


From Adaptive Readiness to Adaptation Results: Implementation of Student Career Construction Inventory and Testing the Career Construction Model of Adaptation

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Abstract

This study evaluates the empirical applicability of the career construction model of adaptation (CCMA) by collecting evidence about the validity of the Student Career Construction Inventory (SCCI) from a sample of Turkish high school students and examining the relations between adaptive readiness, adaptability resources, adapting responses, and adaptation results. To test the model, we conducted two studies with samples of high school students in Ankara, Turkey ($n_1 = 251$; $n_2 = 694$). In the first study, the SCCI was translated into Turkish and psychometric properties of the inventory were assessed. To validate the four-factor structure of the SCCI Turkish High School Form, two different levels of confirmatory factor analysis (CFA) were applied to 251 participants. The results of CFA demonstrated that the data for the SCCI Turkish high school sample fit the theoretical model very well. The internal consistency of the SCCI was determined as 0.72 for crystallizing, 0.75 for exploring, 0.85 for deciding, 0.73 for preparing, and 0.90 for the total. In the second study, the CCMA, consisting of four dimensions (adaptive readiness, adaptability resources, adapting responses, and adaptation results), was empirically tested by using the SCCI, which had been tested for validity in the first study. The results of serial mediation analysis supported the CCMA, indicating that adaptive readiness indirectly influenced adaptability resources, adapting responses, and adaptation results.

Keywords

career construction model of adaptation, adaptivity, adaptability, adapting, adaptation, self-esteem, happiness

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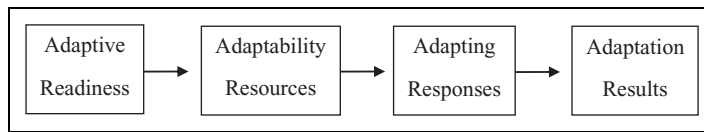


Figure 1. Career construction model of adaptation.

Introduction

The Fourth Industrial Revolution (Schwab, 2017) brings about economic, social, and technological changes to society and to the world of business. It also leads to the necessity of constructing, developing, and managing one's own career instead of depending on a fixed organization; thus, the responsibility for people's career development has started to shift from organization to individual (Pope, 2015). Due to this change, individuals need to recognize their interests, abilities, values, and other personal qualities and the necessary qualifications for the current era before stepping into business. This has also raised the question of how one can adapt to the changes that may occur after embarking into the world of work (Savickas, 2019).

Career development theories that have been developed starting from Parsons's pioneering steps have tried to find answers to questions such as these. Examples of these theories are social cognitive career theory (Lent & Brown, 2013; Lent et al., 1994), the relational theory of working (Blustein, 2006; 2011), and the boundaryless and protean career model (Arthur, 2014; Hall, 2004). These theories emphasize individual responsibility in shaping one's career and express the necessity to achieve successful career orientations. At the same time, the career construction model of adaptation (CCMA; Savickas, 2005; Savickas & Porfeli, 2012), which has been frequently researched in recent years due to increasing interest, is considered as a useful resource for an individual to build a successful career (Savickas, 2005).

Career Construction Model of Adaptation (CCMA)

Career construction theory (CCT) claims that individuals with higher levels of career adaptability have stronger transition capabilities and more psychological resources (Savickas, 1997). In this respect, CCT presents a comprehensive model that explains the interpersonal processes in which individuals give meaning and direction to their professional behavior by focusing on a series of transitions from school to school, from school to work, from work to work, and from profession to profession (Savickas, 2005, 2013). According to this theory, people build their careers using adaptive strategies through which they self-actualize. As demonstrated in Figure 1, the CCMA refers to a sequence of adaptive readiness, adaptability resources, adapting responses, and adaptation results (Savickas, 2013).

Therefore, this model assumes that individuals who are willing (adaptive readiness) and capable (adaptability resources) to perform career behaviors (adapting responses) will have higher levels of adaptation (adaptation results) (Savickas & Porfeli, 2012). In other words, the CCMA recognizes that people are more or less prepared for change, differ in their resources to manage changes, are somewhat able to change when needed, and consequently become integrated into their life roles over time.

Adaptive readiness. Adaptive readiness in the CCMA refers to flexible personality traits and the willingness to fulfill career development tasks, manage professional transitions, and respond to traumas. CCT takes adaptive readiness as a consistent and permanent trait or a core tendency of the individual. Individuals who are willing to adapt are able to use their self-regulatory resources to

alter situations (Savickas, 2013; Savickas & Porfeli, 2012). Adaptive readiness can be measured by variables such as proactive personality, openness to experience, and conscientiousness (Tokar et al., 2019). In the present study, we operationally define adaptive readiness using the empirically distinct indicator of self-esteem. Self-esteem is a construct reflecting the extent to which one prizes, values, approves of, or likes oneself (Blascovich & Tomaka, 1991). Individuals with high self-esteem are more curious to seek out and participate in new experiences. For this reason, for testing the CCMA, self-esteem was used as an indicator of adaptive readiness. We operationalized self-esteem using the Rosenberg Self-Esteem Scale (RSES; Çuhadaroğlu, 1986).

Adaptability resources. The second dimension of the model, adaptability resources, is a psycho-social structure that refers to an individual's readiness to cope with current and upcoming professional development tasks, professional transitions, and personal traumas (Savickas, 1997, 2005). Individuals make use of these sources of self-regulation to solve unusual, complex, and undefined problems caused by professional developmental tasks, professional transitions, and traumas. Adaptability resources shape individuals' social self-esteem as they relate to society and regulate their professional behavior (Savickas, 2013). According to the CCMA, career adaptability supports both the development and use of adaptability resources. Individuals with high levels of career adaptability can easily cope with career-related problems, take advantage of career plan changes, and adapt comfortably to new responsibilities. Therefore, we used the Career Adapt-Abilities Scale (CAAS; Savickas & Porfeli, 2012), which is widely used in various countries, to operationally define adaptability resources.

Adapting responses. Adapting responses, another dimension of the model, refers to the actual performances of adaptation behavior in responding to changing conditions and emphasizing the choice of occupation (Savickas & Porfeli, 2012; Savickas et al., 2018). In other words, it embodies adaptive behaviors such as career planning and research that people use to deal with career development tasks, unstable jobs, and career conditions, and also their assumptions and generalizations about the self and business world (Hirschi et al., 2015). Adapting responses are involved in the actual behaviors of individuals such as exploring, planning, deciding, and committing that construct their career. The Student Career Construction Inventory (SCCI) (Savickas et al., 2018) is the most commonly used tool to operationally define adapting responses. Thus, the present study used the SCCI to operationally define adapting responses that shape adaptation results.

Adaptation results. Adaptation results, the last dimension of the model, refers to the conditions achieved during career construction processes and consequent career outcomes (Šverko & Babarović, 2019). Adaptation results are considered as the correspondence between the person and the environment. In other words, they indicate the results of adapting responses in terms of person-environment correspondence defined through success, satisfaction, and stability (Savickas et al., 2018). Adaptation results can be measured by variables such as career commitment, job satisfaction, work success, and positive affect (Johnston, 2018). In the present study, we operationally define adaptation results using empirically distinct indicators of happiness. Happiness is a construct reflecting the degree to which people take pleasure in life (Veenhoven, 2013). Therefore, we assume positive associations of adaptivity, adaptability, and adapting with happiness. We operationalized happiness using the Oxford Happiness Questionnaire-Short Form (OHQ-SF; Doğan & Akıncı-Çötök, 2011).

These four dimensions together form an optimal sequence for choosing or obtaining a particular profession and bridging the transition from school to school or from school to work (Savickas et al., 2018). The CCMA suggests that adaptive readiness encourages adaptability resources, adaptability resources shape adapting responses, and adapting responses lead to adaptation results. Therefore, it

is necessary that the four dimensions (adaptive readiness, adaptability resources, adapting responses, and adaptation results) in this model be empirically different from each other. Some previous research studies confirmed this distinction (Johnston, 2018); however, it is argued that studies that aim to understand career decision-making processes via this model are inadequate, and this model still needs to be verified. Therefore, this study aims to evaluate the empirical applicability of the model by measuring each step with different structures.

Studies on CCMA

The present study aimed to examine the above-mentioned gap in the literature by measuring each dimension of the model in a sample of high school students. When the previous research on CCT is reviewed, it is observed that a significant number of studies have been conducted on career adaptability, which is one of the most essential concepts of the theory, and which refers to adaptability resources in the CCMA. For instance, career adaptability was found to be significantly related to self-esteem (Cai et al., 2015), career decidedness (Nota et al., 2012), career decision-making difficulties (Hirschi & Volero, 2015), hope and optimism (Buyukgoze-Kavas, 2016; Hirschi, 2014; Karacan-Özdemir & Yerin-Guneri, 2017; Santilli et al., 2014), and happiness (Patton et al., 2002). However, very few studies have attempted to fully evaluate the CCMA. Perera and McIlveen (2017) attempted to conceptualize the CCMA in terms of four dimensions and revealed that the model can be adequately represented through the interactions of features. In addition, Šverko and Babarović (2019) tested the model in two studies. The first study focused on the relations between adapting responses and adaptive readiness. The second study examined the full model in a longitudinal framework that covered the four dimensions of the CCMA. The results showed that there was a significant relation between the dimensions of the model in both studies.

Furthermore, Savickas et al. (2018) developed the SCCI and then tested the model of adaptation using this inventory in their research study. The validity of the scale was examined with CFA. The results showed that there is measurement invariance; that is, the factor structure can be generalized (Savickas et al., 2018). In addition, it was found that the SCCI, as a measure of adaptation responses, is related to other dimensions of the CCMA. The findings of the study revealed that the SCCI supports the model of adaptation among high school students as well as being a valid and reliable instrument. Moreover, several meta-analysis studies (Johnston, 2018; Rudolph, Lavigne, & Zacher, 2017; Rudolph, Lavigne, Katz et al., 2017) have revealed the associations among dimensions of the CCMA. There are also studies that partially confirmed the CCMA. For example, Neureiter and Traut-Mattausch (2017) found positive (career planning, career decision-making self-efficacy, career research) and negative (career decision-making difficulties) relations between adaptive readiness (core self-evaluation) and adapting responses through adaptability resources with the CAAS.

Overall, these studies show that each dimension in the model can be measured separately, and therefore the model can be tested. However, as mentioned above, there is not a sufficient number of studies that test the applicability of the model. Hence, in this study, it was aimed to contribute to the literature on CCT by obtaining additional evidence regarding the applicability of this model with a sample of Turkish high school students with different cultural characteristics.

Turkish Context

This study investigated the role of the dimensions of the CCMA sequentially as a whole in a sample of Turkish high school students. Therefore, it is necessary to begin by addressing the individual's career development in the context of Turkey. When the Turkish education system is taken into consideration, high school students are faced with the transition from school to school or from school to work. Graduates and senior students of high school take a two-stage examination (Higher Education

Institutions Examination) held throughout the country. Candidates who exceed the specified threshold in the first stage of the examination, which is the Basic Proficiency Test (BPT), can take the second exam, the Field Qualification Test (FQT). Candidates who meet the minimum FQT scores required by programs are placed in the programs that they prefer within the allotted quotas. According to a 2018 report of the Measuring, Selection, and Placement Center of Turkey, more than 2 million students take the BPT, and nearly 2 million of those students obtain the right to take the FQT. Among those, about 710,000 students are placed in higher education programs including both undergraduate and associate degree programs. Approximately 395,000 students are placed in undergraduate programs. Considering these numbers, only 35% of the students who take the exam find a place in a higher education institution.

The above-mentioned university transition system and placement rates in higher education programs negatively affect the career development of high school students and, as a result, Turkish high school students have no other choice but to make crucial decisions about their future careers. To make it easier for high school students to make accurate career decisions, it seems useful to understand the applicability mechanism of CCMA theory for Turkish high school students while they are trying to choose their occupations.

Another issue is the employment problem facing young people in the transition period. The aforementioned transition system brings forth a competitive education system. This competitive education system, which is based more on developing cognitive competencies, may cause high school students to develop the false belief that the only way to have an occupation is to enroll in university (Yeşilyaprak, 2012). However, problems related to the transition to the world of work, such as the increase in the number of university graduates despite the smaller rate of increase in employment opportunities, make it difficult for high school students to manage their careers appropriately. The ways in which young people who continue their education manage their career development processes could be better understood by determining their reactions to this process.

Empirical studies conducted on the CCMA have mostly been carried out in Western societies with an individualistic cultural climate. In contrast, although Turkish society has some individualistic cultural characteristics, it can be considered a society in which collectivist cultural characteristics are more dominant (Göregenli, 1995, 1997; Kagıtcıbası, 1997). In collectivist cultures, individuals are described as more group-oriented, promoting goals that are shared with others and focusing on external roles and relatives. In contrast, in individualistic cultures, individuals are depicted as self-oriented, promoting their own goals and focusing on internal abilities, thoughts, and feelings (Markus & Kitayama, 1991; Triandis, 1995). For these reasons, the personalities of individuals belonging to different cultures develop differently. For example, while making career decisions in collectivist cultures, individuals are more dependent on their parents. However, in individualist cultures, they can make more independent decisions about their career paths. Therefore, they may be more satisfied and happy with their career choices (Noordin et al., 2002). In this respect, conducting this study to investigate the applicability of the CCMA for Turkish high school students is crucial in terms of uncovering the cultural reflections and boosting the applicability of this model for diverse individuals. This may help individuals from collectivist cultures to have more self-esteem, make independent decisions, and be happier with their career choices. Furthermore, this is the first study to test the CCMA in Turkish culture. Thus, we think that this study will be pioneering for career counseling in Turkish culture and for other researchers interested in the CCMA. Conducting this research study in Turkish society may contribute to the understanding of the potential effects of the model of adaptation on similarities or differences between cultures.

Current Study

The main purpose of this study is to empirically evaluate the applicability of the CCMA among Turkish high school students. It was also aimed to investigate the validity of the SCCI (Savickas

et al., 2018) among Turkish high school students. Two studies were conducted to achieve these objectives. In Study 1, in order to measure adapting responses, which is the third dimension of the CCMA, the SCCI, developed by Savickas et al. (2018), was adapted for Turkish high school students. The SCCI's factor structure and reliability have been supported in different samples to date (e.g., Croatian, Portuguese, American). However, these samples came from Western societies, where individualistic culture is thought to be more dominant. In this study, the structure and reliability of the SCCI are examined in a Turkish sample with collectivist cultural characteristics. Thus, it is aimed to present results with cultural support for the literature on the CCMA by demonstrating that the SCCI is a valid tool in a Turkish sample with different cultural characteristics.

In Study 2, which used the SCCI adapted to Turkish culture, the CCMA was tested. Each dimension of the model was attempted to be verified with different measurements. The decisions about which measurements to make in each dimension were made based on two previous meta-analysis studies (Johnston, 2018; Rudolph, Lavigne, & Zacher, 2017). Adaptive readiness, the first dimension of the model, was measured with self-esteem. Previous research has shown that there is a relation between self-esteem and career adaptability, and that self-esteem positively predicts career adaptability (Cai et al., 2015; Rusu et al., 2015). It is stated that self-esteem becomes an important focus in career interventions and should therefore be taken into consideration, among other counseling strategies (Hui et al., 2018). In addition, it is emphasized that high self-esteem can be expressed as self-acceptance and this can strengthen an individual's career trust and career adaptability (Savickas, 2005, 2013). Studies have confirmed that self-esteem affects the psychological adjustment and development of the individual (e.g., van Vianen et al., 2012). Individuals with high self-esteem may be more interested in career-related resources and various forms of discovery and planning, such as career planning (Creed et al., 2004; Creed et al., 2007). In addition, self-esteem can increase the confidence of individuals to successfully manage career-related tasks and challenges (Guan et al., 2013). If we can reveal the relation of self-esteem as adaptive readiness in the four-dimensional structure of the CCMA, we will have a chance of strengthening our resources to help clients in career interventions. Therefore, we accepted self-esteem as an indicator of adaptive readiness.

Adaptability resources in the model of adaptation were measured by career adaptability, which is one of the basic concepts of CCT (Savickas, 2005, 2013). The validity of career adaptability in measuring adaptability resources has been proven by many previous research studies (Babarović & Šverko, 2016, 2019; Neureiter & Traut-Mattausch, 2017; Savickas et al., 2018; Šverko & Babarović, 2016).

The third dimension of the model, adapting responses, was measured by the SCCI (Savickas et al., 2018), which was adapted for Turkish high school students in Study 1. Previous studies (Savickas et al., 2018; Šverko & Babarović, 2019) have stated that the SCCI is an indicator of adapting responses. Therefore, the SCCI was used to measure adapting responses in the current study.

The fourth and final dimension of the model, adaptation results, was attempted to be measured with happiness. Previous research revealed positive correlations between career adaptability and optimism (e.g., Buyukgoze-Kavas, 2016), life satisfaction (e.g., Hirschi, 2009), and happiness (Öztemel & Yıldız-Akyol, 2019; Sattar et al., 2017). Furthermore, Perera and McIlveen (2017) stated that positive results such as happiness may indicate adaptation results. In their research, Creed et al. (2002) found that high school students who are optimistic have high levels of career research and planning. In some studies (e.g., Hirschi, 2009, 2011), the tendency to happiness was found to be positively associated with vocational identity achievement and career development. Robertson (2018) stated that happy individuals are more likely to succeed in their careers. Similarly, Boehm and Lyubomirsky (2008) found that happiness is a precursor to career success. Jacobsen (2010) argued that practices that encourage positive trends such as happiness, well-being, and optimism can be used in career counseling and positively affect the individual's future career. When these findings

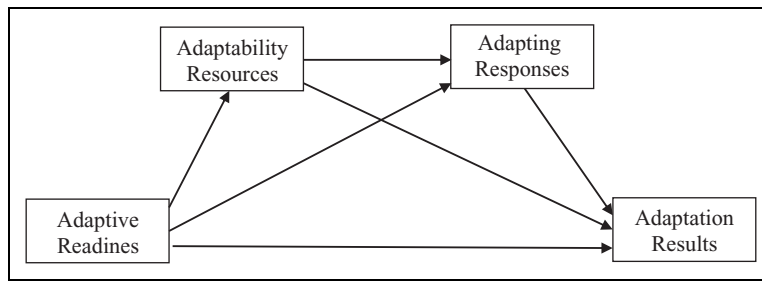


Figure 2. The hypothesized model of the CCMA.

are evaluated together, it is thought that individuals who exhibit career behaviors related to these three dimensions of the model will be happy, and thus they can make accurate choices while taking steps regarding their career futures. Based on the findings of those studies, happiness was considered as an indicator of adaptation results. Additionally, the participants of this study were high school students who have not yet stepped into the world of work. However, even though they have not entered the world of work, we assumed that happiness could be an adaptation result as it is possible that they could think more positively about themselves and the world when they exhibit the corresponding behaviors in the first three dimensions of the model.

Considering the theoretical and empirical explanations set out above, it was assumed that the four dimensions of the CCMA would be positively correlated (H1). Moreover, it was assumed that career adaptability (H2), adaptation responses (H3), and sequentially career adaptability and adaptation results (H4) mediate the relation between self-esteem and happiness. In serial mediation analysis, all path parameters are estimated simultaneously. A three-way mediator effect was tested in the structural model (Hayes, 2009, 2018). The advantage of this approach was to distinguish the indirect effects of both the CAAS (H2) and SCCI (H3) from both mediator variables in the CCMA model. This approach also allows us to discover the indirect effect that passes through both mediators in a series (H4) (Taylor et al., 2008). Therefore, we preferred serial mediation analysis to test the CCMA. In Figure 2, the hypothesized serial mediation model is shown with adaptability resources and adapting responses as mediators of the linkage between adaptive readiness and adaptation results.

Method

In this research, two separate studies were designed to extend our understanding of the CCMA and to make significant contributions to the literature on CCT. In Study 1, the validity of the SCCI, developed by Savickas et al. (2018), was investigated among Turkish high school students. In Study 2, the CCMA, consisting of four dimensions (adaptive readiness, adaptability resources, adopting responses, and adaptation results), was empirically tested. Thus, an effort was made to explain the relation between the sequential dimensions in the model.

Study 1

Procedure and Participants

First, all required permission was obtained from the ethics committee of the Ministry of National Education. The data were collected by school counselors with permission and under the supervision of teachers. Informed consent to participate in this study was given by all participants before the scales were applied. It was explained that volunteerism, confidentiality, no deception, and no harm were the main ethical concerns of the study, and these issues were given a great deal of attention. The

purpose of the study was introduced to the participants. The participants were told not to complete the scales if they were not willing as participation in the study was voluntary. They were informed that there was no correct or incorrect answers, all responses were completely confidential, and their genuine and sincere responses were important in terms of the results of the study. The participants filled in the set of scales in about 15–20 minutes.

The study was carried out among a group of 251 participants enrolled in the 9th, 10th, 11th, and 12th grades in high school. The sample comprised 112 (44.6%) female and 139 (55.4%) male students. These students were enrolled in five different high schools in Ankara, which is the capital city of Turkey. The mean age of the participants was found to be 15.16 ($SD = 1.04$) years. While 161 (64.1%) participants stated that they had decided which profession to choose, 90 (35.9%) participants stated that they had not decided yet. Additionally, 218 (86.8%) participants, who constituted the vast majority of the participants, reported that they perceived their socio-economic status as moderate, while 7 (2.8%) participants reported their perception as low and 26 (10.4%) participants stated it as high.

Measures

Student career construction inventory (SCCI). The SCCI was developed by Savickas et al. (2018). The scale consists of 18 items with a 5-point Likert-type scale ranging from “5 = I have already done this” to “1 = I have not yet thought much about it.” It has four dimensions and each dimension assesses a specific group factor reflecting a particular career construction task involving crystallizing (e.g., “Forming a clear picture of my personality”), exploring (e.g., “Learning about different types of jobs”), deciding (e.g., “Deciding what I really want to do for a living”), and preparing (e.g., “Finding opportunities to get the training and experience I need”). The SCCI provides scores that reflect the accomplishment of the four career construction tasks, as well as a total score that represents the overall degree of vocational development. The SCCI performs similarly with high school, undergraduate, and graduate students, with no significant gender differences. The validity of the scale was tested by confirmatory factor analysis (CFA) and the resulting model fit values demonstrated that the scale’s four-factor structure was valid. For reliability, Cronbach’s α coefficients were examined, and they were found to be 0.93 for the total score, 0.84 for the crystallizing subscale, 0.87 for the exploring subscale, 0.94 for the deciding subscale, and 0.89 for the preparing subscale.

Adaptation Process of the SCCI-Turkish Form. First of all, permission to translate and adapt the SCCI into Turkish for high school students was requested and obtained via e-mail from the scale’s developer. Then, following standard translation procedures, the SCCI was translated into Turkish independently by five experts fluent in English (two English-language experts, an advanced doctoral-level counseling psychologist, and two professors with expertise in career counseling). The translations made by each of the experts were then compared and the best translation for each item was chosen by the researchers. After that, a native Turkish and English speaker who was unfamiliar with the English version of the SCCI back-translated the questionnaire into English. The back-translated version was compared with the original SCCI in terms of clarity, correctness, and cultural relevancy by the researchers. A few revisions were made to ensure the understandability of the translation. Lastly, the scale was applied to 20 high school students to receive feedback about the clarity of the Turkish version of the SCCI. The students stated that the content of the items was easily understandable. Thus, the translation process of the Turkish version of the SCCI was finalized.

After finalizing the translation process, preliminary, criterion validity, internal consistency, and confirmatory factor analyses were performed in order to test the validity and reliability of the scale. In CFA, there are three hypotheses associated with the factor structure for a set of data: a hypothesis

for the number of the factors, a hypothesis stipulating that the factors are expected to be correlated or uncorrelated, and a hypothesized structure matrix stipulating the factors on which the variables are expected to be loaded (Hofmann, 1995). Based on this, we tested the following three hypotheses: the SCCI has four dimensions involving crystallizing, exploring, deciding, and preparing (H5); these four dimensions of the SCCI are significantly correlated with each other (H6); and all the items load on similar dimensions as in the original form (H7).

Career adapt-abilities scale (CAAS). The CAAS, developed by Savickas and Porfeli (2012), was adapted for Turkish adolescents by Karacan-Özdemir (2016). A 24-item 5-point Likert-type scale (“1 = not strong,” “5 = strongest”), the CAAS consists of four subscales of concern (e.g., “Thinking about what my future will be like”), control (e.g., “Taking responsibility for my actions”), curiosity (e.g., “Observing different ways of doing things”) and confidence (e.g., “Overcoming obstacles”). A score can be calculated for each subscale as well as the total score. The validity of the scale was tested by CFA and the resulting model fit values indicated that the scale’s four-factor structure was valid. The correlations between optimism and hope were also taken as proof of validity. For reliability, Cronbach’s α coefficients were examined, and they were found to be 0.89 for the total score, 0.72 for the concern subscale, 0.73 for the control subscale, 0.82 for the curiosity subscale, and 0.81 for the confidence subscale. In this study, the internal consistency coefficients were found to be 0.94 for the total score, 0.84 for the concern subscale, 0.80 for the control subscale, 0.84 for the curiosity subscale, and 0.83 for the confidence subscale.

Career decision-making difficulties questionnaire. The original Career Decision-Making Difficulties Questionnaire (CDDQ) was developed by Gati and Saka (2001). It was adapted for Turkish adolescents by Bacanlı (2016). To determine the construct validity of the CDDQ, CFA was employed. The factor structure of the Turkish version of the CDDQ was found similar to the factor structure of the original CDDQ. The scales include ten difficulty categories embedded in three major categories: lack of readiness (lack of motivation, general indecisiveness, and dysfunctional beliefs), lack of information (the stages of the career decision-making process, self, occupations, and ways of obtaining additional information), and inconsistent information (unreliable information, internal conflicts, and external conflicts). The 34-item CDDQ is scored on a 5-point rating scale ranging from 1 (“does not describe me”) to 5 (“describes me well”). Cronbach’s α internal consistency of the Turkish version of the CDDQ was found as 0.64 for lack of readiness, 0.95 for lack of information, 0.93 for inconsistent information, and 0.94 for the total scale. In this study, Cronbach’s α internal consistency of the CDDQ was found as 0.94 for the scale, as well.

Demographic information form. The demographic information form included general information such as gender, age, grade, perceived socio-economic status, and decision status about a future career. For the latter variable, the participants were asked, “Have you decided about which career to choose?” The participants who answered the question with “yes” were considered decided and the students who answered “no” were considered undecided.

Results

Preliminary analyses. To begin with, the obtained data were evaluated in terms of whether there were any outliers in the dataset by checking the minimum and maximum scores via frequencies. As suggested by Tabachnick and Fidell (2013), after a data cleaning procedure, 11 cases exceeding 5% were excluded. In cases of missing values, those values were replaced by the variable’s mean in order to utilize the remaining data on the whole. The reason for choosing this method was that although the dataset was large, the missing values were very few (0.02%). Furthermore, the missing

values were distributed completely at random. In such cases, if the number of missing values is sufficiently small, the average of the distribution does not change when the lost data are filled in with the mean (Tabachnick & Fidell, 2013). The normality assumption was interpreted by checking the Kolmogorov-Smirnov test, skewness and kurtosis values, histograms, and Q-Q plots. None of the Kolmogorov-Smirnov test values were significant ($p > .05$). Skewness values of >3.0 (Chou & Bentler, 1995) and kurtosis values of >10.0 (Kline, 2011) are considered to be problematic. Skewness and kurtosis values for all items ranged from -0.15 to 0.37 and from -0.27 to 1.26 , respectively. Thus, the variables met the norms for univariate normality (skewness of <3 , kurtosis of <10). Moreover, visual inspection of histograms and Q-Q plots indicated no great deviations from normality. The distribution of the scores of the participants seemed normally distributed when the histograms were examined and the Q-Q plot scores mostly clustered around the line. Thus, it was concluded that normality was not violated for the Kolmogorov-Smirnov test, skewness and kurtosis values, histograms, and Q-Q plots for the SCCI, CAAS, and CDDQ. All steps described thus far were completed using SPSS 24.0.

Confirmatory factor analyses of the SCCI Turkish high school form. To validate the four-factor structure of the SCCI Turkish High School Form, two different levels of CFA were conducted with 251 participants using LISREL 8.80 software (Jöreskog & Sörbom, 1993) with the maximum likelihood estimation procedure. The fit indices for the first level (four sub-dimensions) were found as follows: $\chi^2/df = 1.63$; GFI = 0.91; CFI = 0.98; AGFI = 0.89; NFI = 0.96; NNFI = 0.98; RMSEA = 0.050; SRMR = 0.050. Assuming that the correlation between the dimensions originated from a latent variable, the second level of CFA was performed, and whether the four sub-dimensions together measured the career construction was structurally tested. The fit indices for the second level (total scale) were found as follows: $\chi^2/df = 1.66$; GFI = 0.91; CFI = 0.98; AGFI = 0.89; NFI = 0.96; NNFI = 0.98; RMSEA = 0.051; SRMR = 0.052. The results of both first-level and second-level CFA demonstrated that the data from the SCCI Turkish high school sample fit the theoretical model very well (Jöreskog & Sörbom, 1993; Kline, 2011; Schreiber et al., 2006).

While testing these two different levels of the CFA model, 18 items and 4 sub-factor structures in the original form of the SCCI were taken as a basis and no modifications were made to this structure. It was found that all the items loaded on similar dimensions as in the original form without any modifications. Moreover, to test the relations between the dimensions (crystallizing, exploring, deciding, and preparing) of the SCCI, correlation analysis was performed (Table 1). The results of the correlation analysis demonstrated that crystallizing correlated positively with exploring ($r = .55, p < .01$), deciding ($r = .56, p < .01$), and preparation ($r = .52, p < .01$); exploring correlated positively with deciding ($r = .56, p < .01$) and preparation ($r = .61, p < .01$); and deciding correlated positively with preparation ($r = .67, p < .01$). These findings supported the hypotheses that the SCCI has four dimensions (H5), these four dimensions of the SCCI are significantly and positively correlated with each other (H6), and all the items load on similar dimensions as in the original form (H7).

Criterion-related validity. To demonstrate further evidence of construct validity, the correlations between the SCCI, CAAS, and CDDQ were calculated (Table 1).

The results of the correlation analysis showed that the SCCI total score correlated positively with the CAAS ($r = .71, p < .01$) and negatively with the CDDQ ($r = -.37, p < .01$).

Comparison of groups according to decision status. To provide additional evidence of the validity of the scale, the scores of the students whose career decisions were made and the students who were undecided about their careers were compared within the scope of criterion-related validity by employing the independent samples t-test (Table 2).

Table 1. Correlations of SCCI Subscales, Total Scale, CAAS and CDDQ.

Variable	1	2	3	4	5	6	7
SCCI-Crystallizing	1						
SCCI- Exploring	.55**	1					
SCCI- Deciding	.56**	.56**	1				
SCCI- Preparing	.52**	.61**	.67**	1			
SCCI Total	.77**	.83**	.85**	.85**	1		
CAAS Total	.68**	.53**	.61**	.56**	.71**	1	
CDDQ Total	-.29**	-.22**	-.46**	-.25**	-.37**	-.36**	1

* $p < .05$, ** $p < .01$.

Table 2. Comparison of Groups According to Decision Status.

	Decision Status	N	M	SD	t	η^2
SCCI-Crystallizing	Decided	161	3.88	.61	5.316	.098**
	Undecided	90	3.37	.87		
SCCI- Exploring	Decided	161	3.65	.92	4.924	.090**
	Undecided	90	3.00	1.03		
SCCI- Deciding	Decided	161	4.05	.72	11.036	.351**
	Undecided	90	2.86	.87		
SCCI- Preparing	Decided	161	3.39	.83	6.772	.155**
	Undecided	90	2.62	.89		
SCCI Total	Decided	161	3.74	.61	8.425	.239**
	Undecided	90	2.97	.75		

** $p < .001$.

They were asked, “Have you decided about which career to choose?” The participants who answered the question with “yes” were considered decided and the students who answered “no” were considered undecided. The results showed that students who had made a career decision had significantly higher scores from the SCCI ($t_{(249)} = 8.425, p < .001$) than students who had not made a career decision. Considering that the feature that the scale aims to measure is student career construction, the significant difference in favor of students who had made a career decision can be taken as additional evidence for validity.

Internal consistency. Cronbach’s α coefficient was used to evaluate the internal consistency of the scale. The internal consistency reliability for the SCCI was estimated as 0.72 for crystallizing, 0.75 for exploring, 0.85 for deciding, and 0.73 for preparing. The internal consistency reliability for the total score was 0.90. The results showed that the reliability coefficient of each sub-dimension and the total were higher than 0.70, which is the critical value (DeVellis, 2003).

Study 2

Procedure and Participants

In Study 2, the population was also composed of high school students. As in Study 1, all required permission was obtained from the ethics committee of the Ministry of National Education, and school counselors collected the data with permission and under the supervision of teachers. Informed consent for participating in this study was received from all participants before the scales were

administered. The participants filled in the set of scales in about 20–25 minutes. The convenience sampling method was used and participation in the research was limited to five different high schools in Ankara, Turkey, that were not included in the first study. A total of 707 participants were reached. Thirteen inappropriate cases were excluded after preliminary analyses. After the deletion of inappropriate cases, the total number of participants in this research was 694 (299 female, 395 male). The mean age of participants was found to be 15.23 ($SD = 1.11$) years. Moreover, 585 (84.3%) participants, who constituted the vast majority of the participants, reported that they perceived their socio-economic status as moderate, while 35 (5.1%) participants reported their perception as low and 74 (10.7%) participants stated it as high.

Measures

Student career construction inventory (SCCI). Detailed information was provided about the SCCI adaptation process in the methods section of Study 1, in which we tested the validity and reliability of the SCCI among high school students. For reliability, Cronbach's α coefficients were examined in Study 2 and these were found to be 0.89 for the total score, 0.68 for the crystallizing subscale, 0.72 for the exploring subscale, 0.86 for the deciding subscale, and 0.73 for the preparing subscale.

Rosenberg self-esteem scale (RSES). The RSES was developed by Rosenberg (1965) and adapted to Turkish by Çuhadaroğlu (1986). It is a 10-item (e.g., "I am able to do things as well as most other people," "I take a positive attitude toward myself") self-report measure of global self-esteem. Items are rated from one ("strongly disagree") to four ("strongly agree"). The scale is scored by using the Guttman method. The scores that can be obtained from the scale range from 0 to 6. High scores indicate that the level of self-esteem is high. The reliability and validity of the instrument for Turkish adolescents were established by Çuhadaroğlu (1986). The correlation between the scale and psychiatric interview results was found to be 0.71 for the validity of the RSES-Turkish version. The internal consistency coefficient was calculated for the reliability of the RSES, and it was found to be 0.83. The test-retest reliability was reported as 0.75. The internal consistency coefficient of the scale in this study was calculated to be 0.80.

Career adapt-abilities scale (CAAS). A more thorough description of the CAAS can be found in the methods section of Study 1. In this study, the internal consistency coefficients were found to be 0.93 for the total score, 0.83 for the concern subscale, 0.78 for the control subscale, 0.83 for the curiosity subscale, and 0.82 for the confidence subscale.

Oxford happiness questionnaire-short form (OHQ-SF). The OHQ-SF was developed by Hills and Argyle (2002) and adapted for Turkish students by Doğan and Akıncı-Çötok (2011). It is a five-point Likert-type scale ("1 = strongly disagree," "5 = strongly agree") and it consists of seven items (e.g., "I feel that life is very rewarding," "I am well satisfied with everything in my life"). The construct validity of the scale was examined by exploratory factor analysis (EFA) and CFA. The result of the EFA was a one-factor structure that accounted for 40% of the total variance. This structure was then examined by CFA, and the goodness-of-fit indices were found to be within the acceptable limits. Within the scope of the criterion-related validity, significant positive correlations were found between the OHQ-SF and the Satisfaction With Life Scale and the Life Orientation Test, whereas a significant negative correlation was found between the OHQ-SF and the Zung Depression Scale. The internal consistency coefficient was calculated for the reliability of the OHQ-SF, and it was found to be 0.74. Furthermore, the test-retest reliability coefficient was found to be 0.85. The internal consistency coefficient of the scale in this study was calculated to be 0.73.

Table 3. Normality Analysis, Descriptive Statistics and Correlations.

Variables	1	2	3	4	M	SD	Skew.	Kurtosis
1. RSES	–	.322	.319	.542	4.42	1.52	–.950	.248
2. CAAS		–	.587	.397	3.74	.66	–.254	–.203
3. SCCI			–	.352	3.56	.72	–.508	.251
4. OHQ-SF				–	3.27	.75	–.129	–.169

RSES: Rosenberg Self-Esteem Scale, CAAS: Career Adapt-Abilities Scale, SCCI: Student Career Construction Inventory, OHQ-SF: Oxford Happiness Questionnaire-Short Form. All correlations are significant at $p < .001$ level.

Demographic information form. The demographic information form included general information such as gender, age, grade, and perceived socio-economic status.

Results

Preliminary analyses. First, the obtained data were evaluated in terms of whether there were any outliers in the dataset by checking the minimum and maximum scores via frequencies. As suggested by Tabachnick and Fidell (2013), after a data cleaning procedure, 13 cases exceeding 5% were excluded. In cases of missing values, those values were replaced by the variable's mean in order to utilize the remaining data on the whole.

Normality analysis, descriptive statistics, and correlational analysis. Prior to testing the structural equation model, all variables were assessed for skewness and kurtosis, and none had values that exceeded 3.0 for skewness (Chou & Bentler, 1995) or 10.0 for kurtosis (Kline, 2011). Thus, all data were kept in the original form. After that, descriptive statistics and correlations among the variables were investigated (Table 3).

As assumed in Hypothesis 1, the four dimensions of the CCMA were found to be positively related to each other. As seen in Table 3, self-esteem was positively related to career adaptability ($r = .32, p < .001$), adapting responses ($r = .32, p < .001$), and happiness ($r = .54, p < .001$); career adaptability was positively related to adapting responses ($r = .59, p < .001$); and adapting responses were positively related to happiness ($r = .35, p < .001$). These relations suggest that these variables are appropriate for model testing (Tabachnick & Fidell, 2013).

Serial mediation analysis of the CCMA. To perform serial mediation analysis of the CCMA, IBM SPSS 24 was used. The tested model includes sequential dimensions such that adaptive readiness (self-esteem) facilitates the adaptability resources (career adaptability), which further improve adapting responses (career construction behaviors), which ends in adaptation results (happiness). To test the serial mediation model with adaptability resources and adapting responses as mediators of the link between adaptive readiness and adaptation results, PROCESS macro v3.4 (Model 6), created by Hayes (2018) for SPSS, was used. To test indirect effects, 10,000 bootstrap samples were used with 95% confidence intervals. In the serial mediation model of the CCMA, the X variable was the RSES, the Y variable was the OHQ, the M₁ variable was the CAAS, and the M₂ variable was the SCCI. All paths in the model from adaptive readiness to adaptation results are shown in Figure 3 and the regression coefficients and standard errors for the serial mediation model are investigated (Table 4).

First, H1 was tested in serial mediation analysis. The results showed that self-esteem was positively associated with career adaptability ($B = 0.14, p < .001$), which in turn was related to happiness ($B = 0.23, p < .001$). Meanwhile, career adaptability mediated the relation between self-esteem and happiness (indirect effect = 0.032 (non-standardized), $SE = 0.008$, 95% CI = [0.018, 0.048]). Therefore, H1 was supported.

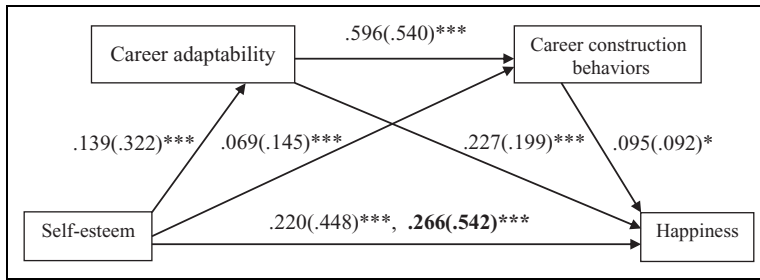


Figure 3. The proposed serial mediation model of the CCMA. *N* = 694. The standardized coefficients were shown in parenthesis and the total effect of self-esteem was shown in bold. **p* < .05. ****p* < .001.

Table 4. Regression Coefficients and Standard Errors for the Serial Mediation Model.

	CAAS			SCCI			OHQ-SF		
	B	SE	<i>p</i>	B	SE	<i>p</i>	B	SE	<i>p</i>
Antecedents									
RSES	.139	.016	<.001	.069	.015	<.001	.220	.016	<.001
CAAS	—	—	—	.596	.035	<.001	.227	.044	<.001
SCCI	—	—	—	—	—	—	.095	.040	.017

Note. RSES = Rosenberg Self Esteem Scale, CAAS = Career Adapt-Abilities Scale, SCCI = Student Career Counstruction Inventory, OHQ-SF: Oxford Happiness Questionnaire-Short Form, B = regression coefficient, SE = standard error.

Similarly, for Hypothesis 2, the assumption that adapting responses mediate the relation between self-esteem and happiness was tested. The results showed that self-esteem was positively associated with adapting responses (*B* = 0.07, *p* < .001), which, in turn, were related to happiness (*B* = 0.10, *p* < .001). Meanwhile, adapting responses mediated the relation between self-esteem and happiness (indirect effect = 0.007 (non-standardized), *SE* = 0.004, 95% CI = [0.001, 0.014]). Therefore, H2 was supported.

Finally, the full model of the CCMA was tested in H3. The results showed that self-esteem was sequentially associated with career adaptability (*B* = 0.14, *p* < .001), adapting responses (*B* = 0.60, *p* < .001), and eventually happiness (*B* = 0.10, *p* < .001). The sequential pathway of “self-esteem → career adaptability → adapting responses → happiness” was significant (indirect effect = 0.008, *SE* = 0.004, 95% CI = [0.001, 0.015]). Therefore, career adaptability and adapting responses mediated the relation between self-esteem and happiness. Consequently, H3 was supported.

Discussion

In this study, each step in the career construction model of adaptation (Savickas, 2005; Savickas & Porfeli, 2012) was evaluated with different measurements in order to test the model on Turkish high school students. Two studies were carried out for this purpose. In the first study, the structure of the SCCI (Savickas et al., 2018), which was accepted as a mediator of the model, adapting responses (Savickas & Porfeli, 2012), was defined within a sample of Turkish high school students together with its psychometric properties and validity. Results indicated that the SCCI is a valid tool for Turkish high school students. The SCCI’s validity was tested previously by Sevinç and Siyez (2018) in a sample of Turkish high school students, but its four-factor structure was not confirmed (for more details, see Sevinç & Siyez, 2018). However, in the sample of the present study, the four-factor structure of the SCCI is supported. Previous research concerning the SCCI’s validity in samples with

different cultural characteristics (e.g., Babarović & Šverko, 2016; Rocha & Guimarães, 2012; Savickas, et al., 2018) also support the results of the current study.

In this study, for the concurrent validity of the SCCI, decision status was used. In this way, it was aimed to gather additional evidence of the validity of the SCCI. The results indicate that individuals who have decided on a profession are more adaptive in their adapting responses compared to those who have not made their decisions yet. The effect sizes of the decision status regarding these results were medium and large. While individuals who have made decisions have expressed their commitment to their career choices, individuals who have not decided yet are not committed to any decision (Reardon et al., 2012). In this sense, it can be considered that individuals who have made a career decision about which profession to choose will examine the changing career conditions and behaviors related to choosing a profession and therefore engage in adaptive responses. In previous studies, career decision-making difficulties, which were accepted as an indicator of adapting responses (Hirschi et al., 2015; Rudolph, Lavigne, Katz et al., 2017), were found to be related to decision status. Individuals who have decided to pursue a profession report fewer decision-making difficulties than those who have not (e.g., Bacanlı, 2016; Kleiman et al., 2004; Öztemel, 2013; Tien, 2005). These results support the findings of the current study. Moreover, the fact that SCCI scores mediate between the CAAS and OHQ-SF in the CCMA tested in Study 2 shows that the SCCI is a valid tool in Turkish culture, which has different characteristics. In summary, the SCCI, for which the validity and reliability were tested in a sample of Turkish high school students, can be considered as a valid and reliable instrument in determining the career adaptation behaviors of high school students who are in the exploration stage (Savickas, 2005, 2013; Super, 1980).

In Study 2, the CCMA was tested. CCT (Savickas, 2005, 2013) draws a map from adaptive readiness to adaptability resources, adapting responses, and adaptation results. Although previous studies have shown that career adaptability is significantly related to happiness (Öztemel & Yıldız Akyol, 2019), self-esteem (Cai et al., 2015; Marcionetti & Rossier, 2019), and career decision-making difficulties (Karacan-Özdemir, 2019), the number of research studies that test the full model is still limited. The present study demonstrates how adaptive readiness affects adaptation results indirectly, and it provides important clues about the mechanisms that support the adaptation results (happiness) of high school students. Moreover, as well as replicating research that partially tested the CCMA, the present study also provides significant insight into how the four dimensions of the model of adaptation work and how adaptive readiness affects adaptation results through adaptability resources and adapting responses.

These results shed light on the potential mechanism to explain components between adaptive readiness and adaptation results. Three types of mediation effects have been observed in the four-stage CCMA: career adaptability and adapting responses are separate mediators and these two variables are also serial mediators. It can be said that career adaptability plays a full mediation role in the relation between self-esteem and adapting responses. This result demonstrates the importance of using adaptability resources to help adolescents be prepared for current and upcoming career development tasks to stimulate adapting responses. Similarly, the fact that adapting responses are mediators in the relation between self-esteem and happiness shows that it is important for adolescents to display career-seeking behaviors in order to achieve satisfaction with the adaptation results.

According to the results, the model proposed in Study 2 indicates the indirect effects of self-esteem, which represents adaptive readiness, on happiness, which represents adaptation results, through adaptability resources and adapting responses, as well as revealing the direct effects of adaptive readiness on adapting responses (the effect of self-esteem on adapting) and adaptation results (the effect of self-esteem on happiness). In other words, career adaptability and adapting responses sequentially mediated the effect of self-esteem on happiness. The results show that individuals with high self-esteem mediate their happiness in being ready to fulfill their career

development tasks and to deal with career transitions and display behaviors such as career planning and career research.

Some previous studies (e.g., Hirschi et al., 2015; Karacan-Özdemir, 2019; Savickas et al., 2018; Šverko & Babarović, 2019; Zhuang et al., 2018) support the results obtained in the present study. When the results of this study are interpreted, it can be understood that adaptive readiness is important for the development of adaptability resources, which leads to adapting responses, bringing about adaptation results. Several meta-analysis studies carried out on the model of adaptation (Johnston, 2018; Rudolph, Lavigne, Katz et al., 2017; Rudolph, Lavigne, & Zacher, 2017) support the results of this study.

The results demonstrate the importance of the mediating role of both adaptability and adapting responses. These results support Hartung and Taber's (2008) view that CCT guides the investigation of the structures (antecedents) that ensure the well-being of the individual. In addition, the results of the current study contribute to studies focusing on positive dispositional factors such as happiness. In their studies on well-being, Huppert and So (2013) stated that it is necessary to use different indicators to increase the comprehensiveness of well-being. In this sense, the present study contributes to the literature on positive dispositional factors in general, and happiness and well-being in particular.

Individuals who have high levels of self-esteem could be more motivated in setting career goals, taking action to achieve those goals, and coping with the flexible and variable structure of the world of work. At the same time, it is likely that these individuals will be more involved in career behaviors in order to adapt to the world of work and to achieve positive career goals while constructing their careers (Cai et al., 2015). Given the assumption that individuals with a higher level of self-esteem are generally more positive about themselves and may feel better about coping with difficulties during their career development (Duffy, 2010), they may be more likely to engage in career exploration behaviors. This may also enable them to use their adaptability resources better and make the expected adapting responses by exhibiting more positive career behaviors. Thus, these individuals may feel happier about life and have higher life satisfaction.

In their study examining the relations between adaptability resources, adapting responses, and adaptation results, Perera and McIlveen (2017) reported that individuals who have adaptive readiness scored higher in the four dimensions of career adaptability (concern, control, curiosity, and confidence) than individuals who were more rigid. This corresponding result supports the findings of the current study. Individuals who have adaptive readiness (high self-esteem) can be expected to exhibit more adaptive behaviors in the other three stages of the model. In conclusion, the current study broadens our limited knowledge of the CCMA.

In summary, the effects of the serial mediators in the model show that self-esteem contributes to the ability to cope with career behaviors and, in doing so, reveals career responses and improves the individual's well-being. These results are consistent with the theoretical views of the CCMA (Savickas, 1997, 2013) and the results of studies on self-esteem (Lian-Huang, 1990; Wulff & Steitz, 1999) and happiness (Johnston et al., 2013).

The results show that individuals with high self-esteem (adaptive readiness), who have features such as trusting and taking responsibility for their own decisions, making choices, not feeling guilty about their choices, solving their problems, and dealing with failure, are ready to deal with career problems (adaptability resources) and achieve behaviors such as making decisions and taking responsibility for those decisions (adapting responses), thus contributing to the goodness of adaptation (adaptation results).

Limitations and Implications for Future Research

In addition to its strengths, there are some limitations of this study. First, it was aimed to test the dimensions of the model of adaptation by taking the total scores of the scales representing each step

of the model. The main reason for this was to provide a simple and clear understanding of the CCMA. However, it was necessary to find out which dimensions of career adaptability (CAAS) and adapting responses (SCCI) support the model. Although this approach facilitates an understanding of the CCMA, it is necessary to reveal the relation between other dimensions of the model and the dimensions of the SCCI, which is an indicator of adapting responses. Therefore, future research should focus on the dimensions of the SCCI.

Another limitation is that a single measurement was carried out to measure all the dimensions except for adapting responses. This limits the understanding of how different measurements or the measuring of each dimension of the model with multiple measurements could affect the model. Including different measurements may explain the CCMA more clearly. In future research, placing and testing different structures in each dimension of the model may provide stronger evidence for the validity of the model.

Third, the high school students who participated in the research study face a series of challenges caused by the Turkish education system. As mentioned earlier, in the section on the Turkish context, an important challenge is that Turkish high school students attribute their career futures to the university entrance exam. Therefore, in future research, it is necessary to continue to examine whether the current results can be generalized or not.

Fourth, we used a cross-sectional design in the present study. Therefore, causal inferences cannot be made about relations among the variables. In future research, researchers may consider studying the CCMA using longitudinal or experimental designs so that they can analyze causal relations among variables developed over time.

Finally, in this research, decision statuses were evaluated with a single question in order to test the criterion validity of the SCCI. Although decision statuses are determined with a single question as criterion validity (e.g., Kleimen et al., 2004; Oztemel, 2013; Tien, 2005), it would be useful to determine the criterion validity by using different measurements of decision statuses in future research.

Counseling Implications

It has recently been reported that the CAAS is used by career counselors and practitioners as a monitoring tool to assist clients (Johnston, 2018). In this respect, the SCCI, which is an indicator of adapting responses and which was adapted for Turkish high school students in this study, can be used as a tool in monitoring the changes in the adaptation behaviors of clients and can also provide an understanding of which behaviors can be changed and how. It can help decide how to intervene when a gap or a problem is noticed in career counseling sessions regarding adaptation behaviors.

This study has shown that self-esteem can predict career adaptability, career adaptation behaviors, and adaptation results (happiness). Practitioners can make use of self-esteem in identifying and helping clients who do not demonstrate appropriate career adaptation behaviors. In addition, it may be important to increase the happiness levels of individuals with low levels of career adaptability and adapting responses. Career counselors can improve both career adaptability and overall life satisfaction, including happiness, by improving exploration, crystallization, decision-making, and planning behaviors. Furthermore, career counselors can help students observe their role models and make more appropriate self-assessments to shape their career development.

Conclusion

The findings of this study have provided evidence for the validity of the SCCI both in general and in a Turkish context with different cultural characteristics. It also uncovered the mediating role of adapting responses (measured by the SCCI) in the CCMA. Further research is necessary to expand the validity of the SCCI and the full model and to explore the effects of different measurements in the model.


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