

Career Adaptabilities of First-Generation College Students: Navigating Challenges in the 21st Century

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Abstract

Since first-generation college students have limited university experience in their families, they may face many difficulties in their lives, and this affects their adaptation levels. While there are many studies about academic and personal adaptation and development of first-generation college students, there are limited studies examining their career adaptabilities. From this point of view, in this study, the career adaptability of first-generation college students was examined in depth with consensual qualitative analysis. For this purpose, 12 university students whose families (including siblings) had not completed a four-year university education were included in the study. A semi-structured interview form was used as a data collection tool in the study. The qualitative data obtained were analyzed according to the stages of the consensus-based qualitative research method. As a result of the analysis, the career adaptability of first-generation college students was categorized under four domains: concern, control, confidence, and curiosity. The findings were interpreted in light of previous studies in the field of career counseling, with recommendations provided for future research and practical applications.

Keywords: First-generation college students, career adaptabilities, disadvantaged groups, consensual qualitative research

Birinci Kuşak Üniversite Öğrencilerinin Kariyer Uyum Yetenekleri: 21. Yüzyıldaki Zorlukların Üstesinden Gelmek

Öz

Birinci nesil üniversite öğrencilerinin ailelerinde sınırlı bir üniversite deneyimi olması nedeniyle, yaşamlarında birçok zorlukla karşılaşabilmekte ve bu durum onların uyum düzeylerini etkilemektedir. Birinci nesil üniversite öğrencilerinin akademik ve kişisel uyumu ve gelişimi ile ilgili birçok çalışma bulunmasına karşın, kariyer uyum yeteneklerini inceleyen sınırlı sayıda çalışma bulunmaktadır. Bu bakış açısından hareketle bu çalışmada birinci nesil üniversite öğrencilerinin kariyer uyum yetenekleri, fikir birliğine dayalı nitel analiz ile derinlemesine incelenmiştir. Bu amaçla, aileleri (kardeşleri dahil) dört yıllık üniversite eğitimi almamış 12 üniversite öğrencisi çalışmaya dahil edilmiştir. Çalışmada veri toplama aracı olarak yarı yapılandırılmış görüşme formu kullanılmıştır. Elde edilen nitel veriler fikir birliğine dayalı nitel araştırma yönteminin aşamalarına göre analiz edilmiştir. Analiz sonucunda birinci nesil üniversite öğrencilerinin kariyer uyum yetenekleri ilgi, kontrol, güven ve merak olmak üzere dört alanda kategorize edilmiştir. Bulgular kariyer psikolojik danışmanlığı alanında daha önce yapılmış çalışmalar ışığında yorumlanmış, gelecekteki araştırmalar ve pratik uygulamalar için önerilerde bulunulmuştur.

Anahtar kelimeler: Birinci nesil üniversite öğrencileri, kariyer uyum yetenekleri, dezavantajlı gruplar, fikir birliğine dayalı nitel araştırma

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INTRODUCTION

In recent years, studies with disadvantaged groups indicate that the importance given to the career development of disadvantaged groups has increased (Pope, 2011). Despite these developments, individuals in minority groups (including socioeconomically disadvantaged groups) still receive unequal career counseling services (e.g., Doyle, 2011; Maree, 2014). Studies called for career counselors and theorists to consider the unique cultural contexts of disadvantaged groups and their views on factors that promote and hinder success (Fouad & Byars-Winston, 2005). However, career-themed studies involving some disadvantaged groups are more intensive, while studies with other groups are more limited (see Osipow & Littlejohn, 1995).

Included in the disadvantaged group, first-generation college students (FGCS) are formally defined as students whose parent(s) did not complete a four-year college or university degree (Tym et al., 2004). In this study, they are portrayed as the first in their family to attend a four-year college, including siblings (Carnevale & Fry, 2000; Terenzini et al., 1996). Previous research has extensively examined various factors influencing the college success, application process, and adaptation to college of FGCS. FGCS's demonstrate a lower level of academic achievement compared to their peers (Collier & Morgan, 2008). They encounter challenges in meeting the expectations set by faculty members (Collier & Morgan, 2008), experience more academic distress and work hours (House et al., 2020), exhibit baseline critical thinking skills (Pascarella et al., 2004), and face difficulties during the application process and subsequent adjustment to college life (McCarron & Inkelas, 2006). These challenges manifest in various ways, including struggles with enrollment in higher education institutions, university entrance exams, and adapting to the university environment (Pratt et al., 2019; Toutkoushian et al., 2018; York-Anderson & Bowman, 1991). Moreover, FGCS often harbor reduced educational aspirations (McCarron & Inkelas, 2006). Additionally, research has explored their lower degree goals, limited professional and non-professional support received, and backgrounds from low-income homes. Tym et al. (2004) emphasized the personal characteristics that impact FGCS's academic journeys. Terenzini et al. (1996) and more recently Engle and Tinto (2008) explored the impact of low-income backgrounds on FGCS, and Gardner and Holley (2011) looked at the professional support systems available to FGCS. However, there is a significant gap in understanding their career development processes and experiences.

Although there is a substantial body of research on the challenges faced by FGCS in terms of college success, there is relatively limited research specifically focused on their career development experiences. When examining the results of these studies, it becomes apparent that factors such as campus relatedness (Ma & Shea, 2021), family influence (Ma & Shea, 2021; Tate et al., 2015), lack of professional/career networks (Tate et al., 2015), and support systems (Demetriou et al., 2017; Ma & Shea, 2021; Tate et al., 2015; Toyokawa & DeWald, 2020) play a significant role in their career development processes. Moreover, FGCS perceive themselves as marginalized in this process (Tate et al., 2015) and view their self-concepts as responsible, appreciative, non-entitled, motivated, and responsible (Tate et al., 2015). Several studies have also explored the career decision-making processes of students in this at-risk group (Toyokawa & DeWald, 2020; Schustack, 2001) and the career services provided through case studies (Olson, 2014). The findings of these studies consistently indicate that FGCS encounter limited support and financial resources in their career development, which impacts their career decisions. Additionally, Gibbons and Shoffner (2004) emphasized the importance of conducting studies to support the career development of this group and discussed how to effectively work with FGCS based on the Social Cognitive Career Theory. Despite recognizing these issues, there remains a lack of empirical evidence on the career adaptability of FGCS, a key concept in the Career Construction Model of Adaptation that has gained prominence in the field of human psychology in recent decades. Specifically, this scarcity of empirical evidence creates a situation where career counselors and other career service providers may, at best, inadequately serve FGCS and, at worst, further marginalize them.

With many obstacles faced as they encounter work and life experiences beyond the opportunities they "left behind", FGCS gain growing awareness of disparities, inequalities, or distinctions between different social classes within a given society (Huber, 2010). Thus, they become vulnerable during their career development, because their ability to be adaptable with regard to their career progression can decay (Savickas, 2002), and they may be more disadvantaged in career transitions and career development due to their perceived lack of support (Cataldi et al., 2018). Therefore, identifying career adaptabilities of FGCS in coping with work-related traumas and career transitions, such as unemployment and gravitation to lower quality jobs after graduation, may serve as a protective factor in preparing them for future possibilities.

Although Savickas (2013, p. 157) drew attention to "non-standard career trajectories consisting of more frequent and less predictable career transitions", empirical research about the career adaptability of FGCS is scant.

It is assumed that people's willingness and ability to adapt are based on individual differences, but also that people's career adaptability is "conditioned by the historical period, depends on local situations, and varies across social roles" (Savickas, 2005, p.51). This study aims to capture individual career adaptation specific to the context of FGCS, applying the theory to identify both conceptual strengths and contextual boundary conditions for career adaptability.

Career Adaptabilities

The 21st century has ushered in an era of unprecedented change, influencing both individuals and the business landscape across scientific, technological, economic, and social dimensions (Bauman, 2013). This period is characterized by significant shifts in communication styles and behaviors, shaping a dynamic work environment vastly different from the stable structures of the 20th century (Savickas, 2015; Savickas et al., 2009; U.S. Army Heritage and Education Center, 2019). Coined with descriptors such as volatility, uncertainty, complexity, and ambiguity, the 21st century underscores the need for individuals to adapt to evolving conditions in their professional lives (Rottinghaus et al., 2012; Savickas, 2015). The diminishing predictability of career expectations and the prevalence of frequent job transitions necessitate the cultivation of new skills and competencies (Savickas et al., 2009). At the forefront of addressing these challenges is the concept of career adaptability, defined as the capacity to navigate changes in the work environment and leverage them effectively (Koen et al., 2010).

In recent years, career adaptability has gained prominence as a psychosocial construct crucial for successful career transitions and job searches (Koen et al., 2010). Career adaptability is a main term in the Career Construction Model of Adaptation and encompasses multiple dimensions, namely concern, control, curiosity, and confidence, each playing a vital role in the individual's approach to their career future (Savickas & Porfeli, 2012). Four dimensions make up career adaptability (Savickas & Porfeli, 2011): Curiosity—actively exploring oneself and opportunities to achieve person–environment fit; control—assuming responsibility and exercising agency in shaping one's career; confidence—belief in one's ability to carry out plans and make/implement appropriate educational and occupational choices; and concern—future orientation and preparation for one's career. Individuals with higher career adaptability can be expected to exhibit more positive career behaviors and to gain results from adaptation, such as job satisfaction, career success, career commitment, organizational commitment, job performance, positive affect, well-being, and life satisfaction (Hirschi et al., 2015; Öztemel & Yıldız Akyol, 2020; Rudolph et al., 2017; Ulaş-Kılıç & Peila-Shuster, 2022). Despite the growing attention to career adaptability, there remains a gap in understanding its dynamics within specific demographic groups, such as FGCS.

Rationale and Aim of the Study

Despite growing interest in career adaptability, few studies have examined the experiences of FGCS, particularly in developing contexts such as Türkiye (Orçan & Çelik, 2018). This is because most of the research on FGCS has been done in countries like the USA, where there is a large body of literature and support services (National Association of Student Personnel Administrators, n.d.). Together with relatively high youth NEET rates (31.1% in 2023 vs. 13.8% OECD average), career adaptability is especially important for FGCS in Türkiye, where university access is mediated by a centralized and high-stakes admission system (YKS) run by ÖSYM. Additionally, the availability of campus-based career guidance services varies amongst institutions (Eurydice, 2025; OECD, 2024). Despite the growing number of first-generation students in Turkish universities (Orçan & Çelik, 2018), there is limited empirical research examining their career development processes. It is particularly important to study their adaptation in this new sociocultural structure and identify ways to enhance it, as it will greatly impact the overall success of these students in the future. Therefore, this study aims to address this gap by exploring the career adaptabilities of FGCS in Türkiye and providing valuable insights for the development of targeted support services in such contexts.

This article addresses career adaptabilities among FGCS, a group often facing unique challenges in their pursuit of higher education and subsequent careers. FGCS frequently encounter obstacles such as limited access to financial resources, lower levels of academic preparation, and a lack of familial guidance and support regarding the college experience (Terenzini et al., 1996; Engle & Tinto, 2008). These students are also more likely to work longer hours and face greater psychological stress, which can impede their academic and career progress (Pascarella et al., 2004; Lundberg et al., 2007). This study aims to contribute to the limited research on the career adaptabilities of FGCS. Guided by the Career Construction Model of Adaptation, we examine how FGCS in Türkiye mobilize concern, control, curiosity, and confidence across school-to-university and school-to-work transitions in a centralized admissions and uneven guidance environment. We use these findings to derive actionable implications for mentoring, advising, and transition supports. Understanding the career adaptabilities of this group is essential, considering the potential disparities they face in adapting to work-related traumas and

career transitions, such as higher dropout rates and lower levels of career success compared to their continuing-generation peers (Cataldi et al., 2018; Gibbons & Woodside, 2014). These obstacles may be exacerbated in the Turkish context by the centralized admissions procedure and unequal guiding ecosystems (Eurydice, 2025; OECD, 2024), emphasizing the need for adaptation resources (confidence, curiosity, control, and concern) during the transitions from school to university and job. This study aims to offer useful insights for researchers, practitioners, and policymakers by examining their experiences and psychosocial resources—specifically, control (agency/responsibility over choices), curiosity (active exploration of self and opportunities), confidence (self-efficacy to implement plans), and concern (future orientation)—in the face of unforeseen changes in the business world (Savickas & Porfeli, 2011). Specifically, the findings can (i) pinpoint which adaptability resources are most salient for FGCS at school-to-university and school-to-work transitions, (ii) inform targeted micro-interventions in advising/career services (e.g., planning workshops, exploratory activities, mastery-building tasks), and (iii) guide institutional/policy steps such as first-year career courses, strengthened mentoring/advising capacity, and paid internship/work-study options for low-income FGCS. Thus, the purpose of this study is to add to the body of empirical evidence supporting the provision of career adaptabilities to, and research on, FGCS. The current study, which is based on the Career Construction Model of Adaptation, provides context-sensitive data to guide career-center, mentoring, and advising activities specifically designed for FGCS in Türkiye. From this point of view, the aim of this study is to examine the career adaptabilities of FGCS, who can be characterized as having challenges different from other college students related to university and academic life. These challenges include limited access to financial resources, lower levels of academic preparation, and a lack of familial guidance and support regarding the college experience (Terenzini et al., 1996; Engle & Tinto, 2008). Thus, the aim is to provide various suggestions to researchers, practitioners, and policymakers regarding the mechanisms FGCS require in career adaptation processes. Therefore, our study aimed to answer the following research question: What are the career adaptabilities of FGCS?

METHOD

Grounded in the constructivist research paradigm, this study included semi-structured interviews with the guiding assumption that reality is socially constructed and that researchers should attempt to understand the experiences of the participating FGCS. To achieve this aim, this study was conducted in accordance with the consensual qualitative research (CQR) design (Hill et al., 1997; 2005). CQR is rooted in phenomenology and grounded theory. In this method, which aims to make sense of data, it is important for the researchers to reach a consensus on the coding (Hill et al., 1997; 2005). In this respect, the CQR, which allows for an in-depth exploration of how FGCSs construct their career adaptation experiences, was preferred in this study as it encourages following a standardized interview protocol and includes a detailed process to enable researchers to reach a consensus in the data analysis process. Specifically, the CQR principles of (i) small-team, judge-based analysis with consensus at each step, (ii) independent external auditing, (iii) sequential analytic steps (domains → core ideas → cross-analysis → auditing), and (iv) reporting cross-case representativeness with frequency labels (General/Typical/Variant/Rare) were adhered to in order to reach a consensus (Hill et al., 1997; 2005).

Participants

A total of 12 FGCS participated in this study. Since similar categories repeated each other and new themes and codes were not obtained (Fusch & Ness, 2015), the data collection process was stopped after the 12th participant. The criterion sampling method involves identifying and selecting individuals or groups who are particularly knowledgeable or experienced about the phenomenon of interest (Patton, 2002). Within the scope of this study, the criteria for inclusion in the sample were determined as being a first-generation university student, being in the age group of 18 years and over, and voluntarily agreeing to participate in the study. Accordingly, the demographic characteristics of the participants who were reached according to the specified criteria and included in the study are given in Table 1.

Table 1. Demographic Characteristics of Participants

Code	Sex	Age	Major	Grade
Black	Male	25	Counseling	4
Lilac	Female	20	Gastronomy	2
Mint	Female	25	Islamic Sciences	4
Orange	Female	24	Islamic Sciences	3
Cherry	Female	23	Islamic Sciences	4

Green	Male	25	Islamic Sciences	4
Violet	Female	25	Islamic Sciences	3
Brown	Male	24	Islamic Sciences	4
Navy Blue	Female	23	Counseling	4
Yellow	Male	23	Counseling	4
Powder Color	Female	21	Counseling	3
Fuchsia	Female	23	Counseling	4

The ages of the participants vary between 20 and 25 years. Four of the participants were male and eight were female. When the distribution of participants according to their grade level is examined, students studying in the fourth grade were in the majority. When the departments of the participants are examined, Islamic sciences, counseling and gastronomy departments stand out.

Tools

Demographic Information Form (DIF). The DIF was used to obtain demographic information about the participants. The DIF included information about the participants' sex, age, grade level and the major they were studying.

Semi-Structured Interview Form. Since the interview technique was used to collect data within the scope of this study, a semi-structured interview form was used. The Career Construction Model of Adaptation served as the conceptual basis for the semi-structured interview methodology, which included questions designed to elicit narratives related to the four adaptability resources: confidence, control, curiosity, and concern (Savickas & Porfeli, 2011). Instead of being set analytic templates, these functioned as sensitizing domains for data gathering. In the formulation of the interview questions, the researchers first conducted a comprehensive literature review and used the Life Adaptability Qualitative Assessment (LAQuA) developed by Di Fabio (2015) to determine career adaptability through interviews. LAQuA is based on Career Construction Theory and the construct and dimensions of career adaptability in order to assess the effectiveness of life design counseling for the 21st century (Savickas, 2005, 2013). In the LAQuA, a total of 12 questions were included to collect data from participants in the four dimensions of career adaptability: career concern, which is defined as planned attitudes and planning competencies; career control, which includes beliefs about the locus of control of career development; career curiosity, which refers to the exploration of possible career opportunities; and career confidence, which represents attitudes towards the ability to engage in tasks related to a career transition. Some examples of the questions in LAQuA are as follows (Di Fabio, 2015): “What does it mean to you to be oriented toward your future?” (concern), “Do you think you take responsibility for your future?” (control), “Do you think you are curious about your future?” (curiosity) and “What does it mean to you to have confidence in your own abilities?” (confidence). After the translation of LAQuA was done by two researchers separately, the researchers met and prepared an application form by reviewing the translations through brainstorming. Within the scope of expert opinion about this application form, two experts, a professor and a doctoral faculty member working on career adaptability skills, were consulted, and changes were made by adding some questions to the interview form. As a result of the feedback received from the field experts, necessary corrections were made, and the final version of the interview questions was created. Example questions included: (i) “What plans do you have for your working life/career? How long did it take to prepare these plans, what steps did you take, and whom did you draw on?” (ii) “When making plans for your future, what potential barriers might you encounter? What are your thoughts about these barriers, and how might you cope with them?”.

Then, the researchers came together to decide on the order of the questions, where to use possible probing questions, and finally, a question was added at the end of the form about any topics that the participants wanted to explain further or to add, other than the questions. The final version of the Semi-Structured Interview Form consisted of questions about the participants' future plans, thoughts and feelings about the future, career decisions and factors affecting these decisions, career options and the processes of exploring career options, the obstacles and supports they face in their careers and their needs. Finally, as qualitative research can be therapeutic in nature and the participants talking about themselves, their stories, and experiences can be cathartic (Rossetto, 2014), the final question in this study asked participants about the feelings with which they left the interview. Based on the answers to this question, the aim was for the researchers, who are also counselors with at least a PhD degree in the counseling field, to use their therapeutic skills. The analysis process was mainly inductive/abductive, in accordance with CQR. Codes and key concepts were extracted from verbatim transcripts through independent coding and consensus, and cross-case categories were then checked for alignment with the four resources; data-driven categories were kept in cases where content did not match. The Data Analysis section contains all the information (Hill et al., 2005; 2012).

Procedure

In order to conduct the study, the necessary permissions were first obtained from X University Ethics Committee. Then, an announcement text was prepared by the researchers to reach the participants who met the inclusion criteria. In the announcement text, FGCS who are continuing their undergraduate education were being asked to participate in a study aiming to examine the career experiences of FGCS. The announcement was posted in various areas of the university (library, etc.) and on various social media platforms (Facebook, Instagram, etc.). Through these announcements, 12 participants who reached the researchers via e-mail were recruited.

Before starting the interviews, participants were asked to sign the Informed Consent Form, Audio Recording Permission Form and a permission form for the anonymous publication of the interview results via email. The Audio Recording Permission Form included the participant's permission for video and audio recording, and the Informed Consent Form included information about the study's purpose, procedures, volunteering, confidentiality, risks and benefits, and their right to withdraw. The permission form for anonymous publication of data ensured participants are fully informed about their consent to the anonymous use of their data in publications and presentations. After the voice recording was transcribed and data analysis was carried out, the Participant Permission Form for Publication of the Interviews was prepared, taking into account that the findings could be published and the participant statements were directly included while explaining the findings. After these forms were signed, interviews were conducted with the participants.

Interviews with the participants were conducted both face-to-face ($n=1$) and online via video calls ($n=11$) between May 22, 2023 and July 7, 2023. At the beginning of the interviews, participants were informed about the research aims, anonymity, the voluntary nature of their participation, and told they could end the interview at any time. They were also informed that the interview would be recorded for transcription purposes. After this explanation to participants, their verbal consent was obtained, and the interview questions were asked after receiving verbal consent. The interviews were conducted in a single session and lasted an average of 60 minutes. The interviews were led by two female researchers, who had PhD degrees from the counseling department and had the appropriate training and experience of working with disadvantaged groups. There were no significant differences in participants' reactions—defined here as perceived comfort/rapport, willingness to elaborate, and the depth/length of responses as noted in interviewer field notes and coding memos—between face-to-face and online interviews (Deakin & Wakefield, 2013). Given that interview settings in Türkiye (e.g., privacy at home, travel constraints, campus access) can influence participants' comfort and disclosure, we conducted interviews in the mode preferred by each participant—online or face-to-face. The interview recordings were de-identified by the two researchers using anonymous codes for each participant and transcribed with the researchers' prior experience of transcription. These transcripts were stored in encrypted form on the researchers' computers. In addition, the transcripts of the video recordings were sent to the participants by e-mail, and all participants stated that they had nothing to add and that the transcripts reflected their views.

Data Analysis

In the analysis of the data obtained within the scope of the research, the analysis steps for the CQR method were followed (Hills et al., 1997; 2005). In order to analyze the data, firstly, the interviews with the participants were transcribed. Then, these transcripts were repeatedly read by the researchers in order to better understand the experiences of the participants. According to the CQR method, the data were analyzed in the following steps: (1) domains—broad topical areas organizing the raw material; (2) core ideas—concise, low-inference summaries of each case within domains; (3) cross-analysis—grouping core ideas across cases into categories/subcategories to identify cross-case patterns; and (4) auditing—independent review and feedback by an external auditor (Hill et al., 2005). As reaching consensus is considered important in CQR, two authors took part in the data coding process as primary team members, while a specialist with a master's degree working on disadvantaged groups and career adaptability took on the role of auditor. The auditor had expertise in LAQuA, career adaptabilities, and disadvantaged groups and participated in various training in these areas and was informed about the research topic, the data collection process and data collection techniques by the authors.

In line with the CQR process steps, first, the two primary team members (authors) reviewed three of the transcripts that were randomly selected and developed domains independently. Then, after reaching consensus on domains through brainstorming for the three transcripts and the code memos, they independently reviewed the remaining transcripts. After reaching consensus on domains in all transcripts and code memos, core ideas were formulated. After the core ideas in the domains were identified, cross-analysis of all interviews was performed, in which each member of the team independently created categories/subcategories into which the main ideas were classified based on content similarity. As in each step, the researchers first conducted cross-analysis independently

and then came together to discuss the results of the analysis. As a result of the discussions, they reached a consensus and decided on the final form of the categories. The consensus about the categories was sent to an auditor to gain their opinion about whether the domains and core ideas fit the data or not. The auditor made several suggestions and gave minor revisions, such as changing code names. For example, for the ‘peers’ code to be more defined, it was changed to ‘peer effect’. As only minor revisions were required, the two primary team members did not need to return to the raw data.

A classification system proposed by Hill et al. (1997) was used to determine the frequency of categories and subcategories. Accordingly, if the relevant category is valid for all participants, it is called general; if it is valid for more than half of the participants, it is called typical; and if it is valid for less than half of the participants (up to at least four participants), it is called variant.

Validity and reliability. To enhance trustworthiness, we combined analyst triangulation, external auditing, and member checking. First, two researchers independently coded the transcripts, and inter-coder agreement was calculated using Miles and Huberman’s (1994) formula ($\text{agreement} / [\text{agreement} + \text{disagreement}]$); the overall agreement was 94.4%. Disagreements were resolved by discussion until a consensus was reached. Second, an external auditor (PhD in counseling, expertise in career adaptability, no role in data collection/analysis) reviewed the codebook, thematic structure, and evidentiary excerpts; feedback informed minor clarifications but no substantive changes, helping to reduce potential groupthink (Hill et al., 2005). Third, for member checking, a plain-language summary of the final results was emailed to all 12 participants approximately six months after data collection; five responded and confirmed that the findings reflected their experiences and that confidentiality was protected. In this study, “triangulation” refers specifically to analyst triangulation (i.e., multiple analysts and an external audit) rather than simple verification by a third person (Creswell, 2007). Credibility was further supported by data saturation, thick description, and verbatim quotations from participants.

The role of the researchers. One of the points that will increase reliability in qualitative research is the researcher’s knowledge of the subject. In this sense, it is seen that the second author has received training on Career Construction Theory prepared by Psycoun Institute and has case studies in this field. In addition, the second author’s previous research experiences related to the CQR and Career Construction Model of Adaptation provided guidance in investigating FGCS’ experiences of career adaptation. The other author has studies in this field, especially in terms of Super’s career adaptation concept and qualitative data analysis. According to Strauss and Corbin (2015; p. 176), qualitative inquiry recognizes that the research process cannot be detached from the researcher’s perspectives and assumptions. In this sense, while evaluating the interviews, both authors explained the purpose of the research in detail, did not include information such as names in the transcriptions, listened to all the shares of the participants during the interview, took notes to return to the question participants could not answer at that moment, did not make any judgments about their answers, and acted in accordance with all ethical rules.

Research Ethics

The relevant ethics committee permission was obtained from the X University Social Sciences Science and Engineering Sciences Research Ethics Committee on X number and X date.

FINDINGS

Four domains pertaining to the career adaptability of FGCS were identified by CQR analysis: (1) confidence, (2) control, (3) curiosity, and (4) concern (Savickas & Porfeli, 2011). The CQR cross-analysis produced the higher-order domains shown below, even though the interview technique was structured around these adaptability resources. We utilize this terminology for clarity because, following inductive coding and consensus, categories centered around concern, control, curiosity, and confidence. Crucially, domains were not imposed beforehand; instead, we kept data-driven categories for content that stretched or intersected the four resources. The outcomes are displayed in Table 2.

Table 2. Domains, Core Ideas, Categories and Frequency of the Results

Domains	Core Ideas	Categories	Frequency
1. Concern	1.1. Time orientation of career plans	Short-term goals	General
		Intermediate/transitional goals	Typical
		Long-term goals	Typical
		Confusion about time orientation of goals	Variant

	1.2. Career planning stages	Self-assessment	General
		Career exploration	General
		Tentative	Typical
		Decision making	Variant
		Implementation	Variant
2. Control	2.1. Career decision making process	Individuals' factors	General
		Social system	General
		Environmental/societal system	Typical
3. Confidence	3.1. Barriers in the career development process	Individual barriers	General
		Educational and vocational barriers	Typical
		Environmental and societal barriers	General
		Barriers arising from the labor market	Typical
	3.2. Resilience	Self-efficacy	Typical
		Perseverance	Typical
		Coping strategies and adaptation	General
4. Curiosity	4.1. Ways to explore career options	Making observations	Variant
		Networking	Variant
		Searching on websites	Typical
		Interview with faculty members	Typical
		Interview with professional staff	Typical
		Information obtained from friends	Typical
	4.2. Personality factors in exploring career options	Inquisitiveness	Variant
		Motivation	Variant
		Openness to innovations/experiences	Variant
		Risk-taking	Variant
		Optimism	Variant

As seen in Table 2, FGCS' experiences in relation to career adaptabilities were coded into four domains in line with the interview questions. This table also includes the frequencies of the categories.

Concern

The concern domain emerged as a result of the analysis of the participants' experiences related to planning and engagement behaviors about their career future. Within this domain, there were two core ideas: time orientation of career plans and career planning stages.

Time orientation of career plans. The core idea of the time orientation of career plans was considered as a measure of the time when the participants planned to realize their future career goals. There were four categories within the time orientation of career plans: short-term goals, intermediate/transitional goals, long-term goals and confusion about the time orientation of goals.

Short-term goals. This category, in which participants generally participated, includes career plans that they aimed to achieve in the short term. These goals included finishing university, preparing for exams for public sector positions, looking for a job and improving their skills. One participant was actively working in a profession, in addition to being a university student, and mentioned the goal of starting a master's degree as a short-term goal.

Intermediate/transitional goals. Intermediate/transitional goals, in which participants typically participate, function as an intermediate stepping stone to reach their long-term career goals. These goals were about completing the educational or financial preparations necessary for the participants to reach their long-term goals. These included postgraduate education and working in the private sector.

Long-term goals. Long-term goals, which the participants typically participate in, refer to the goals they want to achieve in the long term in their career development. Among these, the participants included the goals of becoming an academic at a university, making a career transition, receiving additional training and getting to know different cultures. The additional trainings mentioned here included trainings that require significant financial resources and were therefore among the long-term goals of the participants. For example, participants who continued their undergraduate education in the field of counseling mentioned that they wanted to receive therapy training. In addition to this, some participants also expressed their goal of studying a second undergraduate program.

Regarding the time orientation of career plans, Navy Blue said, "My first goal is to be appointed by getting enough points from the Public Personnel Selection Exam, to earn money (short-term).... In the long-term, I would like to do things related to the academy (long-term)... It is important for me to earn money first, to get additional training related to the field and working in a private tutoring center is what I want to do until I return to the academy (intermediate/transition goals)."

Confusion about the time orientation of goals. In terms of the time orientation of career goals, it was revealed that some participants were confused about the timing of their career plans. These participants stated that they were quite undecided about which career goals to prioritize, and they had difficulty reaching a decision. For example, Orange expressed this confusion as follows: "If I don't get enough points from the Public Personnel Selection Exam (PPSE), should I directly start my master's degree? If I start my master's degree, how will I manage it? How will I progress, or how long will I continue it? My PPSE dream remains unfinished. I am in a state of floundering."

Career planning stages. This core idea, which refers to the emergence of participants' career plans in certain stages, consisted of five stages: self-assessment, career exploration, tentative decision-making and implementation.

Self-assessment. Self-assessment, a category that participants generally agreed with, refers to evaluating their strengths and weaknesses with a critical perspective. Engaging in self-assessment during the career planning process provided participants with an awareness of their strengths and the aspects they needed to develop. Black's statement, "I am researching my career, sometimes I am enough, sometimes I am not enough ... I need to make a little more effort," can be given as an example.

Career exploration. Participants generally noted that they evaluated the information they obtained as a result of self-assessment and environmental conditions as a whole during the career exploration phase. As an example of this category, Black's statement is as follows: "I actually explored my options while making my career plans, I made a conscious choice... I evaluated myself..."

Tentative. The tentative aspect, in which the participants typically participated, included the experiences they obtained in relation to their career options, such as internships, work experience or participation in scientific activities. Therefore, the trial phase included active behaviors to get to know different career options closely. "Especially my internship experiences were very effective in preparing my career plans." (Navy Blue)

Decision-making. Decision-making refers to making a choice among career options. All but one of the participants continued to be undecided about career options and therefore could not reach a clear decision. In this regard, Brown described his career decision more clearly and explained his decision about his application after meeting the necessary conditions for a master's degree program as follows: "I will apply to Giresun University for a master's degree program between July 12-16, 2023."

Implementation. Implementation refers to realizing the career decision and taking active steps related to this decision. There was more focus and commitment to a particular career path in this stage. In other words, it was a stage in which the choice is made and implemented through education, training and work. When the experiences of the participants were analyzed, only the participant coded Brown was able to make a decision among career options and put this decision into practice. Brown, who continues his education in the Islamic sciences undergraduate program as well as actively working in a profession, explained the process of putting his career decision into practice as follows: "I am an emergency medical technician. I was appointed with the Public Personnel Selection Exam. I started working in April 2020."

Control

The second domain that emerged in the study is control. Within the scope of the control domain, the participants mentioned the role of some individual and/or environmental factors that they considered in their career decision making processes. These factors are explained below within the scope of the career decision-making process's core idea.

Career decision-making process. The career decision-making process was a core idea that included the participants' sharing of factors that influenced their career decisions. Participants addressed this core idea from two different time perspectives: past and future. For example, while some participants discussed the factors that influenced their career decisions in the past (e.g. career choice), some participants talked about possible factors that could affect their future career decisions (e.g. job search). When these factors were analyzed in general, participants shared their experiences regarding the effects of individual factors, social system and environmental/societal system on career decision-making processes.

Individual factors. Individual factors were a category that the participants generally agreed with and refers to the impact of individual characteristics on career decisions. Within the scope of individual factors, the participants shared their interests, values, personality traits, ability, motivation, age, being a role model, knowledge about the working world, gender roles, health status, physical characteristics, academic achievement, need for approval and debt of loyalty to family. Therefore, individual factors consisted of a wide range of characteristics. This situation showed that the participants tended to take into account many individual characteristics while making career decisions. Some examples of the statements showing the effects of individual characteristics of participants in the career planning process are as follows: "Throughout my life, I have always been concerned about being an important person and having status. This has also shaped my career plans." (Yellow- prestige value)

"I don't want to let my family down, because my mom... My mom is the one who educated me more than my dad. She is the one who helps me more, stands behind me more. I want to have a job to at least make her happy, to take the burden off her. I want to at least help her both financially and morally." (Lilac- debt of loyalty to her family)

Social system. The social system was a category in which participants generally participated and included factors in participants' immediate environment, such as family, peers, faculty members/teachers, media, education institutions and non-governmental organizations. Each of these factors had different effects on the participants' career decisions. Family was one of the important factors that the participants considered in the career decision-making process. In this sense, most of the participants stated that they took into account the opinions and expectations of family members while making career decisions. For example, Lilac explained her thoughts on the opinions and expectations of family members on this issue as follows: "My family wants me to have a job after graduation. I mean, it's like, why are you going to sit around when you finish university, but it's not. You know how there is a fine line between this? When you finish university, they don't tell you to leave home. They don't tell you to work. But they expect you to work."

Peers were one of the factors influencing the participants' career decision-making process. The participants mentioned the influence of their peers at various points when they made decisions about their career development. For example, Navy Blue explained the process of choosing a high school with the influence of his peers during his middle school years as follows: "We had a very nice group of friends in middle school. Our group split because we made different choices. Most of our group preferred a religious high school. Since I was afraid of being excluded if I chose a different high school (for the high school I would go to), I chose the religious high school with the influence of my friends." As seen in these statements, Navy Blue conformed to the preferences of his peer group in the career decision-making process.

Faculty members and teachers were one of the factors in the social system that affected the participants' career decision-making process. One participant stated that she received career guidance services from her school counselor while deciding on her career choice during her high school years and that the school counselor had an important role in guiding her career decision.

Media emerged as one of the factors affecting participants' career development. The widespread use of social media by the participants made it one of the sources of information about career options. Moreover, the participants attributed meaning to the information they obtained from social media that shaped their future. "Even the smallest information we see on social media can change our lives." (Lilac)

One of the social system factors affecting the participants' career decision-making process is the changing structure of educational institutions. It was noteworthy in the participants' statements that the education institutions and career choice, especially in Türkiye, are mostly related to the success ranking in the university entrance exam. However, the fact that the base scores of educational institutions have changed significantly over the years has caused the participants to perceive uncertainty about the future. Fuchsia's statement regarding this is as follows: "In the 11th grade, I actually decided exactly what I wanted...I wanted to study law. (But in the Türkiye-wide success score ranking based on the score I obtained from the university entrance exam), I was ranked 66 thousand; I could not get a place in law... I studied for the exam for another year. This time, my score dropped even more due to the change in the exam system. I was ranked 113 thousand, and that is how I chose this department."

Finally, participants also mentioned the role of non-governmental organizations in the career decision-making process. In this context, non-governmental organizations that offer scholarships and educational support for university education had an effective role in the participants' career development. For example, Orange shared the following about this issue: "Many of our friends, including me, receive scholarships from the Islamic Sciences Foundation."

Environmental/Societal system. Finally, in the control category, the participants also mentioned the effects of the environmental/societal system in the career decision-making process. The environmental/societal system was a category that participants typically agreed with and included a broader range of factors than the social system. These included country economy, political factors, geographic location and chance. The country's economy was considered an important factor affecting their career future by the participants, as it is a factor closely related to employment policies. In this context, participants stated that fluctuations in the country's economy have a direct impact on job opportunities. Political factors are effective in determining employment policies across the country. In this respect, political factors had a significant effect. In this context, Navy Blue's statements can be given as an example: "Among the factors that control my future, I can definitely count the country's politics. Because we all have our eyes and ears on the announcements (regarding teacher appointment quotas) from the Ministry of National Education." Geographic location is a code that emerged as a reflection of the cultural characteristics that influenced the participants' career decisions. In this sense, the religious and socio-cultural structure in Türkiye was effective in determining the career options of the participants. Finally, the participants mentioned the effects of chance in the career decision-making process. Chance is a category that includes events and situations that participants perceive as unexpected in the career development process.

Confidence

The third domain that emerged within the scope of the research is confidence. Confidence included career barriers that emerged during the participants' career development process and the resources they used to cope with these barriers.

Barriers in the career development process. When the participants' opinions regarding the barriers in the career development process are analyzed, these barriers were categorized into four groups in terms of their source. These are individual barriers, educational and professional barriers, environmental and social barriers and barriers arising from the labor market.

Individual barriers. Career barriers that were thought to arise due to the individual characteristics of the participants were collected under this category. Overall, this theme was generally endorsed by participants. These included a series of career barriers such as low self-efficacy expectations, health problems, loss of motivation, future anxiety, burnout, desire to escape responsibilities, lack of research, fear of criticism, negative thoughts about oneself and lack of foreign language skills. Some examples of participant statements regarding the codes that emerged within the scope of individual barriers are as follows:

"I don't feel successful myself. I think I have not succeeded, and I do not trust myself to do something in my career." (Powder Color- self-efficacy expectations)

"There are times when I don't want to make an effort. This causes me to lose some motivation for my first (career) goal." (Yellow- loss of motivation)

"I am in constant fear, anxiety, and worry these days. What am I going to do next year? The school ends next year!" (Orange- future anxiety)

"There is also a risk that I will not be appointed (as a teacher), and if I am not appointed, I know that my relatives will say: Fuchsia studied, but what happened?" (Fuchsia- fear of being criticized)

Educational and professional barriers. Cases in which the participants perceived some deficiencies related to the profession or the education they received were coded by the researchers under this category. Educational and professional barriers are a category in which participants typically participated. Within the scope of this category, inadequate professional training and unqualified education were coded.

"I did not finish university equipped. I just studied to pass the exams, and I did not have much (knowledge) accumulation." (Green- inadequate professional training)

"Faculty members could show us the workflow in gastronomy in a workshop instead of just showing it from a slide or a book." (Lilac- education quality).

Environmental and societal barriers. Environmental and societal barriers are a category in which participants generally expressed their opinions. In this category, participants stated that they perceived the pressure created by family demands and expectations, the negative effects of the COVID-19 pandemic, the pressure created by Türkiye's economic, political and social structure, the fear of being stigmatized by the environment, and the limited opportunities of the place they live as career barriers. Some examples of participants' statements regarding the codes in relation to environmental and societal barriers are as follows:

"My family has a lot of pressure for marriage." (Black- family expectations)

"I could never prepare for master's education exams because my family forced me to get a job, get appointed, become a civil servant." (Green- family expectations)

"State policy in Türkiye is not very much in favor of supporting science. Therefore, I don't think I will receive any support in this regard. I mean, whatever I can do with my own efforts." (Brown- the economic, political and social structure of Türkiye)

"I live in a neighborhood far from the center, so when I go to other places to work, I need to find a place to stay. But if I work and pay for accommodation at the same time, I will have very little money left in my pocket. I have problems in this regard." (Lilac- the limited opportunities in the place where they live)

Among the environmental and societal barriers, the researchers also identified the "lack of support" code. Lack of support is a code that the participants generally agreed with. When the statements of the participants in this code were examined, they perceived instrumental support, information support, emotional support, professional support, and guidance and role modeling as insufficient within the framework of their career development.

"I need to be supported economically. For example, I am preparing for the Public Personnel Selection Exam. I have to use the money I allocate for my personal expenses to buy video platforms and books for exam preparation." (Green- lack of economic support)

"I want to know that my family will always be with me no matter what happens, even if I fail, and I want to hear this from them from time to time." (Lilac- lack of emotional support).

Barriers arising from the labor market. The majority of participants typically stated that they perceived unpredictable changes in the labor market, limited internship and job opportunities, unfair recruitment processes, and unrealistic expectations of employers as barriers to their career development. Some examples of participant statements are as follows:

"Since the quotas in teaching are limited at the moment, I will try to become an imam (religious official)." (Green- limited internship and job opportunities)

"The subject of this torment really affects me deeply. It is likely that many difficult situations will be encountered in the requested research recruitment and admission to the master's degree." (Orange- unfair recruitment processes)

"On the other hand, it may be a little difficult for us to get a job as work experience is expected from new graduates in the labor market." (Fuchsia- unrealistic expectations of employers)

Resilience. The resilience core idea included the coping methods that participants planned to use to cope with career barriers they expected to face in the future. In some cases, these methods emerged as ways that the participants had coped with career barriers in the past, and therefore, the participants shared that they would use similar coping methods if they faced a similar career barrier in the future. Within the resilience domain, there were three codes: self-efficacy, perseverance and coping strategies and adaptation.

Self-efficacy. Self-efficacy is a category describing the participants' belief in their ability to overcome the barriers they face in their career development, which they typically participated in. The sources of participants' self-efficacy expectations were analyzed in terms of successful past experiences, vicarious learning, verbal persuasion and physiological state. Successful past experiences referred to moments when the participants were able to successfully overcome career barriers in their past lives. Being able to successfully overcome a career barrier in the past provided the belief that they would be able to successfully overcome a similar barrier in the future. For example, Mint expressed her experience in this regard as follows: "When I get stuck in my career, I always think that I can move on again. Why? I have overcome similar difficulties in the past." Secondly, vicarious learning experiences influenced participants' self-efficacy expectations. Vicarious learning involved the participants' observations of the ways in which individuals around them struggled with career barriers. As a result of vicarious learning, individuals received the message that "If they can succeed, so can I". "I listened to some examples from the past lives of faculty members at the university. They did not come to these positions easily. I took them as role models and thought that if they can do it, so can I." (Mint). Thirdly, verbal persuasion was effective on the participants' self-efficacy expectations. Within the scope of verbal persuasion, the participants received encouraging and motivating messages from individuals in their close environment. These messages increased the participants' belief in themselves in overcoming career barriers. "Sometimes there are times when I think about giving up. But at such times, the people around me tell me that I can succeed and support me." (Cherry). Finally, physiological status had an impact on the participants' self-efficacy expectations. In this context, some participants mentioned the possibility of some negative aspects related to their health and emotional states affecting

their coping competencies. "As long as there are no health problems or other similar things, I have the capacity to put my career plans into practice in any way." (Mint)

Perseverance. The majority of participants typically agreed with this topic. Within the scope of this category, they considered that perseverance was an important coping strategy in overcoming career barriers. Perseverance was used in the sense of being willing to struggle with career barriers and putting in effort. Some examples of participant statements within the scope of this category are as follows:

"I mean, I will struggle. I will try." (Brown)

"I think there is nothing one cannot do when one really wants to." (Violet)

Coping strategies and adaptation. Participants generally mentioned that they could use various strategies to overcome career barriers they might face in the future. These strategies included utilizing a social support system, seeking opportunities, acquiring new skills and a fatalistic perspective. While some of these strategies (e.g. searching for opportunities) enabled the participants to actively cope with career barriers, on the other hand, a passive coping style with career barriers came to the fore, especially in the fatalistic perspective. When these strategies were examined in order, all of the participants stated that they could apply for support from individuals in their social support systems, especially family, peers and faculty members, when struggling with career barriers. When the nature of these supports was analyzed, family support was material and moral, friend support was moral, and faculty support was mostly in the form of information. Another strategy that participants plan to use in combating career barriers is searching for opportunities. Searching for opportunities is a strategy used especially by participants who think that they may have difficulties in finding a job for various reasons. The participants who expressed their opinions within the scope of this strategy stated that they review job opportunities in every environment they enter and thus are active in evaluating possible opportunities. Finally, some participants stated that in order to overcome career barriers, they preferred to submit to the new situation that emerged and thus adapted to this situation. This code, called the fatalistic perspective, is a strategy used when the participants feel helpless in the face of a career barrier and avoid an active struggle with the career barrier. Green explained an experience related to this issue as follows: "When I was in my first year, I wanted to quit university education, but my family was strongly against it. I realized that I couldn't do it, so I said what comes around goes around and started to study."

Curiosity

Curiosity is related to FGCS behaviors about exploring career options in the career adaptability process. In this context, two core ideas emerged: ways of exploring career options and personal qualities in exploring career options.

Ways of exploring career options. All participants mentioned that they used various ways to explore career options. This included observation, networking, searching on websites, interviewing faculty members, interviewing professional staff and information obtained from friends.

Making observations. This category, in which the participants participated at varying rates, included observations they made during their internship. In this context, the participants who observed what kind of work the professional did and the work environment had the opportunity to evaluate whether the relevant career option was suitable for them or not. For example, Fuchsia explained how she eliminated a career option after her internship experience as follows: "I did an internship in the field of social services for a month in the summer. There were mostly family visits and report preparation... Since I observed that I could not use my knowledge and skills in the field of counseling, I said that working in the field of social services was not for me, and I quit."

Networking. The networking category, in which less than half of the participants agreed, refers to establishing professional connections in career development. For example, Yellow worked in various jobs during the summer vacation and explained the network he gained through these work experiences as follows: "As I opened up to working life, I gained an effective network. Then different job opportunities emerged."

Searching websites. This category, which the participants typically participated in, included searching for career options via the internet. When the statements of the participants are examined, Google, YouTube and social media accounts (TikTok, Instagram, etc.) were among the websites they frequently used to search for career options. In addition, some participants stated that they read blog posts that they thought were related to career options. "The question I search the most on Google is where can gastronomy graduates work? I follow the TikTok accounts of students studying gastronomy and look at the dishes they make for their final homework" (Lilac).

Interview with faculty members. One of the sources of information about career options is faculty members. Interviews with faculty members emerged as a category that the participants typically participated in.

As a representative of the professional field, faculty members emerged as sources that provide information and awareness about the diversity of career options. "One day or two days a week, I received different ideas from different professors about my career options." (Mint)

Interview with professional staff. This category, in which the participants typically participated, showed that the participants interviewed professional staff as well as lecturers to obtain information about career options. As individuals with experience in the career that the participants were interested in, professional staff provided detailed information about the work environment and professional practices. "I met preachers working under the Presidency of Religious Affairs. I had an idea about their work by meeting with them." (Cherry)

Information obtained from friends. The last category among the ways of exploring career options was information obtained from friends. This category, which was typically reported by the participants, included information that was heard in conversations with friends, but the accuracy of this information was not confirmed. "What I heard from my classmates (while talking about our career options), what I heard from my environment... But I did not do any research to verify this information." (Orange)

Personal qualities in exploring career options. Within the scope of the curiosity domain, the researchers finally determined that some personal qualities were effective in the participants' exploration of career options. These personal attributes included inquisitiveness, motivation, openness to innovation/experience, risk-taking and optimism.

Inquisitiveness. Inquisitiveness is a category in which the participants agreed on as a variant. In this context, the participants mentioned that they had a tendency to think intensively about their individual characteristics (skills, interests, etc.) and explored career options in this direction.

"I thought a lot about the question of what I want to be." (Violet)

"While thinking about my career options, I started to think more about the questions of whether I would be happy and successful if I chose this." (Powder Color)

Motivation. One of the personal qualities that was effective in exploration of career options was motivation. Motivation is a category in which the participants variably expressed their opinions, and it provided a power that mobilized them to explore career options. Therefore, participants with high levels of motivation were more willing to collect detailed information about career options.

Openness to innovation/experiences. Openness to innovation/experiences is a category that the participants agreed with at varying levels. Being open to innovation/experiences emerged as a feature that enables participants to expand their range of career options. In this context, when the statements of the participants were analyzed, interest in jobs in different sectors related to the profession and the desire to get to know different cultures came to the fore. Some examples of the participants' statements are as follows:

"The comfort zone is a safe zone, but the important thing is to be able to go away (from the comfort zone), to risk it." (Lilac).

"I want to travel the world and get to know new cultures." (Cherry)

Risk taking. Risk-taking, which the participants variably agreed with, included the courage to try various career options and to defend their thoughts about their career field. Therefore, participants who were inclined to take risks were more open to exploring and experimenting with different career options. For example, Yellow stated that he had an entrepreneurial spirit and wanted to open his own business. In addition to this, Brown stated that he could take risks in defending what he knows about his professional field in his career future as follows: "I mean, will I be judged for what I write in the future? Or rather, will I gain reactions from society? I will. ... But I will stick to what I know is right."

Optimism. The optimism category, in which the participants participated as a variant, included the participants endeavoring to look to the future with hope by changing their way of thinking in a positive way and thus becoming more willing to explore career options.

"I started to look at life positively, and as I changed my perspective, I started to make better plans for my career future." (Yellow).

DISCUSSION & CONCLUSION

In this study, the career adaptability of 12 FGCS who are attending various undergraduate programs was examined in depth through CQR. The career adaptability of the participants emerged in four domains as concern,

control, confidence and curiosity in accordance with the assumptions of Career Construction Theory and the domains were discussed within the scope of the literature.

The concern domain includes FGCSs' attitudes towards preparing for possible future work-related tasks (Savickas, 2013). In parallel with Savickas' definition of the concern dimension, attitudes and competencies related to planning and how individuals prepare for career tasks came to the forefront in these domains. Accordingly, the core ideas of time orientation of career plans and career planning stages were included in this domain. Research found that limited exposure to higher education and professional settings (Engle et al., 2006), the urgent need to secure employment and financial stability (Broton & Goldrick-Rab, 2016; Rehr et al., 2022; York-Anderson & Bowman, 1991), cultural and family pressures (Tate et al., 2015) and fear of failing to succeed (Lightweis, 2014) contribute to FGCSs' tendency to set shorter-term goals, and they may face difficulties in setting long-term goals. However, it is important to consider that these findings are context-specific and might have evolved over time.

For instance, Hicks (2005) found that FGCS had lower degree goals, a finding that was in line with the focus on short-term goals. However, given that this study is nearly 20 years old, it is crucial to question whether FGCS of today might differ from that of 20 years ago, especially considering changes in societal attitudes and educational policies. Additionally, Hicks' study was conducted in the US, and the results might be less generalizable to FGCS in other contexts, such as Türkiye. In our research, participants expressed goals such as starting a master's degree, finishing university, preparing for and taking public service sector exams, looking for a job, and improving skills. These goals indicate a diversity of aspirations, including long-term professional advancement, which contrasts with the notion of universally lower degree goals among FGCS. However, the fact that the participants aimed to realize these goals within a few months after graduation can be evaluated that they focused more on short-term goals.

Similar difficulties in setting long-term goals may also affect the career planning stages, and in this sense, may result in fewer participants gaining experience in the steps of tentative, decision-making and implementation. Disadvantaged groups, particularly, may lag behind their peers due to limited experiences of self-identity (Engle et al., 2006), and the rates at which FGCS fulfill their own academic objectives and ambitions are lower (McCarron & Inkelas, 2006). Tate et al. (2015) stated that first-generation university students need support in their career development at the point of career goal setting and progressing towards these goals. Our findings suggest that while some FGCS may indeed set shorter-term goals due to immediate pressures, others are clearly aiming for long-term professional and academic achievements. In our sample, concerns clustered around near-term planning for regulated transitions (e.g., public service examinations, immediate job search), suggesting that future orientation is bounded by salient structural milestones. This is compatible with evidence of near-term goal focus among FGCS facing financial and institutional pressures (Engle & Tinto, 2008; Cataldi et al., 2018).

Another domain among the career adaptabilities of FGCSs is control. Within the scope of this domain, participants' perceived control over their career development is based on their individual characteristics; however, various factors related to the social system and environmental/social system that they perceive as being outside their control could also significantly affect their career development. In parallel with the results of this study, studies in the literature revealed that individual and environmental factors have a determining effect on the career development of FGCSs. Among these, Tate et al. (2015), who examined the intrinsic and extrinsic factors affecting the career development of FGCSs through CQR, emphasized family influences among extrinsic factors and persistence, motivation and awareness of responsibilities among intrinsic factors, which is consistent with the results of this study. In order for FGCSs to continue their career development successfully, it seems important to improve their perceptions of control over extrinsic factors. In this context, Demetriou et al. (2017), who examined FGCS perceptions of environmental factors that are effective in career development, emphasized that FGCSs can increase their sense of control over extrinsic factors by playing an active role in managing their environmental resources (e.g., social support system) effectively.

Another domain that emerged among the career adaptabilities of FGCSs is confidence. The domain of confidence included the career barriers that the participants experienced during their career development process and the coping strategies they could use to cope with these barriers. Research showed that FGCSs perceive more career barriers in their career development compared to non-FGCSs (Pratt et al., 2019; Toyokawa & DeWald, 2020). In these studies, financial concerns (Pratt et al., 2019), lack of support, and challenging cultural conditions (House et al., 2020) were mentioned as strong determinants of FGCSs' ability to pursue career development. However, there are also studies showing that perception of self-efficacy and support resources play important roles in FGCSs' ability to combat career barriers (Gibbons & Shoffner, 2004; Ma & Shea, 2021).

Another domain that emerged within the scope of career adaptabilities of FGCSs is curiosity. Curiosity refers to individuals' attempts to get to know themselves and to obtain information about career opportunities (Savickas, 2005, 2013). The curiosity domain includes the core ideas about ways of exploring career options and personal qualities in exploring options. In a study conducted by McMahon et al. (2015), the characteristics of the researcher, future-oriented, observer and self-reflection emerged in the curiosity dimension. Savickas (2013) also found that qualities such as openness to experience, risk-taking and questioning within the framework of curiosity emerged in the scope of coping behavior. Although studies emphasizing the strengths of FGCSs are limited, there are studies that are in line with the results of this study. For example, Byrd and MacDonald (2005) stated that FGCSs are more motivated and inquisitive than other students. In addition, Tate et al. (2015) found that FGCSs perceived themselves as persistent and motivated, appreciative and not entitled, self-reliant and responsible, and adaptable.

Comparing Savickas's resources to previous research, our results show that when control (agency) is bolstered by available networks and services, short-term worry under structural pressures can be transformed into long-term progress. This, in turn, stimulates curiosity through organized investigation, while repeated mastery experiences and reliable mentoring solidify confidence. Coordinated planning workshops, guided exploration, and mastery-plus-mentoring sequences are actionable levers that result from this integrative reading, which echoes FGCS research on financial/structural constraints and support-based efficacy (Engle & Tinto, 2008; Gibbons & Shoffner, 2004; Cataldi et al., 2018).

Further research on career adaptabilities and working with FGCS is necessary. The effectiveness of the Career Construction Model of Adaptation in comparison to other approaches with this population should be the primary focus of empirically based articles. Examples of these approaches include the following: Social Cognitive Career Theory (SCCT) interventions, which improve self-efficacy, outcome expectations, and perceived supports/barriers; Systems Theory Framework (STF)/ecological approaches, which integrate individual counseling with family, peer, and institutional supports; Cognitive Information Processing (CIP) approaches, which develop decision-making readiness (e.g., the CASVE cycle) and metacognitive monitoring; and Planned Happenstance/Chaos Theory interventions, which foster curiosity, persistence, flexibility, and prudent risk-taking to take advantage of unforeseen opportunities. Future studies could compare these alternatives with CCM-A via randomized or hybrid effectiveness-implementation designs, assessing proximal outcomes (e.g., adaptability resources, self-efficacy, decisional readiness) and distal outcomes (e.g., credit accumulation, internship uptake, retention, early employment), while testing moderators such as financial strain, sense of belonging, and access to mentoring. More investigations focusing on first-generation students before they arrive at college are sorely needed. Also, future research should consider including interviews with family members of FGCS to gain a comprehensive understanding of the social support dynamics. These interviews could provide valuable insights into how family influences the career development and adaptability of FGCS. Additionally, family perspectives could help in designing more effective support programs that consider the role of family in the educational and career trajectories of FGCS.

When the career adaptabilities of FGCSs are examined, they may need career counseling due to the problems they face in career development processes in developing countries like Türkiye. At this point, it is suggested that professional experts, such as career counselors should work on developing career adaptabilities while working with FGCS. One of the situations experienced by FGCS in career adaptation processes is that participants do not explore their options at the point of career alternatives. It is important to prepare informative programs where they can explore career alternatives. We also recommend implementing structured career exploration workshops that introduce FGCS to a wide range of career paths, industries, and opportunities. These workshops should include interactive sessions with professionals from various fields and provide hands-on activities that help students identify their interests and strengths. Mentoring, career counseling, and resources to help FGCSs explore various career paths, gain a clearer understanding of their interests and develop the skills needed for long-term success should be developed. Furthermore, the development of a supportive environment that encourages goal-setting and resilience can contribute to the overall success of FGCSs in their academic and career journeys. In this sense, policymakers are recommended to develop various services that can be provided for disadvantaged groups to progress in their career development within universities in developing countries like Türkiye. Incorporating these perspectives would enhance the applicability and usefulness of career counseling strategies and interventions for FGCS.

Limitations

This research has some limitations. First of all, qualitative data were collected from one university in this study. Due to the nature of qualitative research, the findings cannot be generalized to all first-generation students living in Türkiye. If the research is repeated in a society where different values are present, it may reveal different findings. One limitation of this study is related to the demographic characteristics of the participants. While the sample size of 12 participants is adequate for qualitative research, the demographic composition raises concerns regarding the generalizability of the findings. These demographic characteristics, including gender (majority of females), age (majority between 23-25 years of age), and major (majority studying Islamic Studies), may limit the generalizability of the study's findings. Future research should aim to include a more diverse and representative sample to better understand the career adaptabilities of FGCS across different demographics. Another limitation is the use of individual interviews as the only method of data collection. Data were collected through audio-recorded individual interviews and analyzed using verbatim transcripts of these recordings. In future research, the use of other data collection methods, such as focus groups, should be considered, as participants will have more opportunity to communicate their experiences and ideas. Lastly, we acknowledge the potential for sensitization because the interview technique was conceptually associated with the four adaptation resources; nevertheless, precautions (independent coding, consensus, external audit, and retention of non-aligned categories) were taken to lessen confirmation bias.

Statements of Publication Ethics

The research conducted in this study adhered to the highest ethical standards, obtaining necessary approvals from the relevant institutional review board, ensuring informed consent from all participants, and maintaining strict confidentiality throughout the research process.

Researchers' Contribution Rate

All authors listed have contributed significantly to the research and have approved the final version of the manuscript.

Authors	Literature review	Method	Data Collection	Data Analysis	Results	Conclusion
Author 1	☒	☒	☒	☒	☒	☒
Author 2	☒	☒	☒	☒	☒	☒

Conflict of Interest

No conflicts of interest exist, and the content of the manuscript is the sole responsibility of the authors.

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