




## RESEARCH ARTICLE

# Investigation of the Mediator Role of Career Adapt-abilities in the Relationship Between Big Five Factor Personality Traits and Career Distress

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## ABSTRACT

Career distress is an important concept for understanding career in young adults. Revealing the variables associated with this concept has the potential to contribute to the reduction and prevention of career distress. The aim of this study, which was carried out in this direction, is to examine the mediating role of career adapt-abilities in the relationship between career distress and five-factor personality traits of university students. The research was conducted with 369 university students. Big Five Personality Traits Scale, Turkish five-factor short form of the Career Adapt-Abilities Scale and Career Distress Scale were used as data collection tools. Data analyzes were performed using Pearson correlation analysis and structural equation modeling method. The findings of the study showed that career adapt-abilities play a full mediator role in the relationship between career distress and extraversion, agreeableness, and conscientiousness personality traits. In addition, career adapt-abilities have a partial mediator role in the relations between career distress and neuroticism and openness to experience personality traits. The results of the study were deliberated upon, taking into account the theoretical framework and preceding research. Recommendations for both practitioners and researchers are proffered.

The process in which a student studies at university (i.e., higher education) contains many problems that students have to cope with. During this period, individuals may experience academic, emotional and behavioral problems such as exam anxiety, sleep problems, depression, loneliness, conflict with parents, procrastination of academic work, acquiring a profession, sexual problems, excessive alcohol use, and substance use (Dinis & Bragança, 2018; Fouad et al., 2006; Köksal ve Topkaya, 2021). Among these problem areas, career-related ones also have an important place (Gizir, 2005; Ulas-Kilic, 2021). In the literature examining the needs of university students for psychological counseling services, it was concluded that the students' need for support for their career development processes is frequent (Yerin-Guneri & Capa Aydin, 2010; 2012). Considering the important career needs and development tasks of this period, to know themselves better, to know about education and job opportunities, to have job search and interview skills, to be able to make career plans, to access the career information they need or to know the sources of support are among the highlights (Korkut-Owen, 2018; Ulas & Ozdemir, 2018). In addition to the efforts to fulfill these developmental tasks, university students have employment concerns about the future (Korkmazer, 2020). The efforts of young individuals to be aware of these expressed developmental needs, to meet them, and to fulfill various developmental tasks, as

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well as to experience employment concerns, can be a source of difficulties and career distress for them. Because career distress is significantly related to variables such as roles and duties related to vocational identity, as well as the perception of employability (Hirschi, 2011; Praskova et al., 2015; Skorikov & Vondracek, 2011).

Career distress can be defined as individuals having trouble making career decisions, avoiding career thoughts, or setting goals (Creed & Gagliardi, 2015). Career distress can affect university students in many ways. For example, research shows that career distress is associated with self-efficacy, career indecision, state and trait anxiety, and depression (Creed & Hood, 2013; Fuqua & Hartman, 1983; Hinkelman & Luzzo, 2007). In addition, career distress has a negative impact on people's future career choices and interpersonal relationships (Hinkelman & Luzzo, 2007; Lucas et al., 2000; Sharkin, 2004; Turner & Berry, 2000). Finally, career distress is associated with exploration, commitment, and career compromise (Creed & Blume, 2013; Creed & Gagliardi, 2015; Creed & Hennesy, 2016). The findings of the studies show that career distress can have a negative impact on both life and career field of individuals. For this reason, it can be said that it will be important to determine the relationships of the career distress.

Research on the career development of individuals; it includes obtaining and analyzing information about personal characteristics as well as on jobs, organizations, and occupational fields (Stumpf et al., 1983). In this context, besides the different variables related to the career, some basic personality traits of individuals can also be effective in their career processes. This situation has been considered in previous studies and the Five Factor Personality Model, which provides a perspective on personality traits, has provided an important framework in the predictive position in research on career processes (Nauta, 2007, Reed et al., 2004). On the other hand, some competencies related to the career field of individuals can also affect their career development processes (Savickas, 2005). In this context, career adaptability, which is an important competence, has the potential to serve as an important predictor variable in career processes (Savickas, 2005). In the light of literature information, addressing career distress in the context of personality traits and career adaptability can provide important contributions to the structuring of career development processes of university students.

### **Big Five Factor Personality Traits and Career Distress**

One of the important psychological factors affecting the career development of individuals is personality traits (Kayadibi & Kirdok, 2020). It is known that personality plays a decisive role in the decisions and choices of individuals (Yesilyaprak, 2011). Many different theories have been put forward about how personality is formed. However, it is stated that among these theories, the theory that researchers mostly refer to is the Five-Factor Model (or Big 5) (Thomas & Segal, 2006). Unlike many personality theories based on clinical experience, the Five-Factor Model is based on various individual characteristics and research findings on their functioning (McCrae, 2018). According to this approach put forward by Costa and McCrae (1992), personality traits have five dimensions. These personality constructs are extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Extraversion refers to the fact that individuals are energetic and thrill-seeking, as opposed to being solitary and stagnant. People with this trait are sociable, fun-loving, affectionate, friendly, caring, and talkative (Chauvin et al., 2007). Agreeableness refers to the individual being polite, adaptable, and modest, as opposed to being competitive. Individuals with this trait are also cooperative, forgiving, and tolerant individuals (Patrick, 2011). Conscientiousness is a trait that expresses being disciplined and meticulous as opposed to being messy and careless. Individuals with this trait are self-disciplined, cautious, planned, and organized (Arthur & Graziano, 1996). Neuroticism refers to states of emotional stability or volatility, and whether an individual is prone to emotional distress. It is stated that individuals with this trait experience rapid emotional transitions (Luthans, 2010). Openness to experience expresses a curious and inquisitive attitude as opposed to being traditional. Individuals with this trait are experienced, they are willing to dream and participate in new activities (Cervone & Pervin, 2018; Costa & McCrae, 1995; Digman, 1990).

It is emphasized that personality-environment interaction is also important for this approach (Caspi & Roberts, 2001). In other words, individuals show intellectual, emotional, and behavioral reactions towards the environment in line with their personality traits and receive reactions from the environment in this direction (Mottus, 2017). In this context, it can be expected that the personality traits of individuals will be effective in

their thoughts, feelings, and behaviors towards their career life. For example, a qualitative study conducted in Türkiye revealed that personal characteristics are the source of individuals' career distress (Özgül, 2023). The pushful and adaptive nature of extroverted individuals (Costa & McCrae, 1995; Digman, 1990) can be a source for finding solutions to the career barriers they encounter and may prevent them from experiencing career distress. On the other hand, these individuals are energetic and social (Cervone & Pervin, 2018; Chauvin et al., 2007). In their career life, where they cannot reveal these characteristics, they may experience problems and have career problems. Individuals with the agreeableness trait are prone to cooperation and can avoid potential career difficulties in terms of their ability to adapt to teamwork (Digman, 1990; Moody, 2007; Patrick, 2011), but being overly empathetic and sensitive is also a factor in career distress as it may delay the resolution of problems. Individuals with a strong sense of conscientiousness may not have career problems due to their strong self-discipline and sense of duty (Cervone & Pervin, 2018; Costa & McCrae, 1995), but their tendency to be overly meticulous, perfectionist, and orderly may cause them to have career problems due to their ability to delay the solution of problems (Cervone & Pervin, 2018; Costa & McCrae, 1995). Neurotic individuals may experience career distress due to lack of stability in their emotions and weakness in their ability to cope with stress (Coleman et al., 2023; Digman, 1990). Finally, individuals who are open to experience can prevent possible career difficulties in terms of their willingness to participate in new experiences and be open to learning (Presbitero, 2018). However, these individuals, who are curious, innovative, and creative, may experience career difficulties in career environments where they cannot exhibit these characteristics (Cervone & Pervin, 2018; Costa & McCrae, 1995; Digman, 1990). Therefore, it can be expected that the personality traits of individuals will affect individuals positively or negatively in the context of their career environment. In this direction, the following hypothesis has been developed to be tested:

H1: The five-factor personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness) are significant predictors of career distress.

### **Career Adapt-Abilities as a Mediator Variable**

The world of work has become an uncertain, borderless, global, and non-linear structure dominated by high variability (Jiang, 2017). In this unlimited and uncertain process, career adapt-abilities have become much more important for individuals to avoid career problems (Savickas et al., 2009). Because career adapt-abilities are the ability to adapt seamlessly to career challenges when career environments are uncertain (Zacher, 2014). Career adapt-abilities are a psychosocial resource that refers to the ability of individuals to adapt to professional development tasks, professional transitions, and personal traumas by solving often unusual and often complex problems (Savickas & Porfeli, 2012).

Career adapt-abilities were first suggested as four sub-dimensions in the relevant literature. These are concern, control, curiosity, and confidence (Savickas, 2005). Interest is the dimension that expresses orientation to the future, being planned, and being interested in the future. Control refers to self-determination, the individual's taking over the management of her/his life, and the individual's responsibility. Curiosity refers to being in the process of researching, exploring, and attempting to gain knowledge. Finally, confidence reflects the individual's belief in her/his own competencies in solving the problems and problems encountered (Savickas, 2005; Savickas & Porfeli, 2012). In recent years, it is seen that there are attempts to add cooperation as a culturally sensitive sub-dimension in addition to the four sub-dimensions (Korkmaz & Kirdok, 2023; Prasad et al., 2021). The fifth dimension, cooperation, reflects the degree of willingness to compromise and contribute to other people (Einarsdóttir et al., 2015).

These psychosocial adaptation resources (i.e., career adapt-abilities) are considered an important competence in overcoming the problems that individuals experience in their careers (Savickas, 1997). These competencies help the individual to be flexible and take a proactive attitude (Savickas et al., 2009). Thus, career adapt-abilities can be considered as a very important source of power for individuals to overcome the problems they will experience in their careers. In addition, the increase in career adapt-abilities was associated with a decrease in the stress level of individuals and an increase in the level of happiness (Johnston et al., 2013). Increased stress and decreased happiness can be a source of career distress. Therefore, it can be said that career adapt-abilities may be related to career distress due to the relationship between increased career adapt-abilities and increased happiness, and decreased stress.

It can be said that personality traits, which have been shown by studies to be effective in career processes, may also have an effect on career adapt-abilities. Personality traits are the most basic factors that affect individual characteristics such as career adapt-abilities (Armstrong et al., 2012; Li et al., 2014; Shane et al., 2010; Woo, 2018). As a matter of fact, it is seen that career adapt-abilities are related to personality traits. Studies have shown that extraversion, openness to experience, and conscientiousness personality traits are related to career adapt-abilities (e.g., Teixeira et al., 2012, van Vianen et al., 2012). Besides, Teixeira et al. (2012) found that career adapt-abilities were positively associated with agreeableness and negatively with neuroticism. Based on the research and literature information, it can be stated that career adapt-abilities may have predictive power on career distress and may also be affected by the personality traits of individuals. Considering this information, it can be argued that career adapt-abilities may have a mediating role in the relationship between personality traits and career distress. H2 was developed to test this argument.

H2: Career adapt-abilities have a mediating role in the relationship between the five-factor personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness) and career distress.

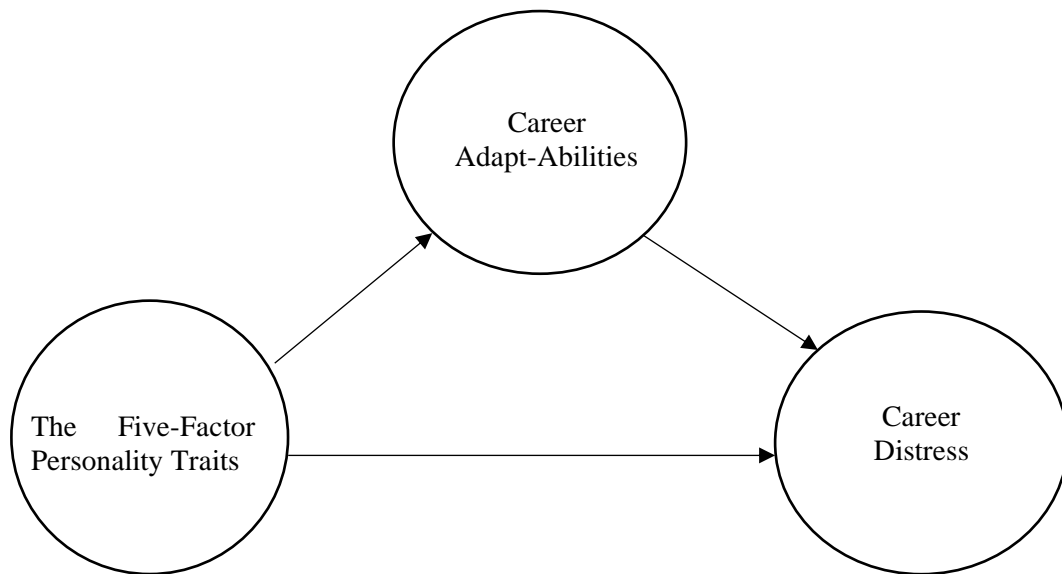
### **The Present Study**

It is claimed that career distress is an important construct for understanding career development in young adults. Despite this claim, it is emphasized that surprisingly few studies have been done about career distress and the relationship pattern of career distress is not yet fully understood (Creed et al., 2016). For example, an experimental study based on the Chaos Approach was conducted on university students in Türkiye (Özaydın & Siyez, 2023). In this study, the role of the developed program in reducing career distress was examined. Another study examined the mediating role of career distress in the relationship between career self-efficacy expectation and vocational outcome expectation of university students (Gürpınar et al., 2021). Another study is a qualitative study conducted by Özgül (2023) to reveal the underlying reasons for the career distress of university students. Career distress has begun to be addressed with different methods and concepts when the studies are examined in the relevant literature.

Career distress refers to a set of negative emotions related to a person's career, such as depression, stress, anxiety, and helplessness. In addition, career distress is a common cause of stress in educational settings, with up to 25% of students participating in campus counseling services experiencing it (Benton et al., 2003; Creed et al., 2016). Therefore, identifying the variables associated with career distress of young individuals will shed light on interventions to prevent this distress. Thus, the problems experienced by university students due to career distress can be prevented. This is one of the main motivations for conducting the current study.

It is widely believed that determining the relationship between individuals' stress factors and their careers can contribute to the career guidance process (Hanks, 2018). The results will be obtained in the current study have the potential to contribute to career guidance processes. Both individual and environmental factors are effective in the career development and career adapt-abilities of individuals (Krumboltz, 1996). Personality traits should be evaluated in the context of individual factors (Nauta & Derckx, 2007). On the other hand, career adapt-abilities are a psychosocial resource that is affected by the interaction of the individual with the environment (Chen et al., 2020). Therefore, in the current study, the career distress of university students was discussed from multiple perspectives in the context of both individual factors such as personality traits, and both individual and environmental factors such as career adapt-abilities. Thus, the relationship patterns of university students towards career distress will be evaluated in different contexts.

In this study, university students' career distress was examined within the framework of their personality traits and career adapt-abilities. The main purpose of the research is to examine whether career adapt-abilities have a mediating role in the relationship between the personality traits and career distress of university students. The hypothetical model developed for this purpose is presented in Figure 1.

**Figure 1.** Research Model

## Method

### The Participants

Participants of the study are 369 university students aged between 18-27 (Mean = 20.76, SD = 1.70). 41.5% (N = 153) of the participants were male and 58.5% (N = 216) were female. 14.9% (N = 55) of the participants perceive their socioeconomic level as low. In addition, 80.8% (N = 298) of these participants perceive it as moderate, and 4.3% (N = 16) as high.

### Measures

**Big Five Personality Traits Scale (BFPTS).** BFPTS was developed by Rammstedt and John (2007). It measures big five personality traits (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience). The scale, a 5-point Likert-type (1: Never to 5: Always), consists of five dimensions and 10 items. Each of the sub-dimensions reflects a personality trait. An increase in the scores obtained from the sub-dimensions means that the personality trait associated with that sub-dimension is higher. The Turkish version of the scale (Horzum et al., 2017) was used in the current study. The Cronbach Alpha internal consistency coefficients obtained for the sub-dimensions in the Turkish adaptation study are as follows: Extraversion is .88, Agreeableness is .81, Conscientiousness is .90, Neuroticism is .85, and Openness to experience is .84. The Cronbach Alpha internal consistency coefficients obtained for the sub-dimensions in this study are as follows: Extraversion is .80, Agreeableness is .74, Conscientiousness is .77, Neuroticism is .76, and Openness to experience is .79.

**Career Adapt-Abilities Scale (CAAS-5-SF).** Turkish five-factor short form of the Career Adapt-Abilities Scale (CAAS-5-SF) was developed by Korkmaz and Kirdok (2023). It measures individuals' career adapt-abilities (i.e., concern, control, curiosity, confidence, and cooperation). The scale, a 5-point Likert-type (1: Not strong to 5: Strongest), consists of five dimensions and 15 items. Sub-dimension and total scores of the scale can be calculated. Increasing total scores from CAAS-5-SF means that career adaptability is increasing. The Cronbach Alpha internal consistency coefficients obtained for the sub-dimensions and total score in the original form are as follows: Total score is .80, Concern is .75, Control is .60, Curiosity is .61, Confidence is .61, Cooperation is .73. The Cronbach Alpha internal consistency coefficient for the total score and sub-dimensions are as

follows: Total score is .85, Concern is .73, Control is .72, Curiosity is .74, Confidence is .76, Cooperation is .83.

**Career Distress Scale (CDS).** CDS was developed by Creed et al. (2016). It measures individuals' career-related distress. The scale, a 6-point Likert-type (1: Strongly disagree to 6: Strongly agree), consists of one dimension and nine items. An increase in total scores indicates an increase in the individual's career-related stress. The Turkish version of the scale (Sensoy & Siyez, 2019) was used in the current study. The Cronbach Alpha internal consistency coefficient obtained for the total score in the original form is .81. The Cronbach Alpha internal consistency coefficient for the total score of the CDS was calculated as .83.

### Data Analysis

First, it was seen that the skewness and kurtosis values of the variables used in the study were within the range of the criteria (between  $\pm 1.5$ ) considered (Table 1) (Tabachnick & Fidell, 2012). Descriptive statistics, and Pearson correlation coefficients were calculated. In addition, structural equation modeling was used to analyze the research model. In the analysis of the significance of the research model,  $\chi^2/df < 5$ ; CFI, GFI  $> .90$ ; RMSEA  $< .10$  criteria were considered (Tabachnick & Fidell, 2012). The bootstrapping method (10.000 resampling) was used to examine the mediating role. 'Confidence intervals not including 0 (zero)' was taken as a criterion in the examination of the significance of the mediating role (Hayes, 2013). Analyses of the study was carried out with IBM SPSS 28 and IBM AMOS 24.

### Ethical Approval

Information about the study was provided to all participants with an informed consent form. All the students who were the participants of the study declared that they participated in the study voluntarily. Within the scope of the study, the 1975 Helsinki Declaration and the ethical standards of the corresponding author's institution were followed. In addition, ethical approval was obtained from the corresponding author's institution (Social and Human Sciences Ethics Committee of Karamanoglu Mehmetbey University; Approval Date: 27.04.2023 Number of Committee Decision: 113-119).

### Findings

The descriptive statistics of the study's data are shown in Table 1.

**Table 1.** Descriptive Statistics of the Variables

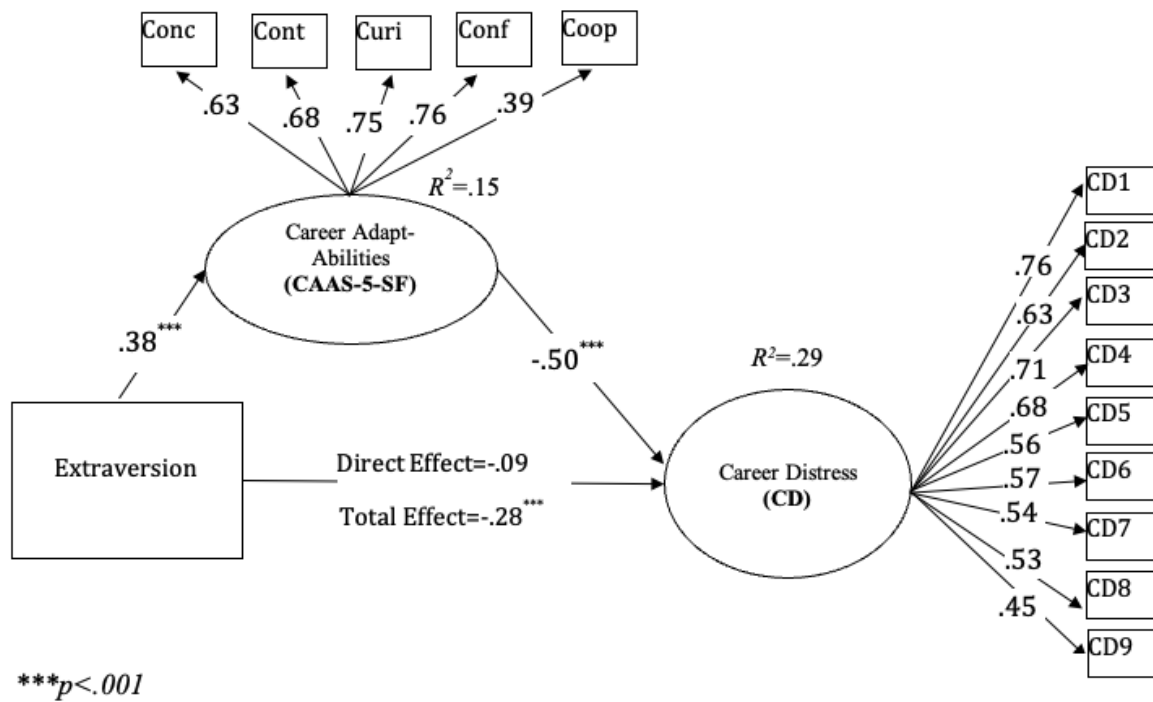
Variable	1	2	3	4	5	6	7
1. Extraversion	(.80)						
2. Agreeableness	.06	(.74)					
3. Conscientiousness	.34***	.23***	(.77)				
4. Neuroticism	-.18***	-.19***	-.26***	(.76)			
5. Openness to experience	.11*	.14**	.17**	-.15**	(.79)		
6. Career adapt-abilities	.36***	.27***	.45***	-.29***	.32***	(.85)	
7. Career distress	-.26***	-.13*	-.30***	.35***	-.10*	-.41***	(.83)
Mean	6.60	8.02	7.32	6.18	6.64	56.92	28.64
SD	1.86	1.37	1.56	1.74	1.65	7.33	8.20
Skewness	-.09	-.41	-.29	-.02	-.15	-.16	.07
Kurtosis	-.63	-.43	-.46	-.47	-.10	-.05	-.27

Note:  $N = 369$ . \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Reliabilities presented in diagonal.

As seen in Table 1, big five personality traits have significant relationships with career adaptability and career stress. Career adapt-abilities are positively associated with all personality traits except Neuroticism. It is negatively associated with Neuroticism. On the other hand, career distress is negatively associated with all personality traits except Neuroticism. It is positively associated with Neuroticism. There is a negative significant relationship between career adapt-abilities and career distress ( $r = -.41, p < .001$ ). Below are the

findings related to the structural equation models in which each personality trait takes place, respectively. First, the model with the Extraversion was tested, as seen in Figure 2.

**Figure 2.** Findings Regarding the Research Model



It is seen that the goodness of fit values of the research model shown in Figure 2 are within acceptable limits [ $\chi^2 = 230.210$ ,  $df = 87$ ,  $p < .001$ ,  $\chi^2/df = 2.65$ ;  $GFI = .921$ ;  $CFI = .916$ ;  $RMSEA = .067$  (90% CI = .056 to .077)]. As seen in Figure 2, Extraversion predicts the career adapt-abilities positively ( $\beta = .38$ ,  $p < .001$ ). In addition, it is seen that the direct effect of the Extraversion on the career distress was not significant. The indirect effect of the Extraversion on career distress is significant ( $\beta = -.19$ ,  $p < .001$ ). The findings show that career adapt-abilities have a full mediator role in the relationship between Extraversion and career distress. Confidence intervals of the direct and indirect effects of the variables show that this mediating role is significant (Table 2).

**Table 2.** Mediation Analysis Findings

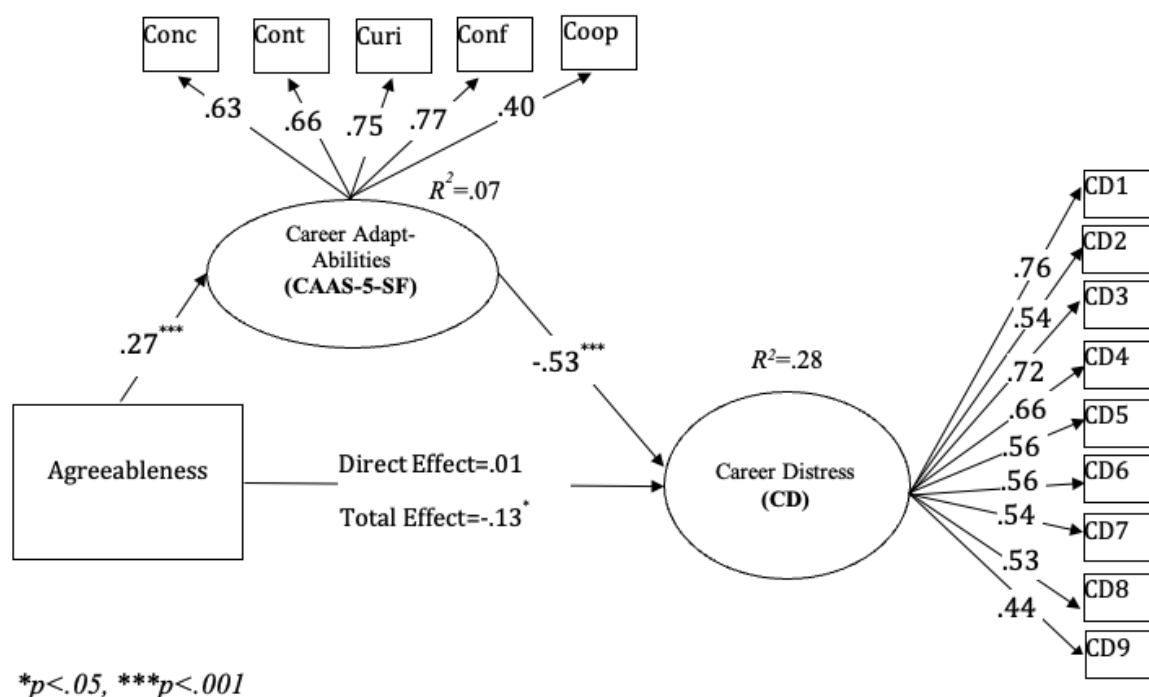
Pathway	Coefficient	CI Lower-bound	CI Upper-bound
<b>Total effect</b>			
Extraversion → CD	-.28***	-.39	-.16
<b>Direct effects</b>			
Extraversion → CD	-.09	-.21	.04
Extraversion → CAAS	.38***	.27	.49
CAAS → CD	-.50***	-.63	-.36
<b>Indirect effect</b>			
Extraversion → CAAS → CD	-.19***	-.28	-.12

\*\*\*p < .001; N = 369.

Note: CI: Confidence Interval Bias %95; CD: Career Distress; CAAS: Career Adapt-Abilities.

In Figure 3, the research model in which Agreeableness was included was tested.

**Figure 3.** Findings Regarding the Research Model



It is seen that the goodness of fit values of the research model shown in Figure 3 are within acceptable limits [ $\chi^2 = 246.364$ ,  $df = 87$ ,  $p < .001$ ,  $\chi^2/df = 2.83$ ;  $GFI = .916$ ;  $CFI = .901$ ;  $RMSEA = .071$  (90% CI = .060 to .081)]. As seen in Figure 3, Agreeableness predicts the career adapt-abilities positively ( $\beta = .27$ ,  $p < .001$ ). In addition, it is seen that the direct effect of the Agreeableness on the career distress was not significant. The indirect effect of the agreeableness on career distress is significant ( $\beta = -.14$ ,  $p < .001$ ). The findings show that career adapt-abilities have a full mediator role in the relationship between Agreeableness and career distress. Confidence intervals of the direct and indirect effects of the variables show that this mediating role is significant (Table 3).

**Table 3.** Mediation Analysis Findings

Pathway	Coefficient	CI Lower-bound	CI Upper-bound
<b>Total effect</b>			
Agreeableness → CD	-.13*	-.25	-.004
<b>Direct effects</b>			
Agreeableness → CD	.01	-.11	.13
Agreeableness → CAAS	.27***	.15	.38
CAAS → CD	-.53***	-.65	-.40
<b>Indirect effect</b>			
Agreeableness → CAAS → CD	-.14***	-.22	-.08

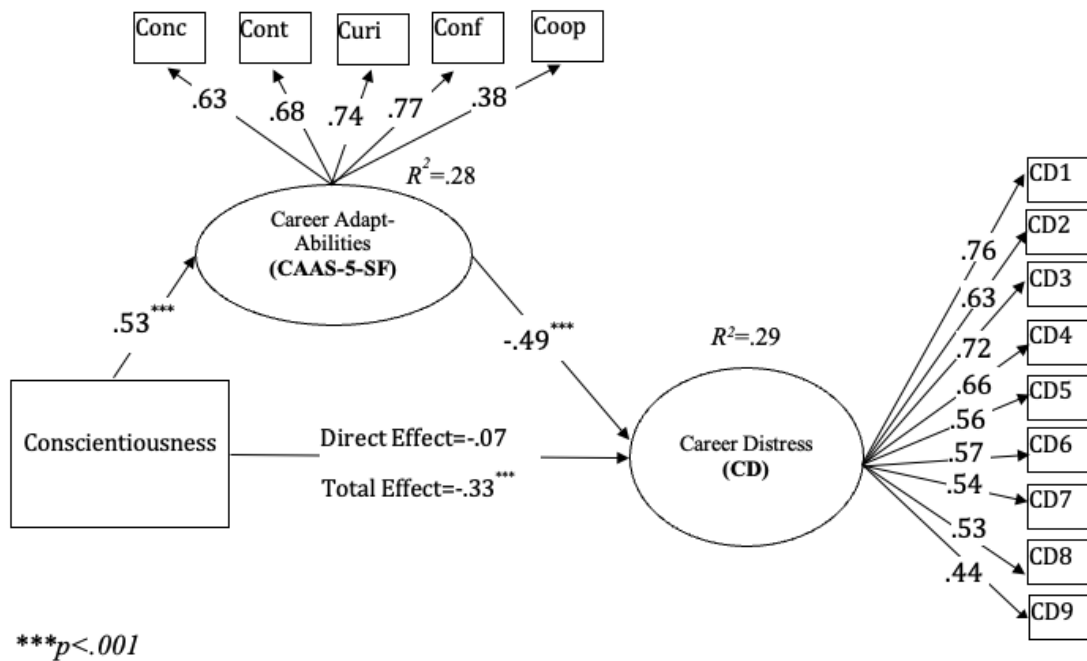
\* $p < .05$ ; \*\*\* $p < .001$ ;  $N = 369$ .

Note: CI: Confidence Interval Bias %95; CD: Career Distress; CAAS: Career Adapt-Abilities.

In Figure 3, the research model in which Conscientiousness was included was tested.



**Figure 4.** Findings Regarding the Research Model



It is seen that the goodness of fit values of the research model shown in Figure 4 are within acceptable limits [ $\chi^2 = 230.025$ ,  $df = 87$ ,  $p < .001$ ,  $\chi^2/df = 2.64$ ;  $GFI = .922$ ;  $CFI = .914$ ;  $RMSEA = .067$  (90% CI = .056 to .077)]. As seen in Figure 4, Conscientiousness predicts the career adapt-abilities positively ( $\beta = .53$ ,  $p < .001$ ). In addition, it is seen that the direct effect of the Conscientiousness on the career distress was not significant. The indirect effect of the Conscientiousness on career distress is significant ( $\beta = -.26$ ,  $p < .001$ ). The findings show that career adapt-abilities have a full mediator role in the relationship between Conscientiousness and career distress. Confidence intervals of the direct and indirect effects of the variables show that this mediating role is significant (Table 4).

**Table 4.** Mediation Analysis Findings

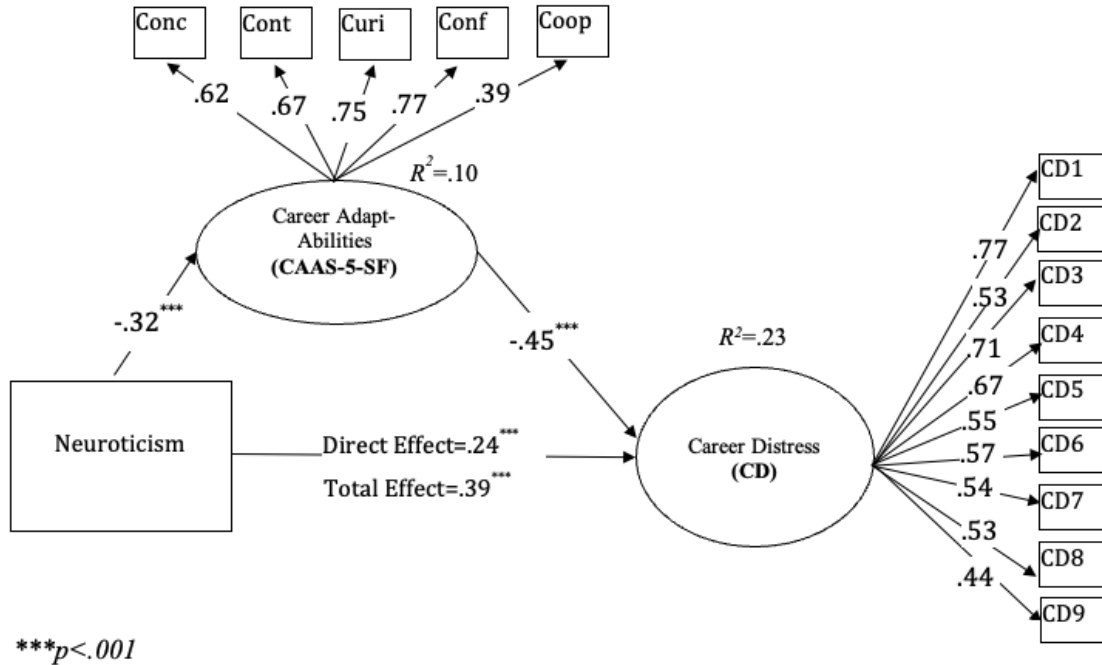
Pathway	Coefficient	CI Lower-bound	CI Upper-bound
<b>Total effect</b>			
Conscientiousness → CD	-.33***	-.45	-.21
<b>Direct effects</b>			
Conscientiousness → CD	-.07	-.23	.09
Conscientiousness → CAAS	.53***	.43	.61
CAAS → CD	-.49***	-.65	-.33
<b>Indirect effect</b>			
Conscientiousness → CAAS → CD	-.26***	-.37	-.17

\*\*\*  $p < .001$ ;  $N = 369$ .

Note: CI: Confidence Interval Bias %95; CD: Career Distress; CAAS: Career Adapt-Abilities.

In Figure 5, the research model in which Neuroticism was included was tested.

Figure 5. Findings Regarding the Research Model



It is seen that the goodness of fit values of the research model shown in Figure 5 are within acceptable limits [ $\chi^2 = 244.833$ ,  $df = 87$ ,  $p < .001$ ,  $\chi^2/df = 2.81$ ;  $GFI = .918$ ;  $CFI = .904$ ;  $RMSEA = .070$  (90% CI = .060 to .081)]. As seen in Figure 5, Neuroticism predicts the career adapt-abilities negatively ( $\beta = -.32$ ,  $p < .001$ ). In addition, it is seen that the direct effect of the Neuroticism on the career distress was significant ( $\beta = .24$ ,  $p < .001$ ). The indirect effect of the neuroticism on career distress is significant ( $\beta = .15$ ,  $p < .001$ ). The findings show that career adapt-abilities have a partial mediator role in the relationship between Neuroticism and career distress. Confidence intervals of the direct and indirect effects of the variables show that this mediating role is significant (Table 5).

Table 5. Mediation Analysis Findings

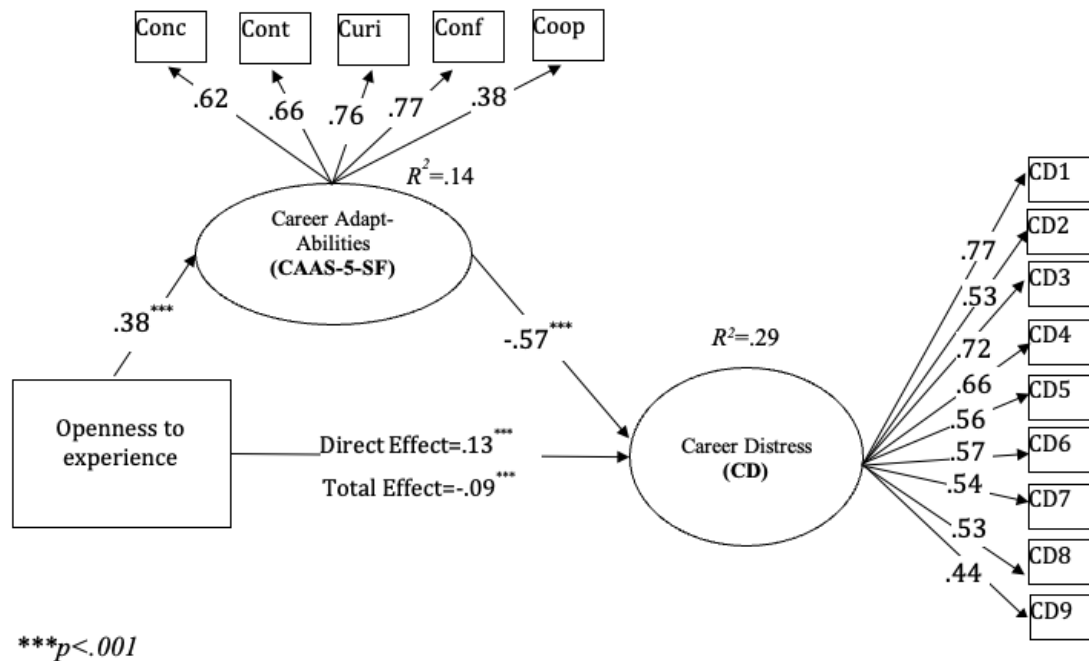
Pathway	Coefficient	CI Lower-bound	CI Upper-bound
<b>Total effect</b>			
Neuroticism → CD	.39***	.28	.49
<b>Direct effects</b>			
Neuroticism → CD	.24***	.13	.36
Neuroticism → CAAS	-.32***	-.42	-.22
CAAS → CD	-.45***	-.57	-.32
<b>Indirect effect</b>			
Neuroticism → CAAS → CD	.15***	.09	.22

\*\*\* $p < .001$ ;  $N = 369$ .

Note: CI: Confidence Interval Bias %95; CD: Career Distress; CAAS: Career Adapt-Abilities.

In Figure 6, the research model in which Openness to experience was included was tested.

**Figure 6.** Findings Regarding the Research Model



It is seen that the goodness of fit values of the research model shown in Figure 6 are within acceptable limits [ $\chi^2 = 220.942$ ,  $df = 87$ ,  $p < .001$ ,  $\chi^2/df = 2.54$ ;  $GFI = .923$ ;  $CFI = .917$ ;  $RMSEA = .065$  (90% CI = .054 to .075)]. As seen in Figure 6, Openness to experience predicts the career adapt-abilities positively ( $\beta = .38$ ,  $p < .001$ ). In addition, it is seen that the direct effect of the Openness to experience on the career distress was significant ( $\beta = .13$ ,  $p < .001$ ). The indirect effect of the Openness to experience on career distress is significant ( $\beta = -.22$ ,  $p < .001$ ). The findings show that career adapt-abilities have a partial mediator role in the relationship between Openness to experience and career distress. Confidence intervals of the direct and indirect effects of the variables show that this mediating role is significant (Table 6).

**Table 6.** Mediation Analysis Findings

Pathway	Coefficient	CI Lower-bound	CI Upper-bound
<b>Total effect</b>			
Openness to experience → CD	-.09***	-.21	-.02
<b>Direct effects</b>			
Openness to experience → CD	.13***	.01	.24
Openness to experience → CAAS	.38***	.27	.47
CAAS → CD	-.57***	-.69	-.44
<b>Indirect effect</b>			
Openness to experience → CAAS → CD	-.22***	-.30	-.15

\*\*\* $p < .001$ ;  $N = 369$ .

Note: CI: Confidence Interval Bias %95; CD: Career Distress; CAAS: Career Adapt-Abilities.

### Discussion and Conclusions

In the current study, the relationships between career distress, personality traits, and career adaptability of Turkish university students were examined. The results showed that career distress was predicted by all personality traits and career adapt-abilities in the five-factor model. In addition, it has been concluded that career adapt-abilities have a full mediator role between career distress and some personality traits and a partial

mediator role with some personality traits. The results are discussed based on with previous research and theoretical knowledge.

In the current study, it was concluded that extraversion, conscientiousness, and agreeableness personality traits do not have a direct effect on career distress, but they have an indirect effect on career distress through career adapt-abilities. On the other hand, openness to experience and neuroticism personality traits were found to positively predict career distress and career adapt-abilities had a partial mediator role in these relationships. Therefore, the hypotheses of the current study (H1, and H2) were confirmed. As a result, career adapt-abilities play a mediating role in the relationship between the five-factor personality traits and career distress.

Career adapt-abilities refer to fulfilling responsibilities, taking on necessary roles, and overcoming career-related uncertainties (Savickas, 1997). In addition, career adapt-abilities include important strategies in realizing career behaviors (Savickas & Porfeli, 2012; Savickas et al., 2018). Individuals with a high level of career adapt-abilities look for opportunities by observing the environment, evaluate themselves, make optimum choices, and have the power to dominate their environment (Creed et al., 2009). Savickas (1997) emphasizes that career adapt-abilities has a positive effect on individuals' ability to make future plans. In addition, an increase in career adapt-abilities was associated with a decrease in individuals' stress levels (Johnston et al., 2013; Raque et al., 2024). On the other hand, individuals' career distress is significantly related to stress, indecision, lack of planning, lack of knowledge of the individual and her/his environment, and lack of dominance (Creed & Hood, 2013; Fuqua & Hartman, 1983; Hinkelman & Luzzo, 2007; Ma et al., 2020). Consistent with the findings of the research, a study conducted in Türkiye (Gürpınar et al., 2021) found a negative relationship between career self-efficacy expectation, which expresses the cognitive resource similar to career adaptability skills, and career distress. Bandura (1977) also stated that cognitions can have an impact on negative emotions such as stress and anxiety. In another study (Korkmaz & Doğanülkü, 2022), it was found that university students' hope, optimism, and pessimism were negative predictors of career distress. Therefore, it can be said that the increase in career adapt-abilities will contribute to the reduction of career distress by activating the psychosocial competencies of university students.

One of the most striking findings of the research is that openness to experience has a positive effect on career distress. On the other hand, openness to experience has a negative effect on career distress through career adapt-abilities. When the relevant literature is examined, no research has been found that examines the relationship between openness to experience and career distress. Openness to experience personality trait has features such as a strong imagination, a willingness to be open to different ideas, versatile thinking and mental curiosity (Burger, 2014; Li et al., 2024). Individuals who are open to experience have a structure that is creative, curious, flexible, able to think original and free, open-minded, have an understanding of art and aesthetic values, and often see themselves away from the definite rules of society (Costa & McCrae, 1992). When the findings of the research are examined, it can be said that university students can reach more career options due to the use of personality traits such as the desire to be open to different ideas, sociable, versatile thinking, energetic, and excitement seeking. Therefore, university students will encounter troubles in making career decisions, avoiding career thoughts, or setting goals. On the other hand, the effect of openness to experience on career distress appears to be negative when career adapt-abilities, which includes important strategies in realizing career behaviors, are used together with the personality trait open to experience. This situation shows that career distress will decrease when the right career behavior strategies (i.e., career adapt-abilities) regarding the career options reached with openness to experience are used. Therefore, it can be said that career adapt-abilities reduce career distress in the individual by transforming the direct increasing effect of openness to experience on career stress. As a result, this finding may be related to the fact that career adapt-abilities include strategies that direct career-related behaviors.

Another finding obtained in the current study is that the neuroticism personality trait has a direct and indirect negative effect on career distress. A high level of neuroticism indicates that the individual is in negative emotions such as anxiety, depression, anger, and mood swings (Smiseth & Gillebert, 2023; Weisberg et al., 2011). Neurotic individuals lack the ability to adjust themselves positively to the situations they encounter (Brown & Hirschi, 2013). Due to the lack of ability to adjust to new situations, individuals may have troubles

in making career decisions, avoiding career thoughts, or setting goals in their careers. The meta-analysis study by Martincin and Stead (2015) supports this finding of the research. A positive relationship was found between troubles in career decision-making, which reflects career distress, and neuroticism. Therefore, it can be mentioned that there is an increasing career distress with the increasing neuroticism personality trait. On the other hand, predicting career distress through career adapt-abilities of neuroticism highlights career adapt-abilities as an important factor in reducing the positive effect of neuroticism on career distress. As a result, it can be said that neuroticism increases career distress in the individual and when career adaptability is included in this relationship, the positive effect of neuroticism on career distress may decrease somewhat.

In the current study, it was concluded that conscientiousness, extraversion, and agreeableness were not directly effective on career distress, but were predictive of career distress through career adapt-abilities. Conscientiousness, extraversion, and agreeableness can be considered positive and developer personality traits. In this context, it could be expected that these three personality traits would directly reduce career distress. However, the findings obtained within the scope of the research revealed that these three personality traits were not directly effective on career distress but were effective on career distress through career adapt-abilities. This result is valuable and important.

Conscientiousness refers to individuals being disciplined, meticulous, and duty conscious. Extraversion refers to the individual being sociable, social, and energetic (Cervone & Pervin, 2018; Costa & McCrae, 1995). Agreeableness means being prone to cooperation and being harmonious (Costa & McCrae, 1995; Digman, 1990; Moody, 2007). Individuals with high conscientiousness display an orderly and careful attitude rather than being messy (Cervone & Pervin, 2018; Costa & McCrae, 1995). Control, which is one of the dimensions of career adapt-abilities, reflects the consciousness and responsibility of the individual in decision-making, such as self-discipline (Savickas & Porfeli, 2012). Therefore, consciousness can be effective in reducing an individual's career distress by using the strategy that activates the personality trait in career adapt-abilities. Individuals with extroverted personality traits display a curious and inquisitive attitude depending on their sociability and pushful (Cervone & Pervin, 2018; Costa & McCrae, 1995). On the other hand, one of the important dimensions of career adapt-abilities is curiosity. This refers to the researcher and entrepreneurial attitude of the individual (Savickas & Porfeli, 2012). Accordingly, it can be said that extroverted personality trait can be effective in reducing career distress when used together with career adapt-abilities. Finally, the agreeable personality trait is adaptive and cooperative (Costa & McCrae, 1995; Digman, 1990; Moody, 2007). The dimension that has recently become one of the important dimensions of career adapt-abilities is cooperation (Einarsdóttir et al., 2015; Korkmaz & Kirdok, 2023; Prasad et al., 2021). Therefore, the agreeableness personality trait can be effective in reducing the difficulties experienced by the individual in the career field, together with the use of the cooperation sub-dimension of career adapt-abilities. Past research has revealed that there is a relationship between conscientiousness, extraversion, and agreeableness personality traits and career adapt-abilities (Ocampo et al., 2020; Teixeira et al., 2012, van Vianen et al., 2012; Yang et al., 2020). In addition, it has been revealed that career adapt-abilities is negatively related to career stress (Fiori et al., 2015). However, there is no research finding that these three personality traits are directly related to career distress. In conclusion, although conscientiousness, extraversion, and agreeableness personality traits do not directly contribute to reducing career distress, it can be said that the potential of these personality traits cannot be helped in reducing career distress without the assistance of a resource (i.e., career adapt-abilities). In other words, it can be said that the university students should use career adapt-abilities in order to reveal the effect of conscientiousness, extraversion, and agreeableness, which are positive personality traits, in reducing career distress.

In the current study, the relationship between five-factor personality traits and career distress was examined. In addition, the mediating role of career adapt-abilities in this relationship was tested. The result of the current study showed that the five-factor personality traits directly or indirectly affect career distress. It has been observed that career adapt-abilities reduce the negative effects of the five-factor personality traits, which are innate and relatively permanent characteristics of the individual. Therefore, it has been revealed that the role of career adapt-abilities is important in reducing the career distress that may arise from the personality traits of individuals.

There are some limitations in the current study that can be considered in future research. In addition, some recommendations for researchers and practitioners are presented. First, the current research was conducted with university students in Turkish culture. Culture is an effective factor in the career processes of individuals (Smale et al., 2019). In his research with a group of university students, Eskin (2013) revealed that individualistic tendencies may be more prominent than collectivist tendencies in Turkish society. In addition, it was determined that approximately 40% of the participants in the study had both collectivist and individualistic characteristics. In other words, although the collectivist structure in Turkish society has lost its influence, it continues to exist. Another study conducted in Türkiye found that individuals living in cities have more individualistic tendencies than those living in rural areas (Aycicegi-Dinn ve Caldwell-Harris, 2013). The fact that the data of the current study were collected from individuals living in urban areas may have been effective in making individual characteristics more prominent and collectivist characteristics remaining in the background. For this reason, it is recommended to repeat the research with individuals from different cultures. Secondly, the current research was designed in a cross-sectional. It should not be overlooked that it does not allow for causal inferences. Third, the current study was conducted with university students. The troubles faced by individuals who have not yet been involved in working life and the faced by individuals who have career distress of individuals in working life may differ. While the most important career problems for students who have not started working life are finding a suitable job and being employed, the prominent career problems of individuals in working life are not only maintaining their current employment, but also adapting to changing business conditions and maintaining their productivity (Creed & Ruth-Eva, 2015; Li et al., 2023; Liu et al., 2015; Urbanaviciute et al., 2020). Therefore, conducting similar studies with working individuals and comparing the results will add breadth to the literature.

It is recommended for researchers to carry out studies that include career adapt-abilities, as well as variables that may have other mediator or moderator roles, to clarify the relationship between personality traits and career distress. In the current study, the effect of the department of the students was ignored. Some occupations in Turkey have a more limited structure in terms of employment. This situation can be associated with career distress. Therefore, a similar study can be conducted in which the effect of the university student's department variables is also examined. On the other hand, there are some recommendations for practitioners. In particular, university career centers and psychological counseling units can carry out studies aimed at reducing the career distress of individuals by working to strengthen their career adapt-abilities for students who have career troubles. Thus, the effect of personality traits of individuals on possible career distress is reduced. The level of openness to experience and neuroticism personality traits of students who have career distress in the transition from university to work can be examined. It can be tested whether the career adapt-abilities are high in individuals with these personality traits. Individual or group studies of these individuals with low career adapt-abilities can help them prepare for working life by strengthening their career adapt-abilities.

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