

## Proactive Career Behaviors in the Context of Psychological Needs and Career Adapt-Abilities: A Structural Equation Model

### Psikolojik İhtiyaçlar ve Kariyer Uyum Yetenekleri Bağlamında Proaktif Kariyer Davranışları: Yapısal Bir Eşitlik Modeli

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#### Abstract

Proactive career behaviors are recognized as key antecedents in the successful transition from the student role to the workforce. In this context, there is a growing need for studies to identify variables that influence the development of proactive career behaviors. This study aims to investigate the mediating role of career adaptability in the relationship between university students' proactive career behaviors and psychological needs. A total of 383 students, including 242 females (63.2%) and 141 males (36.8%), participated in the research. Data were collected using the Balanced Measure of Psychological Needs Scale, the Career Adapt-abilities Scale-Short Form, and the Career Engagement Scale. Structural equation modeling was employed to test whether career adaptability mediates the relationship between psychological needs and proactive career behaviors. The results indicated that proactive career behaviors were significantly related to career adapt-abilities and all three psychological needs: autonomy need, relatedness need, competence. Moreover, career adapt-abilities was found to fully mediate the relationship between proactive career behaviors and psychological needs. By contributing to the literature on proactive career behaviors, this study offers theoretical insights and practical implications that could have positive effects on university students' successful transition to work life and their career development processes.

**Keywords:** Proactive career behaviors, Psychological needs, Career adapt-abilities

#### Özet

Proaktif kariyer davranışları, öğrenci rolünden çalışma rolüne başarılı geçişin önemli öncüllerinden biri olarak öne çıkmaktadır. Bu bağlamda proaktif kariyer davranışları üzerinde etkili olabilecek değişkenlerin belirlenmesine yönelik çalışmalara ihtiyaç bulunmaktadır. Bu ihtiyacı karşılamak amacıyla gerçekleştirilen bu çalışma, üniversite öğrencilerinin proaktif kariyer davranışları ile psikolojik ihtiyaçları arasındaki ilişkide kariyer uyum yeteneklerinin aracılık rolünü araştırmayı amaçlamaktadır. Araştırmaya 242'si kadın (%63,2) ve 141'i erkek (%36,8) olmak üzere toplam 383 öğrenci katılmıştır. Veri toplama araçları olarak Psikolojik İhtiyaç Doyumunda Denge Ölçeği, Kariyer Uyum Yetenekleri Ölçeği-Kısa Form ve Kariyer Adanmışlık Ölçeği kullanılmıştır. Değişkenler arasındaki ilişkiler Pearson korelasyon analizi ile incelenmiştir. Psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasındaki ilişkide kariyer uyum yeteneklerinin aracılık rolünün olup olmadığı yapısal eşitlik modelleme yöntemi kullanılarak analiz edilmiştir. Analiz sonuçları proaktif kariyer davranışlarının kariyer uyum yetenekleri ve tüm psikolojik ihtiyaçlarla (özerklik ihtiyacı, ilişkili olma ihtiyacı, yeterlilik ihtiyacı) ilişkili olduğunu göstermiştir. Ayrıca proaktif kariyer davranışları ile psikolojik ihtiyaçlar arasındaki ilişkide kariyer uyum yeteneklerinin tam aracılık rolüne sahip olduğu bulunmuştur. Bu çalışma, proaktif davranışlar literatürünü geliştirerek, üniversite öğrencilerinin başarılı bir şekilde iş hayatına geçiş ve kariyer gelişim süreçlerine olumlu etki yaratabilecek teorik ve pratik uygulamalara yönelik yol gösterici sonuçlar sunmaktadır.

**Anahtar Kelimeler:** Proaktif kariyer davranışları, Psikolojik ihtiyaçlar, Kariyer uyum yetenekleri

## 1. Introduction

The professional literature indicates that the process of starting to work after university has become increasingly complicated and challenging. Temporary employment and unemployment rates have risen due to the restructuring in the work environment (Park et al., 2022). The labor market is characterized by growing uncertainty for recent graduates (Healy et al., 2022). Employers no longer promise life-long employment; instead, they promote employability by encouraging continuous learning and development (Wong et al., 2017). These conditions have had a negative impact on the career processes of college students who are in the process of preparing for the transition to working life. Considering these challenges to achieving a successful career, it is recommended that students be equipped with the necessary resources to navigate the transition effectively (Green et al., 2020). In this regard, researchers have devoted considerable time and effort to identifying the qualities that could be important for students in the transition from school to employment (e.g. Doğanülkü, 2024; Gerçek, 2024; Healy et al., 2022). Among these qualities, proactive career behaviors have emerged as the first prominent sources (Doğanülkü, 2024). It has been suggested that graduates who demonstrate proactive career behaviors are more likely to secure employment. (Valls et al., 2020).

Proactive career behaviors refer to individuals' active development of their careers through various behaviors (Hirschi et al., 2014). These kinds of special behaviors include, for example, engaging in career planning process, networking, skills development, career consultancy, or career exploration activities (Guan et al., 2017; Strauss et al., 2012; Taber & Blankemeyer, 2015). Proactive career behaviors are related to individuals' skills for developing goals and strategies related to planning and implementing career-related outcomes (Akkermans & Tims 2017). Individuals who demonstrate these behaviors are reported to meet their needs better and look for jobs that are more suitable for them (Yu & Davis, 2016). Moreover, individuals who manage their careers proactively take initiatives to improve their skills and knowledge, enabling them to remain more employable and become more talented in the face of changing job requirements compared to individuals who demonstrate less proactive behaviors (Parker & Liao, 2016). Individuals who demonstrate proactive career behaviors tend to find positions and guarantee and improve them in the future (Meyers, 2020). Moreover, they seek to build relationships and gain favor with key players, such as gatekeepers of aspired positions, who can help to achieve their career goals (Meyers, 2020). Besides, these behavior patterns involve behaviors that help individuals adopt the direction of career results more and move around among career difficulties and risks more successfully (Jackson & Tomlinson, 2019). These behaviors are also a strong indicator of career success (Smale et al., 2019). In this context, the need for studies to strengthen the related literature on proactive career behaviors is also frequently emphasized (Peng et al., 2021; Spurk et al., 2020).

### 1.1. Theoretical Background and Hypotheses

#### 1.1.1. Psychological Needs and Proactive Career Behaviors

Vocational guidance practices have turned toward individuals' psychological needs since the beginning of the 21st century (Tang, 2003). A view indicating the potential effect of psychological needs on career processes has begun to develop. Hence, Kuzgun (2014) states that professional activities are related to psychological needs. Self Determination Theory (SDT) on psychological needs, developed by Deci and Ryan (1985), presents a very important viewpoint. SDT highlights that there are three

fundamental psychological needs as nutrition for personal development, which include autonomy, relatedness, and competence (Deci & Ryan, 2008). Autonomy refers to individuals' needs for making their own choices and seeing the will to initiate behaviors in themselves. In other words, it emphasizes the initiative in individuals' behaviors. Competence is related to individuals' needs for seeing themselves as competent in the activities they did or will do. Relatedness reflects the need for being connected to their environment and other people in the environment. Sense of belonging and commitment to other people and desire for satisfactory and supportive social relationships are the products of the need for relatedness (Deci & Ryan, 2000; Ryan & Deci, 2017).

SDT states that when people meet their psychological needs (autonomy, competence and relatedness), they become intrinsically motivated, and the satisfaction of the needs enables personal development, integrity, and well-being (Ryan & Deci, 2002). With some of its assumptions, SDT provides a general framework for people's development (Deci & Vansteenkiste, 2004). It emphasizes that people are proactive by nature and instead of being passively controlled, they tend to act over internal and external forces and dominate them. In this way, when individuals work for a purpose, they can activate their enthusiasm or regulate the environment actively and could affect the working environment proactively to demonstrate good performance. It also emphasizes that individuals have an innate propensity for growth and development (Deci & Ryan, 2000). However, with these assumptions proposed, SDT emphasizes that individuals' growth and positive development potentials due to their nature and realization of their proactive behavior tendencies are associated with the level of meeting three fundamental psychological needs. SDT proposes that people reach an optimal motivation condition when the three fundamental psychological needs, autonomy, competence, and relatedness, are met (Deci & Ryan, 2000, Deci & Ryan, 2008). Hence, SDT provides an unbelievably hypothetical focal point (Bilal et al., 2021) to clarify how proactivity is formed. In this regard, SDT became the fundamental theoretical base used while demonstrating the relationship between proactive career behaviors and psychological needs.

People tend to act in a way to meet their psychological needs (Ryan & Deci, 2002). This tendency can be a source for demonstrating proactive career behaviors. For instance, seeking feedback and networking or reorganizing and strengthening the current relationships can be nourished by individuals' interventions for meeting their need for relatedness, which is among their psychological needs (Meyers, 2020). Proactive career behaviors are defined as goal-oriented behaviors (Crant, 2000). This condition means that individuals can be busy with goals suitable for them so as to achieve these goals (Meyers, 2020). Individuals' determination of goals suitable for them reflects their autonomy because these goals are compatible with their values, interests, and needs (Greguras & Diefendorff, 2010; Sheldon & Elliot, 1999). Hence, individuals' determining autonomous goals in line with these characteristics could lead them to demonstrate proactive career behaviors for achieving these goals. Besides, people are reported to perceive themselves as more autonomous when their proactive behaviors become successful and when they achieve their goals (Meyers, 2020). Individuals who shape their careers according to their competence take initiative, which helps them to fulfill their tasks in a more productive way (Meyers, 2020). In addition, they receive positive feedback from others when successful experiences are lived (Greguras & Diefendorff, 2009), which nourishes their need for competence (Deci & Ryan, 2008) and then motivates them to shape their career to improve their competences even more by taking initiatives. Taking initiative and working to improve skills are among fundamental proactive career behaviors (Hirschi et al., 2014; Peng et al., 2021). Hence, meeting the competence needs and interventions to satisfy this need could be a source for demonstrating proactive career behaviors.

Theoretical explanations show that psychological needs such as autonomy, competence, and relatedness could affect proactive career behaviors. The following hypothesis was developed to test this theoretical pattern empirically:

H1: Psychological needs are significant predictors of proactive career behaviors.

### ***1.1.2. Mediating Role of Career Adapt-Abilities***

Career adapt-abilities is one of the most important cornerstones of the Career Construction Theory (CCT) proposed by Savickas (2005). Career adapt-abilities is defined as the source of coping with current and expected duties, transitions, and traumas in the individual's professional roles (Savickas & Porfeli, 2012). Recent conceptualizations about career adapt-abilities highlight that individuals react to the changes in the business world and career development, cope with them, and then improve them (e.g., Hall et al., 2018; Savickas & Porfeli, 2012). Career adapt-abilities is one of the structures reflecting people's perceived ability that can help to reach their goals (Urbanaviciute et al., 2016). Four sub-dimensions in CCT forms the structure of four high-level general career adapt-abilities. These include concern, control, curiosity, and confidence (Savickas, 2005; Savickas & Porfeli, 2012).

Many researchers assume that career adapt-abilities and individual differences in proactive career behaviors are positively associated (e.g., Guan et al., 2015; Nilforooshan & Salimi, 2016; Taber & Blankemeyer, 2015). The main presumption on this issue is that proactive career behaviors can be seen as reactions specific to a more general psycho-social source of career adapt-abilities, and thus proactive career behaviors are considered to be a direct consequence of career adapt-abilities (Hirschi et al., 2015; Savickas, 2005). In this regard, career adapt-abilities is assumed to direct proactive behaviors and shape strategies (Nilforooshan & Salimi, 2016). Career adapt-abilities also emphasizes personal intervention triggering proactive behaviors and taking responsibility for building one's career (Urbanaviciute et al., 2016). In short, proactive career behaviors are conceptualized as indicators of adaptability because people use these behaviors to fulfill their career duties and change work and career conditions (Guan et al., 2017; Hirschi et al., 2015). On the other hand, the increase in career adapt-abilities (for instance, more curiosity, concern, control, and confidence) means one's strengthening personal psychological sources that increase his/her motivation in terms of realizing clarity of one's goals, perceived competence, and motivation about realizing career-related behaviors (Guan et al., 2015, 2017; Rudolph et al., 2017). In this regard, the increase in the realized motivation is reported to lead to a parallel increase in proactive career behaviors, because it is considered that these kinds of behaviors are generally easier to initiate and maintain under encouraging conditions (Locke & Latham, 2002). Hence, parallel to these views, Taber and Blankemeyer (2015) and Nilforooshan and Salimi (2016) found that career adapt-abilities was predictive on proactive career behaviors.

The degree to which their psychological needs are met is also considered to be an important criterion in the evaluation of university students' career adapt-abilities (Şahin & Gülşen, 2022). Career adapt-abilities is a source that helps individuals to manage current and expected career transitions successfully (Savickas, 2005). These sources are not the main characteristics of the individual; they are rather psychosocial because they exist as a meeting point between humans and the environment (Dike, 2015). Hence, it is clear that career adapt-abilities emphasizes the interaction between individuals and the environment they live in (Chen et al., 2020). In other words, it is highlighted that career adapt-abilities, the result of the interaction between the individual and the environment, is affectable and improvable (Chen et al., 2020). In this regard, the satisfaction of psychological needs can have effects on career adapt-abilities because the quality togetherness of individuals with the environment they are in helps the satisfaction of their psychological needs (Deci & Ryan, 2000; Ryan

& Deci, 2003). Satisfaction of psychological needs is an important individual source of power (Ryan & Deci, 2003). Evidence in the context of education environments has shown that undergraduate students' probability of success increases when their main psychological needs are met (Chacón-Cuberos et al., 2021). Research has shown that satisfaction of psychological needs has effects on the career process of undergraduate students (Pesch et al., 2018). According to Deci (2020), the satisfaction of main psychological needs could encourage well-being, motivation, and behaviors. In addition, meeting main psychological needs is considered to be very important not only for increasing well-being but also enhancing students' career adapt-abilities (Şahin & Gülşen, 2022). Hence, in their study conducted with undergraduate students, Şahin and Gülşen (2022) found that psychological needs were predictive on career adapt-abilities.

In light of the theoretical framework and previous research, it is seen that while career adapt-abilities is a structure that can be nourished by individuals' psychological needs, it includes psychosocial structures that can nourish proactive career behaviors. Therefore, we think that career adapt-abilities could play a mediating role in the relationship between potential psychological needs and proactive career behaviors. In this regard, the following hypothesis was developed to be tested:

H2: Career adapt-abilities has a mediating role in the relationship between psychological needs and proactive career behaviors.

## 1.2. The Present Study

Finding a job and having a career are the primary goals of undergraduate students after they complete their education and graduate from school (Lin et al., 2015). However, both in Türkiye and in the world, individuals have difficulties in transitioning to work life after graduation. Many empirical studies still investigate students' efforts for the successful realization of their "transitioning from school to work" (Klehe et al., 2021). These efforts directed the attention of many career researchers to proactive behaviors because the current career literature, especially in the context of unlimited and changeable career paradigms, has begun to make important emphasis on the personal agency for achieving the desired outcomes (Akkermans et al., 2018). In other words, the tendency toward proactive career behaviors has increased day by day.

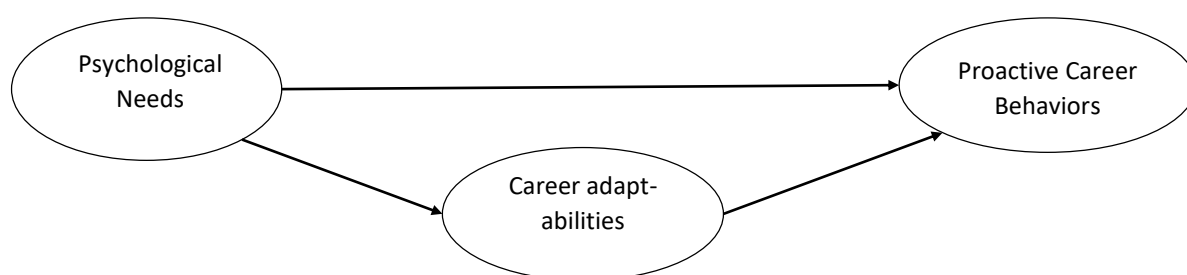
Individuals who demonstrate proactive career behaviors are those who meet their needs better and look for more suitable jobs (Yu & Davis, 2016). Proactive career behaviors are reported to be very important behavior patterns that enhance the transition from the student role to the employee role after graduation (Parker & Liao, 2016). There is a need for searching the antecedents and mechanisms of proactive career behaviors, which have important effects on student's career development process (Peng et al., 2021). This study aims to meet this emphasized need. In this way, it is believed to shed light on the practices and future studies on the development of proactive career behaviors.

One of the key mechanisms this study aims to uncover is the relationship between psychological needs and proactive career behaviors. The need for the investigation of proactive career behaviors mechanisms has also been recommended by researchers (Peng et al., 2021). Besides, Klehe et al. (2021) emphasize that there is a need to determine the antecedents of career-related proactive actions. Hence, our attempt to explain the relationship between psychological needs and proactive career behaviors also directed us to career adapt-abilities. Career adapt-abilities sources have a very important effect on university students to become proactive, namely to build their new careers actively (Green et al., 2020). It is also emphasized that career adapt-abilities may be related to the satisfaction of psychological needs (e.g. Şahin & Gülşen, 2022). Because the satisfaction of

psychological needs is largely nourished by individuals' experiences with other people around them. Despite these stated foundations, previous research has not found any study examining the mediating role of career adaptability in the relationship between university students' psychological needs and proactive career behaviors. Therefore, this study has the potential to be an original and pioneering research that aims to fill the specific gap mentioned and empirically tests these relationships. The study is also considered to be important and special because it can shed light on the preparation of intervention programs for proactive career behaviors that have positive effects on individuals' career transition processes and employability.

Present research aims to investigate the mediating role of career adaptabilities in the relationship between university students' proactive career behaviors and their psychological needs. Figure 1 demonstrates the hypothetical model of the research.

**Figure 1.** *The Hypothesized Structural Model*



## 2. Method

This research is a quantitative mediation study designed using a correlational approach. Correlational research is a design used to determine the presence and degree of relationships between two or more variables (Karasar, 2013). In this study, psychological needs serve as the predictor variable, proactive career behaviors as the outcome variable, and career adaptability as the mediating variable.

### 2.1. Participants

The participants of this study were university students who were enrolled in the Education Faculty of a university located in the eastern Mediterranean region of Türkiye. Data were collected in the spring semester of the 2021-2022 academic year using the convenience sampling method. A total of 383 students [242 females (63.2%) and 141 males (36.8%)] participated in the study. The participants' average age was 21.66 years ( $SD = 3.4$ ), with an age range from 18 to 29.

### 2.2. Data Collection Tools

#### 2.2.1. The Balanced Measure of Psychological Needs Scale

The scale, which was developed by Sheldon and Hilpert (2012), aims to measure individuals' satisfaction with their psychological needs. Turkish adaptation of the scale was performed by Kardaş and Yalçın (2018). The scale is composed of 18 items and responded on a 5-point Likert scale ranging from "I strongly disagree (1)" to "I strongly agree (5)". The scale has three sub-scales including relatedness, competence, and autonomy. There are 6 items that aim to measure each sub-scale.



Higher scores in each sub-scale indicate an increase in the satisfaction of a psychological need. Turkish reliability and validity of the scale were performed with 324 university students. Cronbach's alpha values calculated within the scope of reliability analyses were .78 for relatedness, .79 for competence, and .78 for autonomy. Confirmatory factor analysis performed within the process of scale adaptation showed that goodness of fit indices of the three-factor structure was in an acceptable range in the original scale ( $\chi^2/df=2.92$ ; RMSEA=.08; RMR=.05; CFI=.92; NNFI=.91). In this study, the calculated Cronbach's alpha values were found to be .73 for relatedness, .76 for competence, and .76 for autonomy. As part of the validity analyses, the confirmatory factor analysis indicated that the item factor loadings ranged between .32 and .83, and the model fit indices were within an acceptable range ( $\chi^2/df = 3.39$ ; RMSEA = .08; RMR = .06; CFI = .90; NNFI = .90).

### **2.2.2. Career Adapt-abilities Scale-Short Form**

The scale is the short form of the 24-item Career Adapt-abilities Scale- International Form developed by Savickas and Porfeli (2012). The short form of the scale was developed by Maggiori et al. (2017) and aimed to measure individuals' career adapt-abilities. The Turkish adaptation of the scale was performed by Işık et al. (2018). It consists of 12 items and is responded on a 5-point Likert scale with options ranging from "not strong (1)" and "strongest (5)". The scale has four sub-scales including concern, control, curiosity, and confidence. There are three questions in each sub-scale, and higher scores indicate higher career adapt-abilities. The scale adaptation process was conducted with high school students, university students, and working individuals. Cronbach's alpha values calculated within the scope of reliability analyses was found between .80 and .91 in these three groups. Confirmatory factor analyses calculated within the scope of validity analysis found the goodness of fit indices within these three groups to be in an acceptable range ( $\chi^2/df = 2,13-3.38$ , GFI = .950-.960, CFI = .941-.966, TLI = .922-.955, RMSEA = .059-.082). In this study, the calculated Cronbach's alpha value was found to be .89. As part of the validity analyses, the confirmatory factor analysis indicated that the item factor loadings ranged between .49 and .81, and the model fit indices were within an acceptable range ( $\chi^2/df = 3.79$ , GFI = .90, CFI = .90, RMSEA = .08).

### **2.2.3. Career Engagement Scale**

The scale was developed by Hirschi et al. (2014) to measure individuals' levels of demonstrating proactive career behaviors. Turkish adaptation of the scale was performed by Korkmaz et al. (2020). The scale is composed of 9 items and responded on a 5-point scale ranging from "hardly ever (1)" to "very frequently (5)". It includes one factor. Higher scores indicate higher levels of demonstrating proactive career behaviors. Cronbach's alpha value calculated within the scope of reliability analyses in the scale adaptation process was found .81. Confirmatory factor analyses calculated within the scope of validity analysis found the goodness of fit indices for the single factor model like in the original scale to be in an acceptable range ( $\chi^2/df = 4.9$ ; RMSEA = .09; SRMR = .06; TLI = .93; GFI = .92). In this study, the calculated Cronbach's alpha value was found to be .91. As part of the validity analyses, the confirmatory factor analysis indicated that the item factor loadings ranged between .47 and .83, and the model fit indices were within an acceptable range ( $\chi^2/df = 4.4$ ; RMSEA = .09; TLI = .91; GFI = .90).

### 2.3. Procedures and Ethics

Data were collected from university students who agreed to participate in the study. All of the participants gave their written informed consent. Data collection was done using in-person. The researcher visited the participants in their classrooms to administer the data collection tools. Filling in the data collection tools took about 10 minutes for the participants and no personal information was collected. The study followed the principles of the Declaration of Helsinki and was approved and registered by the Ethics Committee of Bursa Uludağ University (2022-02, Decision Number: 38).

### 2.4. Data Analysis

First of all, it was examined whether there were any missing values in the data set and it was found that there were no missing values. Then, since outliers may affect the normal distribution, it was examined whether there were outliers in the data set by looking at the z-score. Above 3.29 is considered an outlier (Tabachnick & Fidell, 2019). In the examination carried out in this direction, it was seen that there were no outliers in the data set and all data were included in the analysis. Skewness and kurtosis values were analyzed for the normality test. Skewness and kurtosis values between +1,5 and -1,5 indicate normal distribution (Tabachnick & Fidell, 2019). Results showed that data had a normal distribution (See Table 1). Mardia test was performed to test the assumption of multivariate normality. The Mardia test was found to be statistically significant between  $\pm 1.96$  values in terms of both skewness and kurtosis (Byrne, 2016; Mardia, 1970). One of the important analyzes used in testing multicollinearity is discriminant validity. The Heterotrait-Monotrait Ratio (HTMT) method introduced by Henseler et al. (2015) was used to assess discriminant validity. According to Henseler et al. (2015), a HTMT value of less than 0.90 provides evidence of discriminant validity, that is, there is no multicollinearity problem. In this study, HTMT values for all variables vary between .30 and .70, meaning there is no multicollinearity. At the end of the preliminary analyses, analyzes to test the hypotheses were started. Pearson correlation coefficient analysis was used to analyze the relationships between psychological needs, career adapt-abilities, and proactive career behaviors.

A structural equation model using full information maximum likelihood estimation was conducted to assess the mediating role of career adapt-abilities in the relationship between psychological needs and proactive career behaviors. Psychological needs were considered to be an endogenous latent variable while career adapt-abilities was considered as the latent variable acting as a mediator. Proactive career behaviors were the latent and dependent variables. The criteria used for testing the goodness of fit of the structural model to be formed were as follows:  $\chi^2 / df < 5$ , CFI  $> .90$ , GFI  $> .90$ , TLI  $> .90$ , and RMSEA  $< .10$  (Kline, 2005; Tabachnick & Fidell, 2019). Bootstrapping tests were performed to examine whether career adapt-abilities mediated the relationship between psychological needs and proactive career behaviors (Preacher & Hayes, 2008); 10,000 resamples and a 95% confidence interval was used in the Bootstrap AMOS Graphics 24.



**Table 1.** Kurtosis and Skewness Values for Variables

Variable	Skewness	Kurtosis
1- Relatedness	-.82	.92
2- Competence	-.31	.01
3- Autonomy	-.29	-.26
4- Career adapt-abilities	-.62	.70
5- Proactive career behaviors	-.15	-.30

### 3. Findings

#### 3.1. Findings Regarding the Correlation Analysis between the Variables

Table 2 presents the correlation values between the participants' proactive career behaviors scores, career adapt-abilities, and psychological needs (relatedness, competence, autonomy).

**Table 2.** ABT The Correlation Coefficient Between Proactive Career Behaviors, Career adapt-abilities and Psychological Needs

	<i>M</i>	<i>SD</i>	Cronbach's $\alpha$	1	2	3	4	5
1- Relatedness	23.68	3.64	.73	—				
2- Competence	21.90	4.02	.76	.41**	—			
3- Autonomy	20.66	4.51	.76	.45**	.56**	—		
4- Career adapt-abilities	48.69	7.11	.89	.39**	.54**	.46**	—	
5- Proactive career behaviors	32.30	6.81	.91	.32**	.48**	.37**	.69**	—

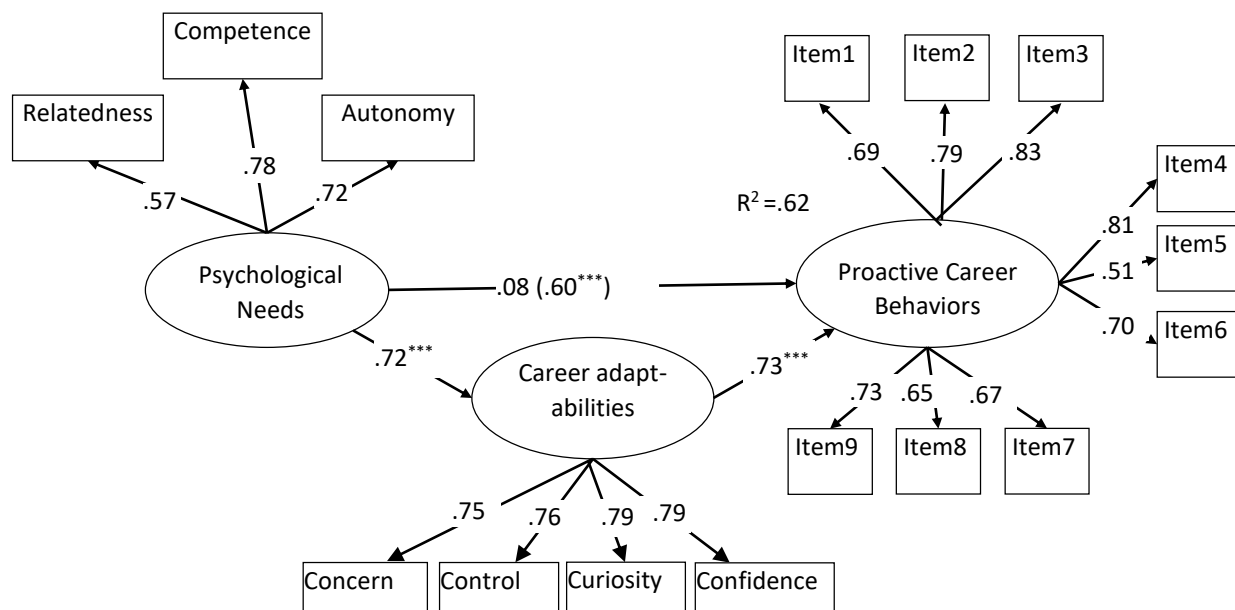
Note. *M*: Mean, *SD*: Standard deviation.

\*\* $p < .01$

As seen in Table 2, proactive career behaviors were found to be positively associated with all psychological needs [relatedness ( $r = .32, p < .01$ ), competence ( $r = .48, p < .01$ ), autonomy ( $r = .37, p < .01$ )] Similarly, career adapt-abilities was also positively associated with all psychological needs [relatedness ( $r = .39, p < .01$ ), competence ( $r = .54, p < .01$ ), autonomy ( $r = .46, p < .01$ )]. Besides, a positive relationship was found between career adapt-abilities and proactive career behaviors ( $r = .69, p < .01$ ). The increase in psychological needs is positively associated with the increase in career adapt-abilities and proactive career behaviors.

#### 3.2. Findings Regarding the Study Model

The model regarding the mediating role of career adapt-abilities in the relationship between psychological needs and proactive career behaviors was tested. The findings are presented in Figure 2.

**Figure 2.** Mediation Model of the Relationship Between the Study Variables

Note. All coefficients between paths are standardized. The coefficient expressed in parentheses is the coefficient between psychological needs and proactive career behaviors before career adapt-abilities was included in the model.

\*\*\* $p < .001$

First, the path coefficient between psychological needs and proactive career behaviors was examined without including career adapt-abilities in the model. The goodness of fit values of this model were within acceptable limits [ $\chi^2$  (50,  $N = 383$ ) = 182.172;  $p < .001$ ;  $\chi^2/df = 3.64$ ; TLI = .92; CFI = .94; GFI = .93; RMSEA = .08]. The path coefficient between proactive career behaviors and psychological needs was significant ( $\beta = .60$ ,  $p < .001$ ). After this analysis, the goodness of fit values of the model in which career adapt-abilities played a mediating role in the relationship between proactive career behaviors and psychological needs were tested. The goodness of fit values of this tested model were also acceptable [ $\chi^2$  (98,  $N = 383$ ) = 337.090;  $p < .001$ ;  $\chi^2/df = 3.44$ ; TLI = .91; CFI = .92; GFI = .90; RMSEA = .08]. The path coefficients between psychological needs and career adapt-abilities ( $\beta = .72$ ,  $p < .001$ ) and career adapt-abilities and proactive career behaviors ( $\beta = .73$ ,  $p < .001$ ) were statistically significant. However, with the inclusion of career adapt-abilities in the model, the path coefficient between psychological needs and proactive career behaviors was not significant ( $\beta = .08$ ,  $p > .05$ ). Psychological needs and career adapt-abilities explained 62% of the variance in the proactive career behaviors. Bootstrapping analysis was performed to test the significance of the mediating role of career adapt-abilities in the relationship between proactive career behaviors and psychological needs. Results are presented in Table 3.

**Table 3.** Bootstrapping Test of the Mediating Effect

Pathways	$\beta$	Standard Error	95% CI
<i>Direct effect</i>			
Psychological Needs $\rightarrow$ Career adapt-abilities	.72***	.05	.62 to .80
Psychological Needs $\rightarrow$ Proactive career behaviors	.08	.11	-.14 to .29
Career adapt-abilities $\rightarrow$ Proactive career behaviors	.73***	.10	.52 to .94
<i>Indirect effect</i>			
Psychological Needs $\rightarrow$ Career adapt-abilities $\rightarrow$ Proactive career behaviors	.52***	.09	.35 to .74
<i>Total effect</i>			
Psychological Needs $\rightarrow$ Proactive career behaviors	.60***	.05	.50 to .69

*Note.* CI: Confidence interval. Standardized beta coefficients ( $\beta$ ) were reported.

\*\*\* $p < .001$

As can be seen in Table 3, except for the path coefficient between psychological needs and proactive career behaviors, all path coefficients are statistically significant as the lower and upper limit confidence intervals are not zero. On the other hand, the indirect effect of psychological needs on proactive career behaviors through career adapt-abilities was found to be significant ( $\beta = .52$ ,  $p < .001$ ; CI [.35, .74]). Therefore, career adapt-abilities had a fully mediating role between psychological needs and proactive career behaviors.

#### 4. Discussion

This study investigated university students' proactive career behaviors, psychological needs, and career adapt-abilities under the guidance of Self Determination Theory (SDT) (Deci & Ryan, 1985) and Career Construction Theory (CCT) (Savickas, 2005). The results showed that proactive career behaviors are significantly associated with both psychological needs and career adapt-abilities. A key finding of the study is that career adapt-abilities fully mediates the relationship between psychological needs and proactive career behaviors. By contributing to the literature on proactive career behaviours, this study offers theoretical insights and practical implications that may support university students' successful transition into the workforce and foster their career development.

According to H1, psychological needs are significant predictors on proactive career behaviors. In the study, the direct effect of psychological needs on proactive career behaviors was not found to be significant. On the other hand, when the total effect was analyzed, psychological needs were found to be significant predictors on proactive career behaviors. This finding clearly indicates that a variable mediates the relationship between psychological needs and proactive career behaviors, which confirms our other hypothesis, H2 because according to H2, career adapt-abilities has a mediating role in the relationship between psychological needs and proactive career behaviors.

Although theoretical evidence is presented that psychological needs may have an impact on proactive career behaviors, no study has been found that examines the effect of university students' psychological needs directly on proactive career behaviors. However, in a study conducted with working individuals, it was observed that the satisfaction of psychological needs has an impact on individuals showing more proactive behaviors towards their careers (Chen et al., 2021). Proactive behavior includes both goal setting and goal attainment stages (Parker et al., 2010). Additionally, given that proactivity often requires significant amounts of energy, resources, and effort, individuals need psychological resources to successfully regulate their proactive goals (Strauss & Parker, 2014). Therefore, psychological needs may be predictive of proactive career behaviors. Similarly, another

study showed that the satisfaction of psychological needs also affects individuals' proactive innovation behaviors (Fan et al., 2022). Although proactive innovation behaviors are not directly proactive career behaviors, they can be considered as behaviors similar to proactive career behaviors in that they show the individual's openness to innovations in his career (Zhao & Han, 2016). Although the number of studies on the relevant subject is limited, the findings obtained in these studies are parallel to the findings in our study.

Career adapt-abilities can develop through nourishment from both psychosocial sources (Dike, 2015) and psychological sources (Chen et al., 2020). Autonomy as one of the psychological needs is related to individuals' seeing the responsibility of their life in themselves, which nourishes the individual psychologically (Deci & Ryan 2000). The need for competence refers to the individuals' finding themselves sufficient and seeing their existence as useful and meaningful, which similarly nourishes them psychologically (Deci & Ryan 2000). The need for relatedness highlights individuals' establishing strong, meaningful, and satisfying connections with other individuals and communicating with them (Deci & Ryan 2000), which nourishes their psychosocial resources. In other words, psychological needs can impact career adapt-abilities, which is a psychosocial and psychological structure. On the other hand, like any other behavior, adaptation is also related to the individual's motivation (Campbell, 1990), and motivation is nourished by psychological needs (Deci & Ryan 2000). Individuals have intellectual and actual motivation when their psychological needs are met (Deci & Ryan 2000). Hence, together with an increase in motivation, psychological needs can have effects on the individual's career adapt-abilities. In present research, the finding indicating that psychological needs have effects on career adapt-abilities is in line with these bases. Besides, similar to the findings in this study, Şahin and Gülşen (2022) concluded that psychological needs were predictive on career adapt-abilities.

Career adapt-abilities (Savickas, 2005) refers to a specific sub-theme in the career construction theory. Savickas, who placed more than one career theory in a socio-constructivist meta-theory, claims that people develop three viewpoints for their career in adolescence and adulthood periods: first as actors, then as agents, and finally as authors. Actor perspective implies following the scenarios given by guides and role models. Yet over time, people self-extend and develop their own goals to strive for as active agents. Finally, they become authors to turn their experiences into meaningful career stories, give them meaning, and explain them. Career adaptation is embedded in the "people as agents" perspective. Agency has a key role in the career transition phases (e.g., the transition from student life to work life). People would probably become more successful if they adapt to cope with these transitions (Klehe et al., 2021) because this adaptability could become a source for the demonstration of proactive career behaviors such as exploring, planning, doing activities for developing skills, and creating a network. In other words, proactive career behaviors are indicators of adaptability (Spurk et al., 2020); namely, adaptive behaviors demonstrated depending on career adapt-abilities prompt individuals to proactive career behaviors. Therefore, proactive career behaviors are highlighted as a direct consequence of career adapt-abilities (Hirschi et al., 2015; Savickas, 2005). Like in the present study, other empirical research results reporting the significant predictive effect on proactive career behaviors (Nilforooshan & Salimi, 2016; Taber & Blankemeyer, 2015) also support the theoretical framework proposed by CCT.

#### **4.1. Limitations and Future Research**

The present research has several limitations, some of which are believed to provide opportunities for future investigation. First, this study is cross-sectional in nature, which limits the

ability to draw causal inferences. As such, the findings should be interpreted with caution, especially regarding cause-and-effect relationships

Secondly, current research was conducted with students who were currently university students in Türkiye. The effect of culture was not analyzed, and Türkiye has a predominantly collectivist culture. Previous research has reported that culture influences career proactivity (Smale et al., 2019). Conducting similar studies with individuals from different cultural backgrounds and recent graduates, as well as examining the impact of culture on proactive career behaviors and comparing findings across cultures, could make a broader contribution to the literature.

Thirdly, this study theoretically benefited from the principles of SDT (Deci & Ryan, 1985) and CCT (Savickas, 2005) as a guide. However, the literature includes many theories for the career developmental processes (e.g., Holland's Theory, Social Cognitive Career Theory). Hence, the theoretical structure can be enriched by receiving support from different theoretical bases and conducting research to reveal the relationships between related variables. In this way, enlightening information can be obtained about individuals' career transition processes.

Finally, it is recommended to conduct studies to determine other mediating and regulatory variables in the relationship between psychological needs and career behaviors. This research investigated the mediating role of career adapt-abilities in the relationship between proactive career behaviors and psychological needs. However, the career literature shows that university students' proactive career behaviors are associated with variables such as tolerance for ambiguity (Doğanülkü, 2024), optimism (Doğanülkü, 2024), and hope (Hirschi, 2014) in the preparation process for work life. Therefore, in addition to the mediating role of career adapt-abilities, the determination of variables that could have a regulatory or mediating role in this relationship could be a guide for studies to be conducted in the future.

### References

- Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology*, 66(1), 168-195. <https://doi.org/10.1111/apps.12082>
- Akkermans, J., Seibert, S. E., & Mol, S. T. (2018). Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology*, 44(1), 1-10. <https://doi.org/10.4102/sajip.v44i0.1503>
- Bilal, M., Chaudhry, S., Amber, H., Shahid, M., Aslam, S., & Shahzad, K. (2021). Entrepreneurial leadership and employees' proactive behavior: Fortifying self determination theory. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 176-191. <https://doi.org/10.3390/joitmc7030176>
- Byrne, B. M. (2016). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (3rd ed.). Routledge.
- Campbell, J. P. 1990. Modeling the performance prediction problem in industrial organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*. Consulting Psychologists Press.
- Chacón-Cuberos, R., Lara-Sánchez, A. J., & Castro-Sánchez, M. (2021). Basic psychological needs and their association with academic factors in the Spanish university context. *Sustainability*, 13(5), 2449. <https://doi.org/10.3390/su13052449>

- Chen, H., Fang, T., Liu, F., Pang, L., Wen, Y., Chen, S., & Gu, X. (2020). Career adaptability research: A literature review with scientific knowledge mapping in web of science. *International Journal of Environmental Research and Public Health*, 17(16), 5986. <https://doi.org/10.3390/ijerph17165986>
- Chen, H., Liang, Q., Feng, C., & Zhang, Y. (2021). Why and when do employees become more proactive under humble leaders? The roles of psychological need satisfaction and Chinese traditionality. *Journal of Organizational Change Management*, 34(5), 1076-1095. <https://doi.org/10.1108/JOCM-12-2020-0366>
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462. <https://doi.org/10.1177/014920630002600304>
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109-134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182-185. <https://psycnet.apa.org/doi/10.1037/a0012801>
- Deci, E. L., & Vansteenkiste, M. (2004). Self-determination theory and basic need satisfaction: understanding human development in positive psychology. *Recherche di Psicologia*, 27, 17-34.
- Dike, S. C. (2015). Sustainable environment, economic growth and poverty eradication measures: The African context: Why there is no meeting point?. *European Journal of Sustainable Development*, 4(2), 439-450. <https://doi.org/10.14207/ejsd.2015.v4n2p439>
- Doğanülkü, H. A. (2024). Life goals and proactive career behaviors: The mediating role of visions about the future and the moderating role of intolerance of uncertainty. *Current Psychology*, 43(1), 72-84. <https://doi.org/10.1007/s12144-022-03236-2>
- Fan, C., Tang, S., Chen, L., & Sun, T. (2022). Perceived organizational support and proactive innovation behavior: The mediating role of basic psychological needs. *Frontiers in Psychology*, 13, 804363. <https://doi.org/10.3389/fpsyg.2022.804363>
- Gerçek, M. (2024). Serial multiple mediation of career adaptability and self-perceived employability in the relationship between career competencies and job search self-efficacy. *Higher Education, Skills and Work-Based Learning*, 14(2), 461-478. <https://doi.org/10.1108/HESWBL-02-2023-0036>
- Green, Z. A., Noor, U., & Hashemi, M. N. (2020). Furthering proactivity and career adaptability among university students: Test of intervention. *Journal of Career Assessment*, 28(3), 402-424. <https://doi.org/10.1177/1069072719870739>
- Greguras, G. J., & Diefendorff, J. M. (2009). Different fits satisfy different needs: linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology*, 94(2), 465-477. <https://psycnet.apa.org/doi/10.1037/a0014068>



- Greguras, G. J., & Diefendorff, J. M. (2010). Why does proactive personality predict employee life satisfaction and work behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology*, 63(3), 539-560. <https://doi.org/10.1111/j.1744-6570.2010.01180.x>
- Guan, Y., Wang, F., Liu, H., Ji, Y., Jia, X., Fang, Z., ... Li, C. (2015). Career-specific parental behaviors, career exploration and career adaptability: A three-wave investigation among Chinese undergraduates. *Journal of Vocational Behavior*, 86, 95-103. <https://doi.org/10.1016/j.jvb.2014.10.007>
- Guan, Y., Zhuang, M., Cai, Z., Ding, Y., Wang, Y., Huang, Z., & Lai, X. (2017). Modeling dynamics in career construction: Reciprocal relationship between future work self and career exploration. *Journal of Vocational Behavior*, 101, 21-31. <https://doi.org/10.1016/j.jvb.2017.04.003>
- Hall, D. T., Yip, J., & Doiron, K. (2018). Protean careers at work: Self-direction and values orientation in psychological success. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 129-156. <https://doi.org/10.1146/annurev-orgpsych-032117-104631>
- Healy, M., Hammer, S., & McIlveen, P. (2022). Mapping graduate employability and career development in higher education research: A citation network analysis. *Studies in Higher Education*, 47(4), 799-811. <https://doi.org/10.1080/03075079.2020.1804851>
- Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, 68(3), 348-372. <https://doi.org/10.1111/hequ.12055>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hirschi, A. (2014). Hope as a resource for self-directed career management: Investigating mediating effects on proactive career behaviors and life and job satisfaction. *Journal of Happiness Studies*, 15, 1495-1512. <https://doi.org/10.1007/s10902-013-9488-x>
- Hirschi, A., Freund, P. A., & Herrmann, A. (2014). The career engagement scale: Development and validation of a measure of proactive career behaviors. *Journal of Career Assessment*, 22(4), 575-594. <https://doi.org/10.1177/1069072713514813>
- Hirschi, A., Herrmann, A., & Keller, A. C. (2015). Career adaptivity, adaptability, and adapting: A conceptual and empirical investigation. *Journal of Vocational Behavior*, 87, 1-10. <https://doi.org/10.1016/j.jvb.2014.11.008>
- Işık, E., Yeğin, F., Koyuncu, S., Eser, A., Çömlekçiler, F., & Yıldırım, K. (2018). Validation of the Career Adapt-Abilities Scale-Short Form across different age groups in the Turkish context. *International Journal for Educational and Vocational Guidance*, 18(3), 297-314. <https://doi.org/10.1007/s10775-018-9362-9>
- Jackson, D., & Tomlinson, M. (2019). Career values and proactive career behavior among contemporary higher education students. *Journal of Education and Work*, 32(5), 449-464. <https://doi.org/10.1080/13639080.2019.1679730>
- Karasar, N. (2013). *Bilimsel araştırma yöntemi*. Nobel Yayınevi.

- Kardaş, F., & Yalcin, I. (2018). An Adaptation Study of the Balanced Measure of Psychological Needs (BMPN) Scale to Turkish Culture. *Çukurova University Faculty of Education Journal*, 47(2), 357-383. <http://dergipark.gov.tr/cuefd>
- Klehe, U. C., Fasbender, U., & van der Horst, A. (2021). Going full circle: Integrating research on career adaptation and proactivity. *Journal of Vocational Behavior*, 126, 103526. <https://doi.org/10.1016/j.jvb.2020.103526>
- Kline, R. B. (2005). *Principles and practice of structural equation modeling*. Guilford Press.
- Korkmaz, O., Kırdök, O., Alkal, A., & Akça, M. Ş. (2020). Kariyer adanmışlık ölçeği: Proaktif kariyer davranışlarının ölçümünün geçerlik ve güvenirlik çalışması. *International Social Sciences Studies Journal*, 72(6), 4668-4677. <https://doi.org/10.26449/sssj.2570>
- Kuzgun, Y. (2014). *Meslek gelişimi ve danışmanlığı*. Nobel Yayınevi.
- Lin, S. H., Wu, C. H., & Chen, L. H. (2015). Unpacking the role of self-esteem in career uncertainty: A self-determination perspective. *The Journal of Positive Psychology*, 10(3), 231-239. <https://doi.org/10.1080/17439760.2014.950178>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705-717. <https://psycnet.apa.org/doi/10.1037/0003-066X.57.9.705>
- Maggiori, C., Rossier, J., & Savickas, M. L. (2017). Career Adapt-Abilities Scale-Short Form (CAASSF): Construction and validation. *Journal of Career Assessment*, 25, 312-325. <https://doi.org/10.1177/1069072714565856>
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57(3), 519-530. <https://www.jstor.org/stable/2334770>
- Meyers, M. C. (2020). The neglected role of talent proactivity: Integrating proactive behavior into talent-management theorizing. *Human Resource Management Review*, 30(2), 100703. <https://doi.org/10.1016/j.hrmr.2019.100703>
- Nilforooshan, P., & Salimi, S. (2016). Career adaptability as a mediator between personality and career engagement. *Journal of Vocational Behavior*, 94, 1-10. <https://doi.org/10.1016/j.jvb.2016.02.010>
- Olafsen, A. H., & Deci, E. L. (2020). Self-determination theory and its relation to organizations, in *Oxford research encyclopedia of psychology*, ed. O. Braddick (Oxford University Press). <https://doi.org/10.1093/acrefore/9780190236557.013.112>
- Park, Y., Lee, J. G., Jeong, H. J., Lim, M. S., & Oh, M. R. (2022). How does the protean career attitude influence external employability? The roles of career resilience and proactive career behavior. *Industrial and Commercial Training*, 54(2), 317-332. <https://doi.org/10.1108/ICT-06-2021-0045>
- Parker, S. K., & Liao, J. (2016). Wise proactivity: How to be proactive and wise in building your career. *Organizational Dynamics*, 45(3), 217-227. <http://dx.doi.org/10.1016/j.orgdyn.2016.07.007>
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827-856. <https://doi.org/10.1177/0149206310363732>

- Peng, P., Song, Y., & Yu, G. (2021). Cultivating proactive career behavior: The role of career adaptability and job embeddedness. *Hypothesis and Theory*, 12, 1-16. <https://doi.org/10.3389/fpsyg.2021.603890>
- Pesch, K. M., Larson, L. M., & Seipel, M. T. (2018). Career decision-making within the college social microcosm: Social value determinants and psychological needs. *Journal of Career Assessment*, 26(2), 291-307. <https://doi.org/10.1177/1069072717692767>
- Preacher, K. J., & Hayes, A. F. (2008). *Assessing mediation in communication research* (pp. 13–54). The Sage sourcebook of advanced data analysis methods for communication research.
- Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior*, 98, 17–34. <https://doi.org/10.1016/j.jvb.2016.09.002>
- Ryan R. M., & Deci E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In Deci E. L., Ryan R. M. (Eds.), *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2003). On assimilating identities to the self: A self-determination theory perspective on internalization and integrity within cultures. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity*. (pp. 253–272). The Guilford Press.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: basic psychological needs in motivation, development, and wellness*. Guilford Publications. <https://doi.org/10.1521/978.14625/28806>
- Şahin, E. E., & Gülşen, F. U. (2022). The mediating role of self-leadership in the relationship between basic psychological needs satisfaction, academic self-efficacy and career adaptability of Turkish undergraduates when life satisfaction is controlled. *Personality and Individual Differences*, 195, 111709. <https://doi.org/10.1016/j.paid.2022.111709>
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown, & R. W. Lent (Eds.), *Career development and counseling: putting theory and research to work* (pp. 42-70). Wiley.
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80, 661–673. <https://doi.org/10.1016/j.jvb.2012.01.011>.
- Shahbaz M. M. (2016). *Academia-industry linkages gap analysis survey*. Career Advisory and Assessment Services.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving, need satisfaction, and longitudinal well-being: the self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482-497. <https://psycnet.apa.org/doi/10.1037/0022-3514.76.3.482>
- Sheldon, K. M., & Hilpert, J. C. (2012). The balanced measure of psychological needs (BMPN) scale: An alternative domain general measure of need satisfaction. *Motivation and Emotion*, 36(4), 439-451.
- Smale, A., Bagdadli, S., Cotton, R., Dello Russo, S., Dickmann, M., Dysvik, A., ... & Unite, J. (2019). Proactive career behaviors and subjective career success: The moderating role of national culture. *Journal of Organizational Behavior*, 40(1), 105-122. <https://doi.org/10.1002/job.2316>

- Spurk, D., Volmer, J., Orth, M., & Göritz, A. S. (2020). How do career adaptability and proactive career behaviors interrelate over time? An inter-and intraindividual investigation. *Journal of Occupational and Organizational Psychology*, 93(1), 158-186. <https://doi.org/10.1111/joop.12288>
- Strauss, K., & Parker, S. K. (2014). Effective and sustained proactivity in the workplace: A self-determination theory perspective. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and selfdetermination theory* (pp. 50–71). Oxford University Press.
- Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology*, 97(3), 580–598. <https://doi.org/10.1037/a0026423>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics*(7<sup>th</sup>. Ed.). Pearson.
- Taber, B. J., & Blankemeyer, M. (2015). Future work self and career adaptability in the prediction of proactive career behaviors. *Journal of Vocational Behavior*, 86, 20-27. <https://doi.org/10.1016/j.jvb.2014.10.005>
- Tang, M. (2003). Career counseling in the future: Constructing, collaborating, advocating. *The Career Development Quarterly*, 52(1), 61-69. <https://doi.org/10.1002/j.2161-0045.2003.tb00628.x>
- Urbanaviciute, I., Pociute, B., Kairys, A., & Liniauskaite, A. (2016). Perceived career barriers and vocational outcomes among university undergraduates: Exploring mediation and moderation effects. *Journal of Vocational Behavior*, 92, 12–21. <https://doi.org/10.1016/j.jvb.2015.11.001>
- Valls, V., González-Romá, V., Hernandez, A., & Rocabert, E. (2020). Proactive personality and early employment outcomes: The mediating role of career planning and the moderator role of core self-evaluations. *Journal of Vocational Behavior*, 119, 103424. <https://doi.org/10.1016/j.jvb.2020.103424>
- Wong, S. C., Mohd Rasdi, R., Abu Samah, B., & Abdul Wahat, N. W. (2017). Promoting protean career through employability culture and mentoring: Career strategies as moderator. *European Journal of Training and Development*, 41(3), 277-302. <http://dx.doi.org/10.1108/EJTD-08-2016-0060>
- Yu, K. Y. T., & Davis, H. M. (2016). Autonomy's impact on newcomer proactive behavior and socialization: A needs–Supplies fit perspective. *Journal of Occupational and Organizational Psychology*, 89(1), 172–197. <https://doi.org/10.1111/joop.12116>
- Zhao, B., and Han, P. (2016). Research on dual-pathway generating mechanism of employees' proactive innovation behavior based on grounded theory. *Chinese Journal Management*, 13, 1003–1011. <https://doi.org/10.3969/j.issn.1672-884x.2016.07.007>

## Geniřletilmiş Özet

### 1. Giriř

21. yüzyıl alıřma dünyasındaki yapılanmaya baėlı olarak üniversiteden sonra iře bařlama süreci giderek karmařık ve zor bir hale gelmiř, istihdam ve iřsizlik oranları artmıřtır (Park ve diėerleri, 2022). Bu baėlamda arařtırmacılar, okuldan iřgücü piyasasına geiřte öėrenciler için önemli olabilecek özellikleri belirlemeye yönelik son dönemlerde çoka arařtırmalar yapmaya bařlamıřlardır (Doėanölkü, 2024; Gerek, 2024; Healy ve diėerleri, 2022). Bu noktada proaktif kariyer davranıřları öne ıkan kaynakların bařında gelmektedir. ünkü proaktif kariyer davranıřlarının mezunların iř bulma ihtimalini arttıran ve alıřma yařantısına geiři kolaylařtıran davranıřlar olduėu vurgulanmaktadır (Valls ve diėerleri, 2020).

Proaktif kariyer davranıřları, bireylerin eřitli davranıřlar yoluyla kariyerlerini aktif olarak geliřtirmelerini ifade etmektedir (Hirschi ve diėerleri, 2014). Bu tür özel davranıřlar kariyer planlama sürecine dahil olmayı, aė oluřturmayı, beceri geliřtirmeyi, kariyer danıřmanlıėı almayı veya kariyer arařtırma faaliyetlerini ierir (Guan ve diėerleri, 2017; Strauss ve diėerleri, 2012; Taber & Blankemeyer, 2015). Bu davranıřlar bireylerin kariyer sonuçlarının yönünü daha fazla benimsemelerine, kariyer zorlukları ve riskleri arasında daha bařarılı bir řekilde hareket etmelerine yardımcı olan davranıřları iermektedir (Jackson & Tomlinson, 2019). Proaktif kariyer davranıřları aynı zamanda kariyer bařarisının da güçlü bir göstergesidir (Smale ve diėerleri, 2019). Hem iř hayatına geiři kolaylařtırması ve istihdam edilebilirliėi arttırması hem de kariyer bařarisına olumlu eskisinden dolayı proaktif kariyer davranıřları ile ilgili literatürün geliřtirilmesi ve proaktif kariyer davranıřları ile iliřkili öncül deėiřkenlerin belirlenmesi gerektiėi vurgulanmaktadır (Peng ve diėerleri, 2021; Spurk ve diėerleri, 2020).

Kariyer danıřmanlıėı alanı 21. yüzyılın bařından itibaren bireylerin psikolojik ihtiyalarına yönelmeye bařlamıřtır (Tang, 2003). Psikolojik ihtiyaların kariyer süreçleri üzerindeki potansiyel etkisini gösteren bir görüř geliřmeye bařlamıřtır. Nitekim Kuzgun (2014) da mesleki faaliyetlerin psikolojik ihtiyalarla iliřkili olduėunu belirtmektedir. Psikolojik ihtiyalar göz önüne alındıėında ise Deci ve Ryan (1985) tarafından geliřtirilen Öz Belirleme Kuramı önemli bir bakıř aısı sunar. Öz Belirleme Kuramı, özerklik, iliřki ve yetkinlik olmak üzere üç temel psikolojik ihtiyaın olduėunu vurgulamaktadır (Deci & Ryan, 2008). Özerklik ihtiyacı, bireylerin seimlerini kendisinin yapmasını ve davranıřları bařlatma iradesini göstermesidir. Yetkinlik ihtiyacı, bireylerin yaptıkları veya yapacakları faaliyetlerde kendilerini muktedir görmesidir. İliřki ihtiyacı ise bireyin insanlar ile doyum saėlayıcı iliřkilere olan ihtiyaını yansıtır (Deci & Ryan, 2000; Ryan & Deci, 2017). Öz Belirleme Kuramı bireylerin doėası gereėi proaktif eėilimde olduklarını vurgular (Deci & Vansteenkiste, 2004). Ancak bu proaktif eėilimin gerekleřmesinin temel psikolojik ihtiyaların karřılanması ile iliřkili olduėu belirtilir (Deci & Ryan, 2000, Deci & Ryan, 2008). Dolayısıyla Öz Belirleme Kuramı doėrultusunda psikolojik ihtiyaların tatmin düzeyi bireylerin proaktif kariyer davranıřları ile iliřkili olabilir.

Diėer yandan birok arařtırmacı, proaktif kariyer davranıřlar ile kariyer uyum yeteneklerindeki bireysel farklılıkların pozitif yönde iliřkili olduėunu varsaymaktadır (Guan ve diėerleri, 2015; Nilforooshan & Salimi, 2016; Taber & Blankemeyer, 2015). Bu konudaki temel varsayım, proaktif kariyer davranıřlarının, kariyer uyum yeteneklerinin daha genel bir psiko-sosyal kaynaėına özėü tepkiler olarak görülebileceėi ve dolayısıyla proaktif kariyer davranıřlarının, kariyer uyum yeteneklerinin doėrudan bir sonucu olarak kabul edildiėidir (Hirschi ve diėerleri, 2015). Bu baėlamda kariyer uyum yeteneklerinin proaktif davranıřları yönlendirdiėi ve stratejileri řekillendirdiėi varsayılmaktadır (Nilforooshan & Salimi, 2016). Kariyer uyum yetenekleri aynı zamanda proaktif

davranışları tetikleyen ve kişinin kariyerini oluşturma sorumluluğunu üstlenen kişisel müdahaleyi de vurgular (Urbanaviciute ve diğerleri, 2016). Kısacası proaktif kariyer davranışları uyumun göstergeleri olarak kavramsallaştırılmaktadır çünkü insanlar bu davranışları kariyer görevlerini yerine getirmek, iş ve kariyer koşullarını değiştirmek için kullanırlar (Guan ve diğerleri, 2017; Hirschi ve diğerleri, 2015).

Kariyer uyum yetenekleri proaktif kariyer davranışları üzerinde etkili olmakla birlikte bireylerin kariyer uyum yetenekleri psikolojik ihtiyaçlarından da etkilenmektedir. Üniversite öğrencilerinin kariyer uyum yeteneklerinin değerlendirilmesinde psikolojik ihtiyaçlarının ne ölçüde karşılandığı da önemli bir kriter olarak kabul edilmektedir (Şahin ve Gülşen, 2022). Kariyer uyum yetenekleri, bireylerin mevcut ve beklenen kariyer geçişlerini başarılı bir şekilde yönetmelerine yardımcı olan bir kaynaktır (Savickas, 2005). Bu kaynaklar bireyin temel özellikleri değildir; daha çok psikososyaldirler çünkü insanlarla çevre arasında bir buluşma noktası olarak var olurlar (Dike, 2015). Dolayısıyla kariyer uyum yeteneklerinin bireyler ile yaşadıkları çevre arasındaki etkileşimi vurguladığı açıktır (Chen ve diğerleri, 2020). Başka bir deyişle, birey ile çevre arasındaki etkileşimin sonucu olan kariyer uyum yeteneklerinin etkilenebilir ve geliştirilebilir olduğu vurgulanmaktadır (Chen ve diğerleri, 2020). Bu bakımdan psikolojik ihtiyaçların tatmini kariyer uyum yetenekleri üzerinde etkili olabilir; çünkü bireylerin içinde bulundukları çevreyle kaliteli bir birlikteliği psikolojik ihtiyaçlarının tatminine yardımcı olur (Deci & Ryan, 2000; Ryan & Deci, 2003). Psikolojik ihtiyaçların tatmini önemli bir bireysel güç kaynağıdır (Ryan & Deci, 2003). Eğitim ortamları bağlamındaki kanıtlar, lisans öğrencilerinin temel psikolojik ihtiyaçları karşılandığında başarı olasılığının arttığını göstermiştir (Chacón-Cuberos ve diğerleri, 2021). Araştırmalar, psikolojik ihtiyaçların karşılanmasının lisans öğrencilerinin kariyer süreçleri üzerinde etkili olduğunu göstermiştir (Pesch ve diğerleri, 2018). Nitekim Şahin ve Gülşen (2022) lisans öğrencileriyle yaptıkları çalışmada psikolojik ihtiyaçların kariyer uyum yeteneklerini yordadığını bulmuşlardır. Kuramsal çerçeve ve geçmiş araştırmalar ışığında kariyer uyum yeteneklerinin bireylerin psikolojik ihtiyaçlarından beslenebilen bir yapı olduğu, proaktif kariyer davranışlarını ise besleyebilen psikososyal yapıları içerdiği görülmektedir. Dolayısıyla psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasındaki ilişkide kariyer uyum yeteneklerinin aracı rol oynayabilir. İfade edilenler bağlamında bu araştırmanın temel amacı proaktif kariyer davranışları, kariyer uyum yetenekleri ve psikolojik ihtiyaçlar arasındaki ilişkileri incelemektir. Bu doğrultuda test edilmek üzere aşağıdaki hipotezler geliştirilmiştir:

H1: Psikolojik ihtiyaçlar proaktif kariyer davranışlarının anlamlı bir yordayıcısıdır.

H2: Kariyer uyum yetenekleri, psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasındaki ilişkide anlamlı bir aracı role sahiptir.

## 2. Yöntem

Bu çalışmanın katılımcıları Türkiye'nin Doğu Akdeniz bölgesinde yer alan bir üniversitenin Eğitim Fakültesi'nde öğrenim gören üniversite öğrencileridir. Veriler 2021-2022 eğitim-öğretim yılı bahar döneminde uygun örnekleme yöntemi kullanılarak toplanmıştır. Araştırmaya 242'si kadın (%63,2) ve 141'i erkek (%36,8) olmak üzere toplam 383 öğrenci katılmıştır. Katılımcıların yaş ortalaması 21,66 (SS= 3,4) olup yaş aralıkları 18 ile 29 arasında değişmektedir. Veri toplama araçları olarak Psikolojik İhtiyaç Doyumunda Denge Ölçeği, Kariyer Uyum Yetenekleri Ölçeği-Kısa Form ve Kariyer Adanmışlık Ölçeği kullanılmıştır. Veriler araştırmaya katılmayı kabul eden üniversite öğrencilerinden toplanmıştır. Katılımcıların tümü bilgilendirilmiş onamlarını vermiştir. Çalışmanın verisi kalem-kağıt kullanılarak toplanmıştır. Araştırmacı veri toplama araçlarını uygulamak için katılımcıları sınıflarında ziyaret etmiştir. Veri toplama araçlarının doldurulması katılımcılar için yaklaşık 10 dakika sürmüş olup herhangi bir kişisel bilgi toplanmamıştır. Çalışma, Helsinki Bildirgesi'nin ilkelerini takip etmiştir ve Bursa



Uludağ Üniversitesi tarafından 25 Şubat 2022 tarihinde 38 sayılı karar ile verilen etik kurul iznine sahiptir.

Psikolojik ihtiyaçlar, kariyer uyum yetenekleri ve proaktif kariyer davranışları arasındaki ilişkileri analiz etmek için Pearson korelasyon katsayısı analizi kullanılmıştır. Psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasındaki ilişkide kariyer uyum yeteneklerinin aracılık rolünü değerlendirmek için maksimum olasılık tahminini kullanan bir yapısal eşitlik modeli uygulanmıştır. Psikolojik ihtiyaçlar yordayıcı, kariyer uyum yetenekleri aracı, proaktif kariyer davranışları ise yordanan değişken olarak modele dahil edilmiştir.

### 3. Bulgular

Proaktif kariyer davranışlarının tüm psikolojik ihtiyaçlarla [ilişki ( $r = 0,32$ ,  $p < .01$ ), yetkinlik ( $r = 0,48$ ,  $p < .01$ ), özerklik ( $r = 0,37$ ,  $p < .01$ )] ile pozitif yönde ilişkili olduğu bulunmuştur. Benzer şekilde kariyer uyum yeteneklerinin de tüm psikolojik ihtiyaçlarla [ilişki ( $r = 0,39$ ,  $p < .01$ ), yetkinlik ( $r = 0,54$ ,  $p < .01$ ), özerklik ( $r = 0,46$ ,  $p < .01$ )] ile pozitif yönde ilişkili olduğu bulgusu elde edilmiştir. Ayrıca kariyer uyum yetenekleri ile proaktif kariyer davranışları arasında pozitif bir ilişki bulunmuştur ( $r = .69$ ,  $p < .01$ ). Yapısal eşitlik modellemesi kullanılarak yapılan analizde ise proaktif kariyer davranışları ile psikolojik ihtiyaçlar arasındaki yol katsayısı anlamlı olduğu gözlenmiştir ( $\beta = .60$ ,  $p < .001$ ). Psikolojik ihtiyaçlar ve kariyer uyum yetenekleri ( $\beta = .72$ ,  $p < .001$ ) ile kariyer uyum yetenekleri ve proaktif kariyer davranışları ( $\beta = .73$ ,  $p < .001$ ) arasındaki yol katsayıları da istatistiksel olarak anlamlı bulunmuştur. Psikolojik ihtiyaçlar ve kariyer uyum yetenekleri, proaktif kariyer davranışlarındaki varyansın %62'sini açıklamıştır.

Proaktif kariyer davranışları ile psikolojik ihtiyaçlar arasındaki ilişkide kariyer uyum yeteneklerinin aracı rolünün önemini test etmek için yapılan önyüklemeye analizi sonucunda psikolojik ihtiyaçların kariyer uyum yetenekleri aracılığıyla proaktif kariyer davranışları üzerindeki dolaylı etkisi anlamlı bulunmuştur ( $\beta = .52$ ,  $p < .001$ ; CI [.35, .74]). Psikolojik ihtiyaçların proaktif kariyer davranışları üzerindeki doğrudan etkisi ise anlamlı bulunmamıştır ( $\beta = .08$ ,  $p > .05$ ). Dolayısıyla kariyer uyum yetenekleri, psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasında tam aracı roldedir.

### 4. Sonuç ve Öneriler

Bu çalışmada, üniversite öğrencilerinin proaktif kariyer davranışları, psikolojik ihtiyaçları ve kariyer uyum yetenekleri arasındaki ilişki araştırılmıştır. Araştırmada proaktif kariyer davranışlarının psikolojik ihtiyaçlar ve kariyer uyum yetenekleriyle ilişkili olduğu sonucuna ulaşılmıştır. Ayrıca psikolojik ihtiyaçlar ile proaktif kariyer davranışları arasındaki ilişkide kariyer uyum yeteneklerinin tam aracılık rolüne sahip olduğu araştırmada ulaşılan bir diğer sonuçtur. Ulaşılan bulgular, proaktif davranışlar literatürünü geliştirerek, üniversite öğrencilerinin başarılı bir şekilde iş hayatına geçiş ve kariyer gelişim süreçlerine olumlu etki sağlayabilecek teorik ve pratik uygulamalara yönelik yol gösterici sonuçlar sunmuştur.

Mevcut çalışmanın tasarımı itibarıyla gelecekte yapılabilecek başka dikkat çekici bazı çalışmalar için fırsatlar sağlayacağına inanılmaktadır. Öncelikle bu çalışma kesitsel niteliktedir. Bu nedenle nedensel çıkarımlar için gerçekçi görüşler sağlayamayabilir. Bu sınırlamanın üstesinden gelmek için araştırmacılar konuya yönelik boylamsal çalışma tasarımlarından yararlanabilirler. Ayrıca psikolojik ihtiyaçları besleyici ve kariyer uyum yeteneklerini arttırmaya yönelik deneysel çalışmalar tasarlanabilir ve böylece bu alanlardaki gelişimin bireylerin proaktif kariyer davranışları üzerindeki etkisi test edilebilir.

Bu çalışmada teorik olarak Öz Belirleme Kuramı (Deci & Ryan, 1985) prensiplerinden yararlanılmıştır. Ancak literatürde kariyer gelişim süreçlerine yönelik pek çok teori yer almaktadır (Hollanda'nın Teorisi, Sosyal Bilişsel Kariyer Teorisi gibi). Dolayısıyla farklı teorik temellerden destek alınarak bu değişkenler arasındaki ilişkiler incelenebilir ve teorik zenginlik sağlanabilir. Bu sayede bireylerin kariyer geçiş süreçleri hakkında daha zengin ve aydınlatıcı bilgiler elde edilebilir. Bu araştırmada proaktif kariyer davranışları ile psikolojik ihtiyaçlar arasındaki ilişkide kariyer uyum yeteneklerinin aracılık rolü araştırılmıştır. Psikolojik ihtiyaçlar ile kariyer davranışları arasındaki ilişkide aracı ve düzenleyici olabilecek farklı değişkenlerin belirlenmesine yönelik çalışmaların yapılması da ayrıca önerilmektedir.

#### **Yayın Etiği Beyanı**

Bu araştırmanın, Bursa Uludağ Üniversitesi Araştırma ve Yayın Etik Kurulları tarafından 25 Şubat 2022 tarihinde yapılan 2022-02 sayılı oturumda alınan 38 sayılı karar ile etik kurul izni bulunmaktadır. Bu araştırmanın planlanmasından, uygulanmasına, verilerin toplanmasından verilerin analizine kadar olan tüm süreçte “Yükseköğretim Kurumları Bilimsel Araştırma ve Yayın Etiği Yönergesi” kapsamında uyulması belirtilen tüm kurallara uyulmuştur. Yönergenin ikinci bölümü olan “Bilimsel Araştırma ve Yayın Etiğine Aykırı Eylemler” başlığı altında belirtilen eylemlerden hiçbirisi gerçekleştirilmemiştir. Bu araştırmanın yazım sürecinde bilimsel, etik ve alıntı kurallarına uyulmuş; toplanan veriler üzerinde herhangi bir tahrifat yapılmamıştır. Bu çalışma herhangi başka bir akademik yayın ortamına değerlendirme için gönderilmemiştir.

#### **Araştırmacıların Katkı Oranı Beyanı**

Bu araştırmada birinci yazar %60, ikinci yazar %40, oranında katkı sağlamıştır

#### **Çatışma Beyanı**

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