



The predictors of Turkish youth's career planning: trait emotional intelligence, cognitive flexibility, and resilience

Berke Kirikkanat¹

Received: 26 January 2020 / Accepted: 28 March 2022 / Published online: 19 April 2022
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Abstract

Having effective career planning attitudes is a significant psychological resource for dealing with occupational burdens, unanticipated conflicts, and ambivalences in business area. The major purpose of the study was to reveal whether Turkish undergraduates' career planning attitudes were shaped by their trait emotional intelligence, cognitive flexibility, and resilience levels, or not. Two hundred forty-four undergraduates in a private university participated in the study. Revised Schutte Emotional Intelligence Scale, Cognitive Flexibility Inventory, and Resilience Scale were used to figure out the predictive roles of these variables on career construction skills (career adaptability, career optimism, and perceived knowledge about job market) measured by Career Futures Inventory. Multivariate regression analysis showed that trait emotional intelligence, cognitive flexibility, and resilience were pivotal predictors of Turkish youth's career construction deeds. The findings are essential for Turkish career counselors to consider how Turkish undergraduates' career development can be facilitated by focusing on these resources.

Keywords Trait emotional intelligence · Cognitive flexibility · Resilience

Résumé

Avoir des attitudes efficaces en matière de planification de carrière est une ressource psychologique importante pour faire face aux fardeaux professionnels, aux conflits imprévus et aux ambivalences dans le domaine des affaires. L'objectif principal de l'étude était de révéler si les attitudes de planification de carrière des étudiants turcs de premier cycle étaient façonnées par leurs traits d'intelligence émotionnelle, leur flexibilité cognitive et leurs niveaux de résilience, ou non. Deux cent quarante-quatre étudiants de premier cycle d'une université privée ont participé à l'étude. L'échelle d'intelligence émotionnelle révisée de Schutte, l'inventaire de flexibilité cognitive et l'échelle de résilience ont été utilisés pour déterminer les rôles prédictifs de ces

✉ Berke Kirikkanat
berke.kirikkanat@yeditepe.edu.tr

¹ Department of Guidance and Counseling, Yeditepe University, 26 Augustos Yerlesimi, İnönü Mahallesi Kayisdagi Caddesi, 34755 Atasehir, Istanbul, Turkey

variables sur les compétences de construction de carrière (adaptabilité de carrière, optimisme de carrière et connaissance perçue du marché du travail) mesurées par l'inventaire de l'avenir professionnel. L'analyse de régression multivariée a montré que l'intelligence émotionnelle, la flexibilité cognitive et la résilience étaient des prédicteurs essentiels des compétences en matière de construction de carrière des jeunes Turcs. Les résultats sont essentiels pour les conseillers d'orientation turcs qui doivent envisager comment faciliter le développement de carrière des jeunes turcs en se concentrant sur ces ressources.

Zusammenfassung

Eine wirksame Einstellung zur Karriereplanung ist eine wichtige psychologische Ressource für den Umgang mit beruflichen Belastungen, unvorhergesehenen Konflikten und Ambivalenzen im Geschäftsleben. Das Hauptziel der Studie war es, herauszufinden, ob die Einstellungen türkischer Studierender zur Karriereplanung durch ihre emotionale Intelligenz, kognitive Flexibilität und Resilienz beeinflusst werden oder nicht. Zweihundertvierundvierzig Studenten einer privaten Universität nahmen an der Studie teil. Die überarbeitete Schutte-Skala zur emotionalen Intelligenz, das Inventar zur kognitiven Flexibilität und die Skala zur Resilienz wurden verwendet, um die prädiktive Rolle dieser Variablen auf die Fähigkeiten zur Karriereplanung (berufliche Anpassungsfähigkeit, Karriereoptimismus und wahrgenommenes Wissen über den Arbeitsmarkt), die mit dem Career Futures Inventory gemessen wurden, herauszufinden. Die multivariate Regressionsanalyse zeigte, dass die emotionale Intelligenz, die kognitive Flexibilität und die Resilienz die entscheidenden Prädiktoren für die Karriereplanung türkischer Jugendlicher sind. Die Ergebnisse sind für türkische Berufsberater wichtig, um zu überlegen, wie die berufliche Entwicklung türkischer Studierender durch die Konzentration auf diese Ressourcen gefördert werden kann.

Resumen

Tener actitudes eficaces de planificación de la carrera es un recurso psicológico importante para hacer frente a las cargas laborales, los conflictos imprevistos y las ambivalencias en el ámbito empresarial. El objetivo principal del estudio era revelar si las actitudes de planificación de la carrera de los estudiantes universitarios turcos estaban condicionadas por sus rasgos de inteligencia emocional, flexibilidad cognitiva y niveles de resiliencia, o no. En el estudio participaron 244 estudiantes universitarios de una universidad privada. Se utilizaron la Escala de Inteligencia Emocional de Schutte revisada, el Inventario de Flexibilidad Cognitiva y la Escala de Resiliencia para averiguar el papel predictivo de estas variables sobre las habilidades de construcción de la carrera (adaptabilidad de la carrera, optimismo de la carrera y conocimiento percibido sobre el mercado de trabajo) medidas por el Inventario de Futuros de la Carrera. El análisis de regresión multivariante mostró que los rasgos de inteligencia emocional, flexibilidad cognitiva y resiliencia eran predictores fundamentales de las habilidades de construcción de carrera de los jóvenes turcos. Los resultados son esenciales para que los orientadores profesionales turcos consideren cómo se puede facilitar el desarrollo profesional de los estudiantes turcos centrándose en estos recursos.

Career planning for undergraduate students is a tough process as the business world becomes more competitive, complex, dynamic, and demanding in the twenty-first century than the previous centuries (Aryee & Debrah, 1992; Bell & Blanchflower, 2011; Stoeber et al., 2016). They should reform their career plans continuously by considering their individual necessities as well as their national economic dynamics in the business area (Broschio & Paulick, 2003). Although career planning process starts from the time they participate in formal education, they should be prepared for every possibility in job-related activities they encounter (Hall, 2002). Thus, career planning contains an intentional course of actions including three components:

- developing self-awareness about interests, skills, values, limitations, and favorable circumstances
- determining career purposes
- choosing a particular career objective by relying on educational and job experiences and organizing an action plan to obtain that objective (Gutteridge, 1986).

A person shapes his/her career path by going through such courses as evaluating his/her wishes, aims, interests, abilities; investigating the potential career options; designing a career strategy; applying to that strategy; and assessing whether s/he achieves his/her career goals, or not (Jaffe & Scott, 1991). In this regard, career planning includes a steady course of self-evaluation and formation of career goals (Kleinknecht & Hefferin, 1982). Hence, it is essential for young people to know if they can overcome these stages through their potentials and personalities.

In Turkey, career planning is quite different from that in Western societies. The youth in the West is involved in a different education system where s/he can freely make career preferences and construct his/her career development process based on his individual concerns. However, in Turkey, starting from the secondary school years, the youth must be successful in general examinations to be educated in a prominent high school, and a well-known college. Their career path is largely determined by centralized testing system which they put large efforts to get high scores from entrance examinations. Therefore, career counseling process in Turkey includes helping the youth make a proper career choice based on their exam scores (Owen et al., 2011).

When Turkish economic system is examined thoroughly, it is stated that the economic environment provides the youth unhopeful picture for their career life as Turkish Statistical Institute (TUIK) reported in July 2019 that the number of unemployed people went up to 13.0% compared to the previous year (9.6%). The unemployment rate in people between the ages of 15 and 24 went up to 13.3% (9.8% in 2018). The rate presenting the ones who were neither involved in any educational degree nor in any business field went up to 23.4% as opposed to the last year (21.3% in 2018). As a result, the new graduates are in the face of inadequate employment facilities and salaries in Turkey, where political and economic uncertainties are quite high. To have a successful career life, they must have the ability to handle with possible career obstacles, and to formulate remedial plans in case of their potential troubles, as Lent (2013) emphasized.

Future of Jobs Report discloses the main fact that the most pivotal job abilities necessary for the achievements in the fourth Industrial Revolution (i.e., for the ones who would like to survive and attain big goals in the job market by 2020) are complex problem solving, critical thinking, creativity, people management, coordination with others, emotional intelligence, judgment and decision-making, service orientation, negotiation, and cognitive flexibility (World Economic Forum [WEF], 2018). Besides, the employment market highlights the need of individuals who improve such coping strategies as resilience (Bimrose & Hearne, 2012). Thus, Turkish undergraduates' positive psychological resources like trait emotional intelligence, cognitive flexibility, and resilience are very essential components of their career construction processes. Such personality traits have the potential to lead them to survive in this hard economic atmosphere. To understand their career planning attitudes, Career Construction Theory provides important information about how to handle with career problems effectively (Savickas, 2005).

Career Construction Theory

According to Career Construction Theory (CCT, Savickas, 2005, 2013), reciprocal person-environment fit is a crucial element in one's career adaptation process. The theory combines internal and external factors in one's career success by considering recent career obstacles which demand an effective adaptation to the competitive working environment (Duffy et al., 2015; Savickas & Porfeli, 2012). In CCT, the process of adaptation includes four components: adaptivity, adaptabilities, adapting, and adaptation. Adaptivity refers to one's personality characteristics allowing the one to become flexible, ready, and keen to deal with vocational transitions and challenges (Savickas & Porfeli, 2012). On the other hand, adaptability includes necessary coping mechanisms for adaptation. It encompasses the required abilities used to solve career problems, which can be stated as control, concern, curiosity, and confidence. Control represents the action of taking responsibility of one's career establishment. Concern involves one's motivating drives to be ready for subsequent vocational duties. Curiosity is described as scrutinizing oneself and possible career pathways in order to make proper career decisions. Confidence involves one's insurance to solve his/her potential career problems effectively by believing his/her competencies (Savickas, 1997, 2002, 2005, 2013). Based on these resources, the proper actions taken to construct one's career pathway represent his/her adapting responses. With adapting responses, there are different adaptation consequences such as achievement, satisfaction, and so on.

Trait emotional intelligence

Based on Career Construction Theory, trait emotional intelligence can be seen as the aspects of adaptivity component in the model. It is described as one's personality trait representing one's belief in his/her emotional abilities (Petrides, 2011). It is also called as trait emotional self-efficacy. It can be regarded as one's perceptual

emotional competence which includes behavioral tendencies of emotions, and self-understanding skills (Pérez et al., 2005). In other words, it involves one's self-evaluations of his/her emotional skills. It encompasses one's self-assessment of how well s/he comprehends, controls, and puts his or her emotions into words to be able to survive in his or her life (Petrides et al., 2016). People having high scores in **trait emotional intelligence** consider themselves as flexible and adaptive to novel conditions (Petrides, 2011). It can be stated that there is a relationship between trait emotional intelligence and adaptability mechanisms.

In addition to Career Construction Theory, the action theory of career development (Young et al., 1996) states that emotional understanding plays an essential role on one's career establishment. Relying on this theory, one's emotional power influences his/her motivational states, decision-making processes, behaviors, and career plans, which in turn shapes his/her career path. Especially, in career development literature, emotional intelligence is significantly related to academic performance (Perera & DiGiacomo, 2013), career adaptability (Celik & Storme, 2018; Coetzee & Harry, 2014; Merino-Tejedor et al., 2018; Udayar et al., 2018), career commitment (Carson & Carson, 1998), career optimism (Jordan et al., 2002), positive work attitudes, altruistic behaviors, and work outcomes (Carmeli, 2003), proper career decision-making (Di Fabio et al., 2012; Sollarova & Kaliska, 2019), experiencing appropriate career choice processes (Emmerling & Cherniss, 2003), and career successes (Cooper, 1997).

Cognitive flexibility

Cognitive flexibility can be considered as a significant adaptivity ingredient based on Career Construction Theory. It refers to one's cognitive skill which s/he can alter his/her thoughts depending on the changing conditions s/he is involved in Martin and Rubin (1995). It leads to adaptive behavioral reactions to these conditions, deriving from its feature of international mindedness (Dennis & Vander Wal, 2010; Jacques & Zelazo, 2005). It allows the one to have high levels of tolerance toward uncertainty (Griffin & Hesketh, 2003). That is, cognitive flexibility lets the individual be conscious of the alternative pathways of resolutions in any circumstances (Martin et al., 1998). Such a cognitive efficiency causes him/her to survive in unpredictable environmental conditions. Therefore, it is very essential in one's career life as s/he encounters many demanding and blurred working situations in his/her business area (Dawis & Lofquist, 1976). Studies demonstrate that cognitive flexibility has essential links with academic achievement and career choice (Jacques et al., 2014; Kerkood et al., 2017), career adaptability (Chong & Leong, 2015; Rudolph et al., 2016), career future (Yıldız-Akyol & Boyacı, 2020), working with the individuals in different cultures (Shaffer et al., 2012), studying attitudes (Önen & Koçak, 2015), approaches to learning (Déak, 2003; Vitiello et al., 2011), leadership (Reiter-Palmon, 2003), multi-tasking (Ionescu, 2012), assertiveness, responsiveness, and communication competence (Martin & Anderson, 1998), creativity (De Dreu et al., 2011), and optimism (Keith et al., 2015).

Resilience

Another important career resource which can be a pivotal adaptivity element in terms of Career Construction Theory is resilience. It refers to a set of personality characteristics impeding the one from developing negative and ineffective behaviors in risky circumstances (Masten, 2001). Such features include coping with traumatic experiences and demonstrating resistance toward them (Masten, 2007; Rutter, 2006). In other words, it contains protective factors allowing the one to deal with negative conditions competently (Dyer & McGuinness, 1996). These factors can be considered as a group of skills such as being able to be decisive in solving difficult problems, to show positive attitudes toward others, to find the internal strength to move on during the process, to be unique in resolutions and so on. They can be enhanced by individuals if they regard the hardy times as an opportunity to understand themselves (Richardson, 2002). Especially, the difficult moments in one's life let him/her boost his/her insight about himself/herself, which in turn increases his/her readiness to handle with compelling situations. Thus, resilience is a crucial personal component in one's career path as s/he is involved in challenging business life. Researches indicate that resilience has notable relations with career adaptability (Bimrose & Hearne, 2012; Büyükgoze-Kavas, 2016; Kalafat, 2018), job performance, job satisfaction, work happiness, and organizational commitment (Youssef & Luthans, 2007), career success (Coutu, 2002; London, 1983), coping strategies, self-leadership, optimism, self-esteem, and positive mood (Rottinghaus, 2004; Steinhardt & Dolbier, 2008), academic achievement (Allan et al., 2014), and academic major satisfaction (McIlveen et al., 2013).

The relations among trait emotional intelligence, cognitive flexibility, resilience, and career planning attitudes

For Career Construction Theory (CCT), adaptivity enhances the development of one's adaptability mechanisms (Savickas & Porfeli, 2012). It can be stated that trait emotional intelligence, cognitive flexibility, and resilience are likely to enhance one's career planning attitudes (i.e., career adaptability, career optimism, and perceived knowledge of job market), proposed as important adaptability systems by Rottinghaus et al. (2005). Career adaptability is a significant dimension of one's career planning. For CCT, it is an important resource for an individual to cope with the recent demands in the business area (Savickas, 2005). Super and Knasel (1981) described career adaptability as one's ability to carry out varying working circumstances effectively. Yet, Savickas (1997, 2005) expanded the concept, and stated that it refers to being prepared for any probable career developmental duties, transitions, and intense individual challenges in one's life. Maintaining one's self-concept despite diverse problematic situations occurring in one's career path characterizes one's career adaptability.

Celik and Storme (2018), Merino-Tejedor et al. (2018), and Udayar et al. (2018) investigated the mediating role of career adaptability on the links among trait

emotional intelligence, academic satisfaction, academic engagement, career decision-making problems, and self-perceived employability with undergraduate students. They figured out that trait emotional intelligence had a positive impact on undergraduates' career adaptability levels. This, in turn, increased their academic satisfaction and engagement, self-perceived employability, and decreased their career indecision levels.

In addition, Bimrose and Hearne (2012) examined four qualitative studies to understand the relation between resilience and career adaptability in career development literature. They found that these two concepts were inter-connected. The ones who had high levels of resilience demonstrated themselves as more adjustable to unexpected business life, and more flexible than the others. Moreover, in the study of Buyukgoze-Kavas (2016), the more resilient Turkish undergraduates were, the more adaptable they were in their career lives. Besides that, Kalafat (2018) revealed that 21–30 aged adults having high levels of resilience had high levels of career adaptability, which allowed them to handle with blurred working states effectively.

Chong and Leong (2015) also studied the mediating function of career adaptability on the relations among cognitive flexibility, conscientiousness, environmental exploration, and strategic career management with 307 undergraduates. They found that cognitive flexibility was one of the important precursors of undergraduates' career adaptability in addition to conscientiousness and environmental exploration. It had a positive effect on their practical engagements to reach their career goals.

Furthermore, career optimism is an essential unit of career planning (Rottinghaus et al., 2005). It can be portrayed as one's assurance in his/her abilities to make convenient career preferences, form his/her career goals, follow his/her ideals, and progress in his/her career path effectively (Hennessey et al., 2008). Specifically, it refers to one's positive expectations about his/her subsequent career developmental stages (Raymund et al., 2015). In the study of Jordan et al. (2002), it was found that emotionally intelligent individuals formed positive anticipations about their career lives as they were less vulnerable to negative affections deriving from uncertainties in their working conditions. These individuals had the capacity to handle with the probable ambivalences in their job places effectively. They could decrease their negative influences by rethinking them as the opportunities for their individual development. Therefore, they could keep their emotional dedication to their jobs alive. Moreover, in the study of Carmeli (2003), it was accounted that emotionally intelligent employees had positive mental outlook toward their working lives. It supported them to focus on resolutions at the time of challenges rather than the problems, used their emotional energy to cope with demanding working tasks effectively, felt responsible, and spent their time saving the organization in hardy times rather than complaining about its inefficient aspects. Such an understanding let them affectively join into the organization and had high degrees of gratification from work. Therefore, it is possible to think that emotionally intelligent undergraduates may prepare themselves for the business world better as they look at their career positively than the others.

In the study of Kalafat (2018) with a sample of 177 Turkish undergraduates, it was also revealed that there was no significant relation between resilience and career optimism. Undergraduates' resilience levels did not have the potential to predict their career optimism levels. However, Tolentino et al. (2014), and Yıldız-Akyol and Boyacı (2020) found that undergraduates having high degrees of cognitive flexibility had high degrees of career optimism. They stated that a cognitively flexible personality was operated as a self-management mechanism which the individual dealt with unpredictable business circumstances effectively and looked at future career demands in a positive light.

The other dimension of career planning is the perceived knowledge about business market (Rottinghaus et al., 2005). It can be described as one's ability to apprehend the business area very well and follow up new movements in employment settings, leading to better career decisions in his life. In the study of Yıldız-Akyol and Boyacı (2020), cognitively flexible Turkish undergraduates had more knowledge about the job market than those who were cognitively inflexible. The researchers stated that cognitive flexibility made undergraduates think about every potentiality in the business area vigorously. Thus, they had the tendency to gather lots of information to have diverse solutions for possible problems in the area.

The present study

Career Construction Theory (CCT) implies that the contextual factors should be taken into consideration in addition to his/her personality factors in his/her career planning. Upon thinking about the environmental dynamics in Turkey, it has a difficult educational and economic atmosphere for young people. Especially, lots of standardized examinations in the educational area as well as high unemployment rates in the job field make them stressful and anxious in their career path. To be successful in their careers, they need positive psychological personality resources. Examining the individual resources is very fundamental to help Turkish undergraduates proceed in their career development in a healthy manner. Specifically, pondering about these prominent resources can provide essential information for both Turkish career counselors and educational researchers. It enlightens them to consider necessary career intervention strategies whose aims are to increase Turkish undergraduates' accomplishments in their career paths in the twenty-first century. It can reveal possible resolutions to their career obstacles which obscure the attainments of their ideals.

Consequently, based on the theoretical framework of CCT, the present study aims to examine the direct effects of the adaptivity inputs (i.e., trait emotional intelligence, cognitive flexibility, and resilience) on Turkish undergraduates' adaptability mechanisms/career planning attitudes (i.e., career adaptability, career optimism, and the perceived knowledge about business market). Therefore, the present research tries to answer the question: To what extent do trait emotional intelligence, cognitive flexibility, and resilience explain Turkish undergraduates' career planning attitudes? Based on that question, the proposed hypothesis can be stated as Turkish undergraduates who have high degrees of trait emotional intelligence, cognitive flexibility, and

resilience are more likely to have high degrees of career adaptability, career optimism, and the perceived knowledge about business market.

Method

Participants

Convenient sampling method was used to form the sample of the research. In this sampling method, the researcher gathers the data from the ones who are easily approachable at the occasion when the study is conducted (Cohen et al., 2007). 244 undergraduates (130 girls, 114 boys) in a private university participated in the study. There were 55 freshmen (22.5%), 60 sophomore (24.6%), 65 junior (26.6%), and 64 senior (26.2%) students in the major of social and natural sciences in the fall term of academic year of 2018–2019. The age ranged from 18 to 25 years old ($M = 21$, $SD = 1.53$).

Research design

The present study was formed via the predictor correlational research design whose aim is to clarify the anticipating roles of two or more variables on the criterion variable (Fraenkel et al., 2012). In this regard, the study had the purpose of examining the predictive impacts of one's trait emotional intelligence, cognitive flexibility, and resilience on his/her career adaptability, career optimism, and perceived knowledge of the job market.

Measures

Revised Schutte emotional intelligence scale

It is a means of assessment (33-items) used to figure out the degree of one's global trait emotional intelligence suggested by Salovey and Mayer (1990) model necessary for his/her intrapersonal and interpersonal relations in social and occupational life (Schutte et al., 1998). The scale was revised by Austin et al. (2004) and comprised of 41-items. In the study, the adapted version of the revised scale made by Tatar et al. (2011) was conducted. The adaptation study was carried out with 1743 Turkish participants whose age varied from 17 to 78 years old. Based on the explanatory and confirmatory factor analyses, the scale was consisted of a three-factor structure (Optimism/Mood Regulation, Utilizations of Emotions, and Appraisal of Emotions) on a 5-point scale. Total score can be obtained from the scale. Cronbach alpha reliability coefficient of the total scale was .82. In addition, Cronbach alpha coefficients of each subscale were .75, .39, and .76, respectively. The internal consistency value of the Utilization of Emotions subscale was lower

than the other two subscales. Based on the split-half method, Cronbach alpha coefficients for the first half and second half of the total scale were .69 and .71. Cronbach alpha coefficients for the first half and second half of the subscales of Optimism/Mood Regulation, Utilizations of Emotions, and Appraisal of Emotions were .72 and .43, .15 and .17, .66 and .54, respectively. Because these internal consistency values formed the idea that the factor structure of the scale was not clear enough, the researchers suggested that the total score should be used. Test–retest reliability coefficients of the total scale in one week and two-week intervals were .49 and .56, respectively ($p < .001$). In the present study, Cronbach alpha reliability coefficient of the total scale was .78.

Cognitive flexibility inventory

It is a tool aimed to assess the degree of one's cognitive flexibility toward the life conditions and events s/he encounters (Dennis & Vander-Wal, 2010). In the present research, its adapted version made by Sapmaz and Dogan (2013) was applied. The adaptation study was conducted with 551 Turkish participants whose age ranged from 17 to 28 years old. The factor analyses demonstrated that the scale included 20-items with a two- factor pattern (Alternatives and Control) on a 7-point scale. Alternatives subscale consisted of the items representing one's tendencies to find alternative solutions or explanations in the face of difficult situations. Control subscale composed of the items indicating one's beliefs in his/her abilities to control tough conditions. Total score can be attained from the inventory. Cronbach alpha coefficient of the total scale was .90. Besides, Cronbach alpha coefficients of each subscale were .90 and .84, respectively. Test–retest reliability coefficient of the scale was .75 ($p < .001$). In the present study, internal consistency estimate of the total scale is .90. Cronbach alpha coefficients of Alternatives and Control subscales were .89 and .85, respectively. To examine cognitive flexibility in detail, the scores of Alternatives and Control sub-dimensions were considered profoundly.

Resilience scale

It is a measurement tool identifying the level of one's psychological resilience in the face of tough conditions in his/her life (Wagnild & Young, 1993). In the study, its adapted version formed by Terzi (2006) was utilized. The adaptation study was carried out with 155 Turkish university students in a public university (Terzi, 2006). The factor analyses indicated that the scale was composed of 24-items on a 7-point scale. Cronbach alpha reliability coefficient was .82. In the present study, Cronbach alpha reliability coefficient of the total scale was .89.

Career Futures Inventory

It is an instrument used to investigate whether an individual works out his/her career in a positive manner, or not (Rottinghaus et al., 2005). In the study, its adapted version by Kalafat (2012) was utilized. The adaptation study was conducted with 555 Turkish participants whose age ranged from 17 to 39 years old (Kalafat, 2012). The factor analyses showed that the scale involved 25-items with a three-factor structure (Career Adaptability, Career Optimism, and Perceived Knowledge about Job Market) on a 5-point scale. Cronbach alpha coefficient of the total scale was .88. Moreover, Cronbach alpha coefficients of each subscale were .83, .82, and .62, respectively. In the present study, internal consistency estimates of Career Adaptability, Career Optimism, and Perceived Knowledge about Job Market subscales were .82, .87, and .70, respectively. To understand how trait emotional intelligence, resilience, and cognitive flexibility shape one's career planning attitudes, the scores of Career Adaptability, Career Optimism, and Perceived Knowledge about Job Market subscales were considered.

The personal information form

It was engendered by the researcher to gather information about the descriptive features of the sample. In the form, there were the demographic questions including age, gender, and class level of the participants. The form and the scales mentioned above were assigned to the participants during their courses by the researcher at the same time.

After ethical permissions were given by the university, the surveys were conducted onto the participants once during their courses. Their involvement into the study was based on their voluntariness. They were told that their data would not be distributed to anyone, and the information would only be utilized for the present research purposes by giving them informed consent forms. The application of the scales lasted for almost 25 min.

Results

Preliminary analyses

In case of the possibility of the missing and outlier data, 250 undergraduates took part in the study. However, four participants constituted the missing data as they did not answer the questions in the scales completely. Because these data made up less than 5% of the total data, list wise deletion method was utilized (Tabachnick & Fidell, 2007). The rest of the data was analyzed whether there were outliers, or not in accordance with Mahalanobis distance calculation. In this regard, two participants were identified as outliers and excluded from the data because they fulfilled all the items in an expected desirable manner ($p < .001$) Hence, the analyses of the study were carried out with 244 participants.

To conduct multivariate regression analysis on the data, its assumptions (i.e., multivariate normality, linearity, multicollinearity, and homoscedasticity) were examined profoundly (Tabachnick & Fidell, 2007). To test the multivariate normality, skewness and kurtosis indexes were calculated. In Table 1, the indexes are shown precisely.

As it is indicated in Table 1, the skewness and kurtosis indexes of all indicators were in acceptable levels (± 1.5) for the normal distribution (Tabachnick & Fidell, 2007). They ranged from $-.82$ to 1.43 . Besides the multivariate normality, the data set was analyzed in terms of the linearity and homoscedasticity. The preliminary graph analyses showed that there were no violations of assumptions of linearity and homoscedasticity.

On the other hand, the data were also examined according to multicollinearity. To understand if multicollinearity and singularity existed in the data set, bivariate correlations coefficients and variance inflation factors (VIFs) were calculated. Supposing the coefficients are higher than $.90$ (Tabachnick & Fidell, 2007), and if the VIF scores are above 10 (Hair et al., 1995), then, it can be claimed multicollinearity and singularity prevail in the data set. In Table 2, the coefficients of each variable are shown in brief.

As it is indicated in Table 2, the correlation coefficients were between $.20$ and $.67$. Moreover, the VIF scores of trait emotional intelligence, resilience, alternatives, and control were 1.557 , 1.988 , 1.785 , and 1.676 , respectively. Thus, these results displayed that multicollinearity and singularity were not included in the data set.

Main analyses

To investigate if trait emotional intelligence, resilience, and the sub-dimensions of cognitive flexibility significantly predicted Turkish undergraduates' levels of career adaptability, career optimism, and perceived knowledge about job market, multivariate regression analysis was applied onto the data. The results showed

Table 1 The normality indexes of study variables

Variable	Skewness	Kurtosis
TEI	$-.27$	$-.27$
RES	$-.65$	$.39$
CF	$-.37$	$.35$
ALT	$-.32$	$-.01$
CON	$-.56$	$.40$
CPA	$-.36$	$.48$
CA	$-.04$	$-.16$
CO	$-.82$	1.43
PK	$-.08$	$-.22$

TEI trait emotional intelligence, RES resilience, CF cognitive flexibility, ALT alternatives, CON control, CPA career planning attitudes, CA Career adaptability, CO career optimism, PK perceived knowledge of job market

Table 2 Inter-correlation matrix of study variables

Variable	1	2	3	4	5	6	7
1. TEI	1.00						
2. RES	.54*	1.00					
3. ALT	.52*	.58*	1.00				
4. CON	.39*	.59*	.53*	1.00			
5. CA	.47*	.67*	.47*	.57*	1.00		
6. CO	.57*	.63*	.42*	.46*	.62*	1.00	
7. PK	.20*	.39*	.31*	.39*	.43*	.41*	1.00

TEI trait emotional intelligence, RES resilience, ALT alternatives, CON control, CA career adaptability, CO career optimism, PK Perceived knowledge about job market

* $p < .01$

Table 3 The results of multivariate regression analysis ($N = 244$)

Variables	Model	B	SE-b	β	t	p
CA	Constant	8.209	3.146	–	2.403	.02
	TEI	.058	.026	.126	2.234	.03
	RES	.138	.020	.453	7.080	.00
	ALT	.009	.050	.011	.178	.86
	CON	.265	.063	.246	4.199	.00
CO	Constant	–12.771	4.738	–	–2.696	.01
	TEI	.199	.036	.321	5.501	.00
	RES	.174	.027	.422	6.411	.00
	ALT	–.055	.070	–.050	–.797	.43
	CON	.162	.087	.112	1.849	.07
PK	Constant	3.369	1.857	–	1.814	.07
	TEI	–.014	.014	–.071	–.981	.33
	RES	.032	.011	.248	3.041	.00
	ALT	.030	.027	.086	1.117	.26
	CON	.105	.034	.228	3.050	.00

TEI trait emotional intelligence, RES resilience, ALT alternatives, CON control, CA career adaptability, CO career optimism, PK perceived knowledge about job market

that these variables explained 51% of the variance in career adaptability ($R = .71$, $R^2 = .51$, $F(4, 239) = 61.915$, $p < .001$); 48% of the variance in career optimism ($R = .69$, $R^2 = .48$, $F(4, 239) = 54.900$, $p < .001$), and 20% of the variance in perceived knowledge about job market ($R = .45$, $R^2 = .20$, $F(4, 239) = 14.995$, $p < .001$). The raw and β coefficients of the predictor variables are shown in Table 3.

As it is shown in Table 3, trait emotional intelligence ($\beta = .13$, $t(243) = 2.234$, $p = .03$), resilience ($\beta = .45$, $t(243) = 7.080$, $p < .01$), and control sub-dimension of cognitive flexibility ($\beta = .25$., $t(243) = 4.199$, $p < .01$) significantly predicted the levels of career adaptability unlike alternatives sub-dimension of cognitive flexibility ($\beta = .011$, $t(243) = .178$, $p = .86$). Moreover, trait emotional intelligence ($\beta = .32$, $t(243) = 5.501$, $p < .01$) and resilience ($\beta = .42$, $t(243) = 6.411$, $p < .01$) significantly predicted the levels of career optimism unlike alternatives ($\beta = -.05$, $t(243) = -.797$, $p = .43$) and control ($\beta = .112$, $t(243) = 1.849$, $p = .07$) sub-dimensions of cognitive flexibility. And resilience ($\beta = .25$, $t(243) = 3.041$, $p < .01$) and control ($\beta = .23$, $t(243) = 3.050$, $p < .01$) sub-dimension of cognitive flexibility significantly predicted the levels of perceived knowledge about job market as opposed to trait emotional intelligence ($\beta = -.07$, $t(243) = -.981$, $p = .33$) and alternatives ($\beta = .086$, $t(243) = 1.117$, $p = .26$) sub-dimension of cognitive flexibility.

Discussion

The objective of the research was to probe if Turkish undergraduates' career planning attitudes were formed by their trait emotional intelligence, cognitive flexibility, and resilience. The findings conveyed that Turkish undergraduates having high degrees of trait emotional intelligence, resilience, and control sub-dimension of cognitive flexibility had high degrees of career adaptability. Another finding was that Turkish undergraduates having high levels of trait emotional intelligence and resilience had high levels of career optimism. Yet, cognitive flexibility sub-dimensions had no predictive influence on the career optimism levels.

The anticipating role of trait emotional intelligence, resilience, and control sub-dimension of cognitive flexibility on career adaptability was consistent with Career Construction Theory (CCT). They were uncovered as significant adaptivity elements letting undergraduates be prepared for their potential career transitions and difficulties (Petrides et al., 2016; Savickas & Porfeli, 2012), and developing their career adaptability mechanisms. The same finding can be seen in the previous studies by Bimrose and Hearne (2012), Büyükgöze-Kavas (2016), Celik and Storme (2018), Chong and Leong (2015), Kalafat (2018), Merino-Tejedor et al. (2018), and Udayar et al. (2018). They revealed that the ones having high degrees of trait emotional intelligence, resilience, and cognitive flexibility had high career adaptability degrees. Based on the findings and theoretical information, it can be stated that the ones who believe that they can manage their emotions, negative thoughts, beliefs, and difficult career circumstances very well can have the chance of survival in a demanding and ambivalent Turkish business life. As they can modify their emotional and mental framework competently, they can explore possible career pathways, and find practical resolutions for their career problems easily.

The present study also indicated the predictive roles of resilience and trait emotional intelligence on career optimism unlike the dimensions of cognitive flexibility. Their influential roles on career optimism were consistent with

Career Construction Theory (CCT) and the studies of Jordan et al. (2002) and Carmeli (2003). Resilient and emotionally intelligent individuals are likely to enhance their insurance in their abilities to make proper career choices and attain good outcomes in the future. Such a belief increases their adaptability chances (Savickas & Porfeli, 2012). Their positive emotions enhance their resilience levels in their career lives leading to the development of career optimism (Boehm & Lyubomirsky, 2008). In addition, the ones having high scores of trait emotional intelligence have high scores of trait optimism, defined as believing and perceiving life from a positive point of view which results in one's positive anticipations in his/her career life (Petrides, 2010). In career development literature, there is no study investigating the relationship between trait emotional intelligence and career optimism with undergraduate students. Jordan et al. (2002) and Carmeli (2003) revealed the significant positive relation between trait emotional intelligence and career optimism levels of the employees. On the other hand, Kalafat (2018) examined the relationship between resilience and career optimism of Turkish undergraduates. He found that high levels of resilience did not lead to high levels of career optimism. Such a finding is not in line with the present study. Therefore, it may be mentioned that resilient and emotionally intelligent Turkish undergraduates, depending on the external circumstances, can diversify their optimistic perspectives toward their career lives. Hence, they can have positive perspectives toward their careers, manage their stress accurately, and utilize their emotional drives as a motivational tool for decreasing their career obstacles. They may regard ambiguous Turkish job environment as an opportunity to demonstrate their real self-concepts.

The research indicated that there was no predictive role of cognitive flexibility on career optimism. Such a finding was not in line with the Career Construction Theory (CCT), and the studies of Tolentino et al. (2014) and Yıldız-Akyol and Boyacı (2020). Therefore, it may be pointed out that Turkish undergraduates may consider their career obstacles as irresolvable in the short run due to the ups and downs in Turkish economic conditions despite tolerating their career ambiguities efficaciously. Furthermore, the present study demonstrated that the undergraduates' having high levels of resilience and control sub-dimension of cognitive flexibility had high levels of perceived knowledge about job market. There is no study indicating such a relation among these variables. It can be stated that the ones who are sure about regulating tough moments in their career lives effectively, and who persevere in the face of such difficulties may gather lots of information from business area they want to focus on to have alternative action plans for their future career problems, and to solve them decisively. As their knowledge about their career life increases, they may better cope with potential career problems. In Turkey, the possibility of unemployment is high whenever Turkish youth graduates from the university. As a result, the ones who can adapt to alterations in Turkish economic and educational systems effectively, and who can show persistence in attaining their career goals may survive easily in their career lives.

Conclusions and implications

Based on the Career Construction Theory (CCT), the study contributes to the career development literature by scrutinizing the direct impacts of trait emotional intelligence, cognitive flexibility, and resilience on Turkish undergraduates' career planning attitudes. In accordance with all findings of the study, there are some vital implications for the practical field. It can be suggested that considering undergraduates' trait emotional intelligence, cognitive flexibility, and resilience in career counseling might be useful for their career development. Specifically, career intervention strategies based on increasing these adaptivity systems can contribute to undergraduates' career adaptability mechanisms in higher education context. They are allowed to cope with their school-to-work transition processes effectively (Koen et al., 2012; Monteiro & Almedia, 2015; Savickas, 2005). Such a career intervention program might be beneficial for undergraduates to handle with potential risks of their career life.

Limitations and suggestions

There are some shortcomings in the present study. One of the limitations is that the sample included a group of Turkish undergraduates in a private university, undermining the generalizability of the research outcomes. Besides that, it provided national findings specific to the career conditions in Turkey. Another limitation is that the study only used quantitative research methods by using the scales measuring Turkish undergraduates' career personal inputs and career construction deeds.

Therefore, future researchers can consider cross-cultural differences in these adaptivity inputs and career planning attitudes of undergraduates by including different nationalities in the sample. Another suggestion for future research is to consider examining the same constructs over the ones who are in post college graduation or employment years with different measurement tools. Other suggestion is that an experimental or quasi-experimental approach can provide different ideas about career counseling strategies for improving undergraduates' adaptability mechanisms. As a result, with different research designs and sampling methods, it is possible to understand profound relations among these variables.

Author contributions The author contributed to the study conception and design. Material preparation, data collection and analysis were all performed by the author. In addition, the author read and approved the final manuscript.

Funding No funding was used in the current study.

Data availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Code availability Not applicable.

Declarations

Conflict of interest The author declares that she has no conflict of interest.

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