=0.677H, HI=0.944</td>
<td>2.978</td>
<td>0.063</td>
<td>0.059–0.067</td>
<td>0.903</td>
<td>0.897</td>
</tr>
<tr>
<td>Third model (17 items) n=507</td>
<td>60.149%</td>
<td>0.822</td>
<td>EI=10, AĦ=3, KT=3, MH=3, HI=12</td>
<td>EI=0.920, AĦ=0.721, KT=0.561, MH=0.677H, HI=0.944</td>
<td>2.522</td>
<td>0.055</td>
<td>0.051–0.059</td>
<td>0.926</td>
<td>0.918</td>
</tr>
</tbody>
</table>

Note: KMO = Kaiser–Meyer–Olkin indicator; χ²/df = quotient of chi-squared and the degree of freedom; RMSEA = root mean square error of approximation; 90% CI = 90% confidence interval of the RMSEA; CFI = comparative fit index; TLI = Tucker–Lewis index; EI = inconsistent information; AĦ = general indecisiveness; KT = dysfunctional beliefs; MH = lack of motivation; HI = difficulties arising from insufficient knowledge and information.
cross-loadings (above 0.35). The first factor, *difficulties arising from inconsistent information*, explains 42.994% of the variance. The second factor, *general indecisiveness*, explains 5.972% of the variance. The third factor, *dysfunctional beliefs*, accounts for 5.152% of the total variance. The fourth factor, *lack of motivation*, stands for 4.228% of the total variance. The fifth factor, *difficulties arising from insufficient knowledge and information*, explains 3.608% of the total variance.

The descriptive statistics of the Hungarian version of the CDDQ in the secondary-school sample are presented in Table 3.

### Table 3. Consistency of the subscales and the descriptive statistics of the Hungarian version of the CDDQ found in a sample of secondary-school students (total explained variance: 61.954%)

<table>
<thead>
<tr>
<th></th>
<th>Difficulties arising from inconsistent information</th>
<th>General indecisiveness</th>
<th>Dysfunctional beliefs</th>
<th>Lack of motivation</th>
<th>Difficulties arising from insufficient knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>37.84</td>
<td>14.97</td>
<td>16.45</td>
<td>9.35</td>
<td>49.66</td>
</tr>
<tr>
<td>Scatter</td>
<td>17.49</td>
<td>6.12</td>
<td>4.91</td>
<td>5.36</td>
<td>22.04</td>
</tr>
<tr>
<td>Internal consistency (α)</td>
<td>0.920</td>
<td>0.721</td>
<td>0.561</td>
<td>0.677</td>
<td>0.944</td>
</tr>
<tr>
<td>Explained variance %</td>
<td>42.994</td>
<td>5.972</td>
<td>5.152</td>
<td>4.228</td>
<td>3.608</td>
</tr>
</tbody>
</table>

**Investigation of convergent validity**

The five-factor questionnaire (obtained through CFA) was used to examine the convergent validity of the 31-item CDDQ developed above. The internal consistencies of the scales’ factors seemed appropriate. They were tested with Pearson’s correlation test. It was investigated whether variables of different scales showed any relevant correlations. The results are presented in Table 4. *Lack of motivation* correlates positively with the factors of *general indecisiveness* ($r(507) = 0.232, p < 0.01$), *dysfunctional beliefs* ($r(507) = 0.521, p < 0.01$), and *insufficient knowledge* ($r(507) = 0.523, p < 0.01$). The factor *general indecisiveness* has a positive correlation with the factors *dysfunctional beliefs* ($r(507) = 0.109, p < 0.01$), *inconsistent information* ($r(507) = 0.530, p < 0.01$), and *insufficient knowledge* ($r(507) = 0.424$,
p < 0.01). Furthermore, the factor inconsistent information shows a positive parallel connection with insufficient knowledge \((r(507) = 0.809, p < 0.01)\). There are correlations between most of the factors, but their strength is not significant.

### Table 4. Correlations among the variables of the CDDQ in the secondary-school sample

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of motivation (1)</td>
<td>1</td>
<td>0.232**</td>
<td>-0.028**</td>
<td>0.521**</td>
<td>0.523**</td>
</tr>
<tr>
<td>General indecisiveness (2)</td>
<td>1</td>
<td>0.109**</td>
<td>0.530**</td>
<td>0.424**</td>
<td></td>
</tr>
<tr>
<td>Dysfunctional beliefs (3)</td>
<td>1</td>
<td>0.054</td>
<td>0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inconsistent information (4)</td>
<td>1</td>
<td></td>
<td>0.809**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient knowledge (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Note.** The correlation is significant \((p<0.01)\).

### Figure 3. Final 31-item structure of the Hungarian version of the CDDQ

**CDDQ-structure**

**Prior to the Process**
- Lack of motivation
- General indecisiveness
- Dysfunctional beliefs
- Inconsistent information
- Insufficient knowledge

**During the Process**
The international literature on the subject (Amir et al., 2008; Arnold, 2003; Creed & Wong, 2006; Fabio & Kenny, 2011; Gati & Tal, 2008; Vahedi et al., 2012) paint a somewhat different picture considering the structure of the scale than the results seen in the Hungarian sample. However, this conforms to those research outcomes, according to which the factor structure of the CDDQ is influenced by cultural differences (Albion & Fogarty, 2005; Creed & Wong, 2006; Mau, 2001; Zhou & Santos, 2007).

When adapting a measuring instrument, it is important whether various fields are to be studied within a single dimension or to be handled as separate variables. During CFA, in contrast to the investigations in the literature, this study found a five-factor model acceptable in the secondary-school sample (N = 507). As opposed to the 32 items of the original questionnaire, the Hungarian scale contains 31 items. It is possible that variable 9 of the CDDQ – the item which was removed – may have been too generally formulated, and thus the cross-loadings were high.

According to research, the factor structure of the CDDQ is significantly influenced by cultural differences. Because their factor structures differed, only two factors were distinguished in the Chinese version, for example (Creed & Wong, 2006). In an Iranian investigation, three factors were discerned (Vahedi et al., 2012), while a Greek study featured seven factors (Vaiopoulou et al., 2019). Furthermore, it is worth noting that some investigations have not thoroughly examined the functioning of the factors within the questionnaire. This indicates the importance of conducting comprehensive research to validate and understand the factor structure of the CDDQ in various cultural contexts. The exploration of career decision-making difficulties is crucial because cultural differences significantly influence the factor structure of the CDDQ. Recognizing and understanding these cultural variations is essential for accurately assessing and addressing career decision-making difficulties across diverse populations.

The Career Decision Difficulties Questionnaire (CDDQ), developed by Gati, Krausz, and Osipow (1996), holds significant value due to its methodological, theoretical, and practical uses in various contexts. It serves as
a valuable tool for designing counselling processes, assessing their effectiveness, and comparing pre- and post-test data.

The CDDQ is particularly suitable for examining samples from secondary schools, making it useful in assessing career decision-making difficulties among students. Additionally, it can be effectively utilized in organizational settings, such as workplaces, or before embarking on retraining programs. One key advantage is its comprehensive approach to addressing career decision-making difficulties. It enables measurement of both cognitive and emotional factors associated with these difficulties. This holistic perspective allows for a better understanding of the multifaceted nature of career decision-making challenges and facilitates targeted interventions.

By using the CDDQ, counsellors and practitioners can gain insights into clients’ career decision-making difficulties and can tailor their interventions accordingly. The questionnaire provides a structured framework for assessing and addressing these difficulties, aiding in the formulation of effective counselling strategies (Olteanu, 2023). Furthermore, it allows changes in career decision-making difficulties to be measured over time. By comparing pre- and post-test data, practitioners can evaluate the effectiveness of counselling interventions and can track their clients’ progress. The scales of the questionnaire are neatly related to the topic of career decision-making and career orientation in the Hungarian literature. The importance of career consciousness and the need to refine self-definition and self-knowledge are specifically discussed in the counselling model of Szilágyi (2005).

**Funding:** This research received no external funding.
References


