

Pessimism, Defensive Pessimism, Avoidant Coping, and Career Indecision in High School Students: A Model Test

Hazel Duru^a

Abstract

High school years constitute one of the critical periods for individuals' career choice and career development. Based on this, it is essential to identify the factors that negatively affect students' career decisions and to intervene against them. This study aimed to contribute to the literature by testing a model that predicts pessimism, defensive pessimism, and avoidant coping to explain career indecision. 778 high school students (587 girls, 191 boys; Mage = 16.4 years, SD = .52) participated in this study, and students completed self-report measures of the above-mentioned constructs. The results showed that pessimism and career indecision were significantly related, with defensive pessimism and avoidant coping supporting a significant serial mediation model between pessimism and career indecision. These results provide substantial empirical evidence and recommendations that suggest promising ways to reduce career indecision in adolescents, pessimism, defensive pessimism, and avoidant coping.

Keywords: Pessimism, Defensive Pessimism, Avoidant Coping, Career Indecision

Lise Öğrencilerinde Karamsarlık, Savunmacı Kötümserlik, Kaçınmacı Başa Çıkma ve Kariyer Kararsızlığı: Bir Model Testi

Öz

Lise yılları, bireylerin meslek seçimi ve kariyer gelişimi için kritik dönemlerden birini oluşturmaktadır. Buradan hareketle öğrencilerin kariyer kararı vermelerini olumsuz etkileyen unsurların belirlenmesi ve bunlara yönelik müdahalelerde bulunulması son derece önemlidir. Bu çalışma, kötümserliğin, savunmacı kötümserliğin ve kaçınan başa çıkmanın, kariyer kararsızlığını açıkladığını ön gören bir modeli test ederek alan yazına katkıda bulunmayı amaçlamıştır. Bu çalışmaya, 778 lise öğrencisi (587 kız, 191 erkek; yaş ortalaması = 16.4, standart sapma=.52) katıldı ve öğrenciler yukarıda belirtilen yapıların öz bildirim ölçümlerini tamamladı. Sonuçlar, kötümserlik ve kariyer kararsızlığının anlamlı bir şekilde ilişkili olduğunu, savunmacı kötümserlik ve kaçınan başa çıkmanın, kötümserlik ve kariyer kararsızlığı arasında önemli bir seri aracılık modelinin desteklendiğini gösterdi. Bu sonuçlar, ergenlerde mesleki kararsızlığın azaltılmasında, kötümserlik, savunmacı kötümserlik ve kaçınan başa çıkmanın azaltılmasına yönelik umut verici yollar öneren önemli ampirik kanıtlar ve öneriler sunmaktadır.

Anahtar Kelimeler: Kötümserlik, Savunmacı Kötümserlik, Kaçınan Başa Çıkma, Kariyer Kararsızlığı

^a Asst. Prof, Uludağ University, Faculty of Education, Bursa, Türkiye. E-mail: hazelduru@uludag.edu.tr
ORCID: <https://orcid.org/0000-0002-1669-6407>

Citation: Duru, H. (2024). Pessimism, defensive pessimism, avoidant coping, and career indecision in high school students: A model test. *Istanbul Sabahattin Zaim University Journal of Education*, 6(2), 131-149.
<https://doi.org/10.46423/izujed.1496360>

Introduction

Since the last century, career indecision has been an essential issue in career development and career counseling literature (Hacker et al., 2013; Lipshits-Braziler et al., 2016). Undoubtedly, career decisions are essential in individuals' lives (Lancaster et al., 1999). Making a career decision is both a complex and stressful process, and many young people encounter difficulties in the career decision-making process (Amir & Gati, 2006). These difficulties may delay the process and lead to ineffective decisions (Gati et al., 1996). It is essential to understand the sources of career indecision so that counselors can provide more effective service and encourage them to deal with their client's problems more effectively (Brown & Rector, 2008; Germeijs & De Boeck, 2003). Today, the ever-changing and unpredictable business world has made career decision-making even more challenging (Savickas, 2013). These radical changes require individuals to have more skills and show behaviors compatible with their careers (Lent & Brown, 2013; Savickas, 2013). In addition, determining the factors affecting career indecision, which is critical in the career choice process, is valuable in knowing how to intervene. Piper (2022) stated that while positive variables related to career development (such as optimism) are frequently discussed, non-positive variables (such as pessimism) are rarely discussed, which is a negative situation. Studies have concluded that pessimism is more effective than optimism in improving individual well-being (Piper, 2022). Choosing a profession and a career in Turkey coincides with the high school years. 11th and 12th-grade high school students make their career decisions. In this context, it may be essential to identify non-positive factors affecting students' career choices and shape interventions accordingly. Based on all these, this study examines the role of pessimism, defensive pessimism, and avoidant coping styles in explaining high school students' career indecision.

Pessimism

Pessimism is a reflection of the individual's expectations that negative things will happen in his life and future (Chang, 2001). It is an attitude or characteristic through which one expresses one's distressed mood and misfortune. Pessimists think that the events they will experience will have negative consequences and approach life events cautiously (Prescott, 2012). Pessimism creates feelings of helplessness that cause individuals to focus intensely on the limitations they create for themselves while performing their tasks, and accordingly creates a spiral of anxiety that disturbs individuals (Hammontree & Ronan, 1992; Norem & Chang, 2002). Hope, optimism, and pessimism are variables related to individuals' career development (Ginevra et al., 2020). Since pessimism is associated with individuals' indecisiveness regarding their careers, it can prevent individuals from exhibiting proactive behavior (Braunstein-Bercovitz et al., 2012). When the literature on career development was examined, pessimism was evaluated as an emotional and personality-related factor that significantly affects career indecision (Saka et al., 2008). Pessimism is associated with lower career decision-making and school success (Patton et al., 2004). Adolescents with

high levels of pessimism have difficulty making positive educational and career plans (Ginevra et al., 2017). Saka et al. (2008) focused on the emotional and personality-related aspects of career decision-making problems and presented a model. In this model, three dimensions are considered: pessimistic views about career choice, career choice anxiety, and self and identity confusion. According to this model, negative emotions such as anxiety, depression, and pessimism can increase career indecision. High levels of pessimism and depression appear to increase career indecision. Pessimistic views play a critical role in emotional and personality-related career decision-making difficulties. These views have also been consistently emphasized regarding career indecision (Gati & Levin, 2014). The pessimistic views mentioned constitute the cognitive aspect of indecision and include negative beliefs about business life (Gati et al., 2012). Those with pessimistic views need help determining career goals (Viola et al., 2016). In addition, Saunders et al. (2000) concluded in their study that pessimistic thoughts explained career indecision by 25%. As can be seen, even if pessimism is considered to explain career indecision, these studies are not sufficient in number, and the existing studies are not up-to-date. Based on all these, it may be helpful to examine pessimism's role in explaining students' career indecision, especially in high school.

Defensive Pessimism

Defensive pessimism is when individuals create unrealistically low expectations before starting a situation in order to prepare for possible failure and motivate themselves to work hard to avoid this possible failure (Norem & Cantor, 1986). It involves setting low expectations that do not reflect reality before possible evaluation situations and, accordingly, thinking about negative consequences (Norem, 2001b). Defensive pessimism refers to the strategy of individuals keeping low expectations about a situation and thinking about all kinds of bad possibilities in detail while preparing themselves for a task or situation (Norem, 2008). Individuals can adopt defensive pessimism as a strategy, cope with anxiety by creating low expectations about the possibilities they will experience in the future despite their previous successes, and also experience optimism due to their previous successes (Benyamini, 2005). In their studies, Suárez and Fernández (2005, 2011) determined that students use two different emotional-motivational strategies, namely defensive pessimism and positive expectations, in the studying and learning processes. Students who use the defensive pessimism strategy activate their negative self-schemas and compensate for unrealistically low expectations by motivating themselves to try harder. These individuals use their negative expectations and the anxiety they experience to make more effort and achieve good results (Cantor, 1990; Suárez & Fernández, 2005, 2011). While optimists are focused on growth and progress, act with an optimistic perspective, and have good performances, pessimists are focused on safety and security, act with a pessimistic perspective, and perform well (Hazlett & Molden, 2011). It has been stated in the literature that although defensive pessimism has a

negative dimension, it does not negatively affect performance (Norem & Cantor, 1986a; Norem & Illingworth, 1993). However, some studies (Norem & Chang, 2002; Norem, 2001a) have revealed that defensive pessimists are anxious individuals. Anxiety can also negatively affect cognitive performance because it makes it difficult for individuals to focus on their tasks (Eysenck, 1992). When the literature is examined, it is seen that no studies have been conducted on defensive pessimism and career development. Although defensive pessimism seems to be a strategy that leads individuals to positive results, understanding its impact on career development is essential in order to provide adequate career counseling services to students in this period.

Avoidant Coping

Coping styles refer to the response to threatening elements or obstacles in order to prevent or reduce the emergence of distress (Ghanem et al., 2019). Lazarus and Folkman (1984) emphasized that when evaluating whether coping strategies are effective, attention should be paid to the extent to which the situation is suitable for internal and external demands. Avoidant coping refers to coping strategies that are little or no effective (Roth & Cohen, 1986). Avoidant coping is characterized by avoiding problems and is associated with distress (Carver & Scheier, 1994; Dunkley et al., 2000). Coping styles can be classified as active and passive (avoidant) coping (Nielsen & Knardahl, 2014). While active coping is characterized by adaptation and problem-focused coping, passive coping is characterized by functional and non-adaptive strategies, such as avoidance, when faced with stress (Wood & Bhatnagar, 2015). Avoidant coping has three aspects: focusing on and venting emotions, behavioral disengagement, and mental disengagement. For example, avoiding stress by sleeping is an avoidant coping behavior (Carver et al., 1989). Coping is considered an essential concept in the literature on career development (Argyropoulou et al., 2007; Lee, 2005; Weinstein et al., 2002). Using coping skills increases individuals' resilience during the career development process, helps individuals predict adverse outcomes, and takes precautions against problems that may arise (Lent, 2013). Considering the consequences of ineffective coping strategies, ensuring that individuals use effective coping styles in career decision-making is a critical role for career counselors (Lipshits-Brazilier et al., 2015). Although coping styles are of critical importance in career decision-making, studies show that there is no comprehensive theory for coping with career indecision (Lipshits-Brazilier et al., 2015). Difficulties associated with career decision-making are associated with the use of ineffective coping strategies, while effective strategies come to the fore in coping with career indecision (Lipshits-Brazilier et al., 2017). The use of ineffective coping strategies also increases career-building difficulties (Boo & Kim, 2020). Based on all these, coping styles are important in students' career indecision, but studies do not provide a clear framework for effective coping styles. It seems important at this point to determine which coping style is effective in high school students experiencing career indecision.

Career Indecision

Career indecision refers to the individual's inability to choose a satisfying education, profession, or career and to actively pursue this choice (Xu & Bhang, 2019). This shows that the career decision is affected by the person's life-satisfying profession and career choice (Söner, 2021). The inability of individuals to decide what kind of career they want is expressed as career indecision (Guay et al., 2006). Career decision is one of the most influential and essential decisions in individuals' lives (Hackett & Betz, 1995). Individuals' career choices respond to their needs, expectations, interests, and values and are an important determinant of their quality of life (Guay et al., 2006). Based on these, it is expected that career indecision is one of the main concepts addressed by occupational psychology (Brown & Rector, 2008; Savickas, 1995; Skorikov, 2007). The first step of career counseling is identifying the difficulties that make it difficult for individuals to make career decisions (Osipow, 1999). Making a career decision is part of professional development and is temporary. It often results from interpersonal conflicts, difficulties, or lack of knowledge (Brown & Lent, 2008). Some students need information about themselves, while others need information about the business world (Guay et al., 2006). In this research, the concept of career indecision defined by Çakır (2004) is centered. Çakır (2004) considered five characteristics when developing the concept of career indecision. These can be listed as internal conflicts, insufficient knowledge, lack of profession and field knowledge, irrational beliefs in choosing a profession, and external conflicts. Internal conflicts are conflicts that individuals experience in their inner world. Lack of self-awareness means that individuals do not have sufficient knowledge about themselves. (For example, abilities, interests, and professional values). The lack of profession and field knowledge is the lack of knowledge about professions and education fields (educational institutions, course contents, educational environments, etc.). Irrational beliefs regarding career choice are individuals' thoughts about their profession that do not reflect reality. External conflicts are the inability of individuals in the decision-making process to reconcile their wishes with the wishes of their family (Çakır, 2004). As can be seen, a career is one of the leading decisions in an individual's life. This decision seems to be affected by many factors, from internal and external conflicts.

Current Study

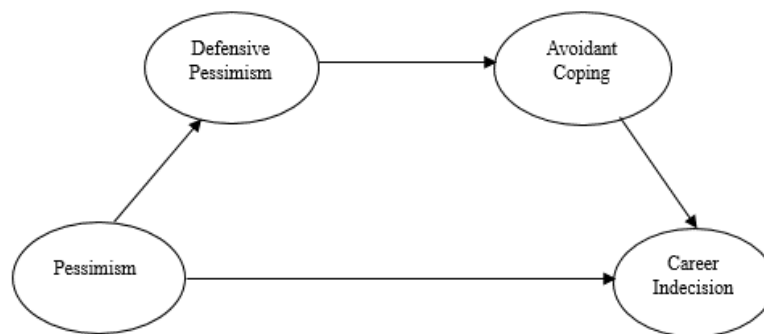
In Turkey, the high school period is critical for students to make career decisions. Approximately 3.5 million students take the exam every year to enter the institutions where they will receive vocational education (Student Selection and Placement Center [ÖSYM], 2023). This figure shows how essential career decisions are for the country's youth. In addition, the employment rate of young people is also worrying. The unemployment rate among young people in Turkey is 15.9% (Turkish Statistical Institute [TUIK], 2023). This may cause students to have a pessimistic perspective about their careers and have difficulty making career decisions. In addition, individuals who have a pessimistic perspective about their future may reinforce their

career indecisiveness by adopting ineffective coping styles. Based on this, identifying the difficulties students face in making career decisions, identifying the factors that will cause career indecision, and addressing and intervening in these negative factors are extremely valuable for young people to make the right decisions and experience satisfaction in their careers. It is thought that explaining to what extent negative variables (pessimism, defensive pessimism, avoidant coping), which have not been the subject of previous research or have been the subject of very little, affect career indecision will provide an essential framework for career counseling literature.

Purpose of the Study

Based on the evidence and theoretical knowledge in the literature, this study aims to investigate the relationships between pessimism, defensive pessimism, avoidant coping, and career indecision and test the model created for these variables. The hypothesized model is presented in Figure 1.

Figure 1. Hypothesis Model



For this purpose, the following hypotheses were tested:

- Hypothesis 1. Pessimism significantly predicts high school students' career indecision.
- Hypothesis 2. Pessimism significantly predicts the defensive pessimism level of high school students.
- Hypothesis 3. Defensive pessimism significantly predicts high school students' avoidant coping style.
- Hypothesis 4. Defensive pessimism and avoidant coping play a mediating role in the relationship between pessimism and career indecision in high school students.

Method

Participants

The study was conducted in four different high schools in one of the largest provinces of Turkey. An easily accessible, convenience sampling method, one of the random sampling methods, is used in the research. In this sampling method, researchers begin to create their sample starting from the most accessible respondents until they reach a

group of the size they need, or they work on a situation or sample that is most accessible and will provide maximum savings (Büyüköztürk et al., 2017). The study sample comprised 778 high school students (587 girls, 191 boys; Mage = 16.4 years, SD = .52). 179 participants are 9th-grade students, 150 are 10th-grade students, 346 are 11th-grade students, and 103 are 12th-grade students. In addition, 150 students are science high school students, 428 are anatolian high school students, and 200 are vocational and technical anatolian high school students.

Data Collection Tools

The Career Decision Inventory. The inventory was developed by Çakır (2004) to measure the career indecision experienced by high school students in the professional field. While developing the items in the inventory, the career development tasks of high school students and the views of social cognitive theory were considered. The inventory consists of a total of 30 items and five subscales. A five-point Likert-type rating is used in the evaluation. The internal reliability coefficient of the inventory was found to be .85 (Çakır, 2004). In this study's scope, the scale's reliability coefficient was determined as .95.

Optimism-Pessimism Scale. The scale was developed by Çalışkan and Uzunkol (2018) to determine adolescents' tendencies toward optimism and pessimism. OPS consists of 16 items and two subscales: optimism and pessimism. The CFA was performed within the scope of the validity analysis; it was found that the scale showed a good fit ($\chi^2/df=2.22$, CFI=0.98, and GFI=0.94). Within the scope of reliability studies, the Cronbach's Alpha internal consistency coefficients of the subscales of OPS were found to be 0.86 for the optimism subscale and 0.82 for the pessimism subscale (Çalışkan & Uzunkol, 2018). Within the scope of this study, the pessimism sub-dimension of the scale was used as a measurement tool. In this study, the reliability coefficient for the pessimism sub-dimension of the scale was calculated as .87.

The Defensive Pessimism Scale. The scale was adapted to Turkish by Çelik-Örücü (2013). The scale consists of 12 items and two subscales: negative expectations and reflection. A seven-point Likert-type rating is used to evaluate the scale. For the two-factor model, $\chi^2(51) = 138.39$, $p < .01$; $\chi^2/df = 2.71$; GFI = .91; AGFI = .87; RMSEA = .08; and CFI = .94. The internal consistency coefficient for the entire scale was calculated as 0.81, 0.78 for negative expectations and 0.64 for reflection (Çelik-Örücü, 2013). In this study, the internal reliability coefficient of the scale was calculated as .86, .82 for negative expectations, and .83 for reflection.

KIDCOPE in Turkish Adolescents. The scale was adapted to Turkish by Bedel et al. (2014). The scale consists of 11 items and three subscales: active coping, avoidant coping, and negative coping. The scoring of the scale is carried out on a four-point scale from never (0) to always (3). The internal consistency reliability coefficient of the scale was calculated as .72 for active coping, .70 for avoidant coping, and .65 for negative coping (Bedel et al., 2014). In this study, only the avoidant coping subscale of the scale was used. In this study, the internal reliability coefficient for the avoidant coping dimension of the scale was calculated as .53.

Data collection and preliminary analysis

Before applying the scales to the participants, approval was obtained from the Social and Human Research Ethics Committee of the university (23.12.2022, decision

number:41) where the researcher worked, and research permission was obtained from the Directorate of National Education to which the high schools are affiliated. After obtaining the necessary permissions, school psychological counselors administered the scales to the students online over four weeks. Before the application, students were informed about the scope and content of the application. Data were collected from 791 high school students who volunteered to participate in the study. After data collection, the forms were examined for missing values, outliers, normality, and multicollinearity. The Mahalanobis distance value was examined in the outlier analysis, and 13 data were removed from the data set. Skewness and kurtosis values were examined, and their suitability for univariate normal distribution was evaluated. It is reported that skewness and kurtosis values between [-1.5 and +1.5] are a criterion for the normality of the distribution (Tabachnick & Fidell, 2013). VIF and tolerance values were also examined for multicollinearity, and no multicollinearity was found between the variables. A multicollinearity problem occurs when the VIF values are greater than 10, and tolerance values are less than 0.10 (Büyüköztürk, 2002). In this study, the values were found within the stated range. As a result of the examinations, 778 data that met the required assumptions for analysis were analyzed. The data analysis used Pearson correlation analysis, serial mediation analysis, and Bootstrap confidence intervals to determine the relationships between variables. Analysis was performed using SPSS 20 and SPSS AMOS 25. The serial mediation analysis performed with SPSS AMOS determines whether the mediation relationship is significant or not by using the highest and lowest values of the confidence intervals. The Bootstrap method does not include 0 (Hayes, 2017). In this context, the Bootstrap method with 5000 samples was used, and the significance level of the mediation analysis was examined, taking into account the 95% confidence interval.

Data Analysis

In this correlational study, the relationships between high school students' pessimism, defensive pessimism, avoidant coping, and career indecision were examined. Pearson product-moment correlation was used to determine the relationships between variables. Mediator hypothesis testing was conducted using Gaskin's (2016) prediction plugin. These were the "Specific Indirect Effects_Path" and Serial Mediation estimation performed in IBM AMOS version 25. χ^2/ sd , RMSEA, GFI, and SRMR were taken as criteria for the fit indices of the model while creating the structural equation modeling. In accepting the values of the goodness of fit indices of the model, Çokluk et al. (2016), Marcoulides and Schumacher (2001), Tabachnick and Fidell (2001), and Bayram (2016) opinions are based on. Within the framework of these views, $\chi^2 / df \leq 5$, $RMSEA \leq .10$; $GFI \geq .85$, $SRMR \leq .10$ values were determined as acceptable limits of model fit.

Results

Pearson correlation analysis examined the relationships between pessimism, defensive pessimism, avoidant coping strategies, and career indecision. The relationships between the variables are shown in Table 1.

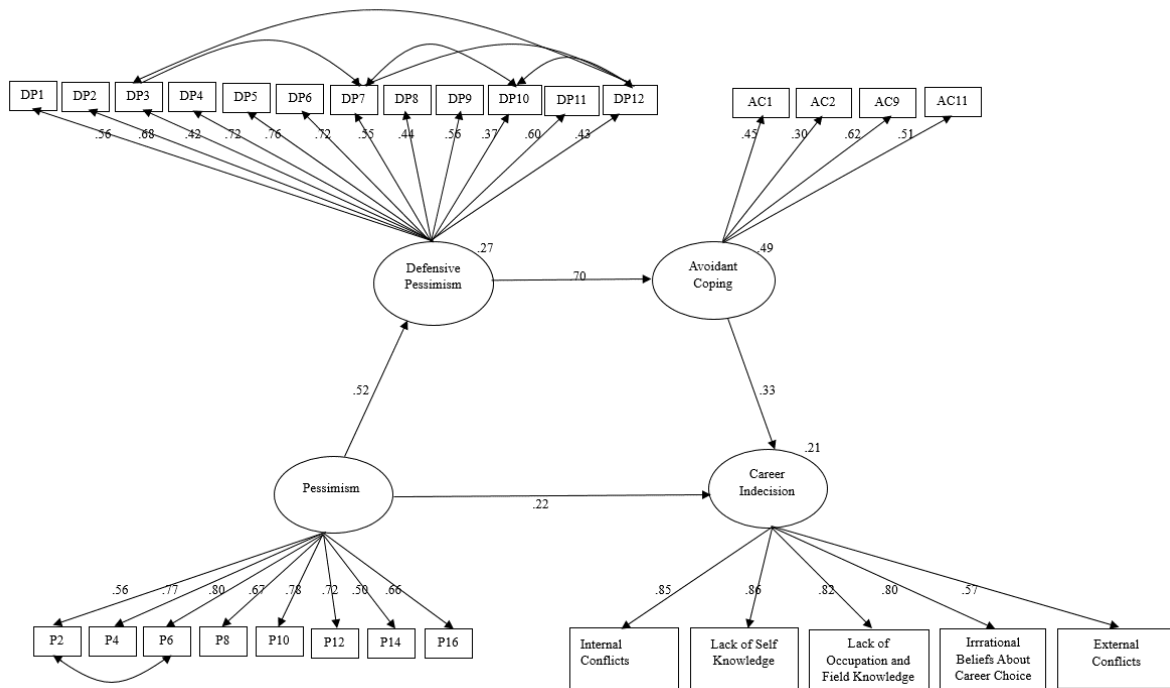
Table 1. Descriptive Statistics and Correlations Between Variables

Variables	1	2	3	4
Pessimism	-			
Defesnsive pessimism	.38**	-		
Avoidant coping	.44**	.45**	-	
Career indecision	.34**	.23**	.33**	-
X	21.66	58.39	10.12	77.60
Ss	6.82	12.82	2.26	25.54
Skewness	.17	-.39	.29	-.07
Kurtosis	-.30	.001	-.22	-.75

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

According to the analysis results, a moderate positive relationship was detected between pessimism and career indecision [$r = .34$, $p < .01$]. A moderate positive relationship was found between pessimism and defensive pessimism [$r = .38$, $p < .01$]. and avoidant coping [$r = .44$, $p < .01$]. A moderate positive relationship was determined between defensive pessimism and avoidant coping [$r = .45$, $p < .01$] and a low-level positive relationship was determined between career indecision [$r = .23$, $p < .01$]. It was determined that there was a moderate positive relationship between avoidant coping and career indecision [$r = .33$, $p < .01$].

According to the analysis results regarding the mediating role of defensive pessimism and avoidant coping between pessimism and career indecision, pessimism, which is the independent variable of the model, has a significant effect on defensive pessimism ($B = 0.52$, $SE = 0.07$) and career indecision ($B = 0.22$, $SE = 0.12$) has a direct effect. It was also concluded that the direct effect of avoidant coping on career indecision was significant ($B = 0.33$, $SE = 0.31$). Hypothesis 1, hypothesis 2, and hypothesis 3 were confirmed. Modifications were made among the error terms in the model in Figure 2. As a result of the modifications, it is seen that the model meets the goodness-of-fit criteria: [$\chi^2/df = 4.3$, $RMSEA = .06$; $GFI = .86$, $SRMR = .09$]. The created model explains $\beta = .21$ of career indecision in high school students ($p < .001$).



Note. Values in each path represent standardized regression coefficients. All regression paths are significant at $p < .05$.

Figure 2. Structural Equation Modeling for Variables

When the analyses are evaluated, pessimism indirectly affects career indecision through defensive pessimism and avoidant coping. Mediation hypothesis testing was conducted using Gaskin's (2016) prediction plugin. These are the "Specific Indirect Effects_Path" and Serial Mediation estimation performed in IBM AMOS version 25. Mediation analysis (based on 5,000 bootstrap samples) showed a partial, indirect relationship between pessimism and career indecision. Serial mediation was pessimism → defensive pessimism → avoidant coping → career indecision [$\beta = 0.21$, $SE = 0.07$, 95% CI (0.22, 0.52), $p < .01$]. Since the Bootstrap lower and upper confidence intervals did not include 0, the mediation effect was significant, and the mediation hypothesis 4 of the study was confirmed. Direct and indirect effects are included in Table 2.

Table 2. Direct and Indirect Effects

Endogenous Variables	Exogenous Variables	Direct Effect		Indirect Effect	
		B	SE	B	95% CI
Career Indecision	Pessimism	.21**	.001	.36**	[0.22, 0.52]
Defensive Pessimism	Pessimism	.52**	.03	-	-
Avoidant Coping	Defensive Pessimism	.71**	.04	-	-
Career Indecision	Avoidant Coping	.33**	.05	-	-

Note. CI = Confidence interval. ** $p < .001$, * $p < .05$.

Conclusion and Discussion

The study examined a model in which defensive pessimism and avoidant coping mediate serially between pessimism and career indecision in high school students. It was hypothesized that pessimism would directly and indirectly (via defensive pessimism and avoidant coping) predict career indecision. The results supported the model and showed that defensive pessimism and avoidant coping played a serial mediating role between pessimism and career indecision.

One of the confirmed hypotheses of the study is that pessimism significantly predicts defensive pessimism. Although there is no research in the literature examining the relationships between the two variables mentioned with high school students, there are results parallel to the study results. Jones et al. (2017) concluded in their study that stress and rumination were explained by pessimism. In their study, Ziegler and Hawley (2001) found that students who scored higher on the pessimistic explanatory style also scored higher on general irrational thinking and low frustration tolerance. Defensive pessimism involves individuals having low expectations, preparing for all kinds of bad conditions, and thinking about every possibility in detail. Based on this, pessimism may explain defensive pessimism by focusing on negative possibilities and having low expectations. The focus of pessimism on the negative outcome of the events to be experienced and the focus of defensive pessimism on creating low expectations and being ready for bad possibilities may be parallel. In this respect, pessimism may explain a part of defensive pessimism.

Another confirmed hypothesis of the study is that pessimism significantly predicts high school student's career indecision. When the literature is examined, it is seen that there are studies parallel to the results of this study. Braunstein-Bercovitz et al. (2012) found in their study that there was a positive significant relationship between the pessimism trait and career indecision of university students. Career indecision refers to the individual's inability to choose an education, profession, or career that will bring him/her satisfaction. Pessimistic individuals may have a pessimistic perspective in all areas of their lives and in areas related to their profession and career. Pessimistic individuals have negative expectations about the future and a negative perspective and mindset regarding the events they will encounter. Based on this, pessimistic individuals may think that they will not be able to make effective career decisions and will experience more internal conflict when making career decisions. In addition, they may be more prone to producing unrealistic, irrational beliefs about career decisions. This may cause them to have negative outcome expectations regarding their careers and experience indecision. In addition, pessimistic individuals may not show research behavior regarding their careers, thinking that no matter what they do, they will encounter negative consequences regarding their careers. Additionally, pessimistic individuals may be less focused on career decisions because they believe their employment chances could be higher. Raisi Sarteshnizi et al. (2023) found a negative and significant relationship between career pessimism and employability perception in

their study. In addition, Kelly and Shin (2009) found that negative career thoughts and feelings significantly explained the lack of career-related knowledge. Based on all these, pessimism may increase individuals' career indecision.

Another confirmed hypothesis of the study is that defensive pessimism significantly explains the avoidant coping style of high school students. When the literature is examined, there is research that supports this conclusion of the study. Thropp et al. (2003) concluded that pessimism predicts avoidant coping. Defensive pessimists prepare themselves for possible failure and direct themselves to work harder to avoid failure. In addition, they have unrealistically low and negative expectations. Avoidant coping refers to the individual avoiding and moving away from stressful situations when faced with them. Defensive pessimists may avoid stressful events because they do not want to encounter a bad outcome. In addition, not achieving a result may be a better option for them than getting a bad result. For this reason, these individuals may be prone to using an avoidant coping style.

The final result of the research is that defensive pessimism and avoidant coping mediate the relationship between pessimism and career indecision. When the literature is examined, it is seen that there is no study examining these four variables together. Not addressing pessimism and coping styles in explaining career indecision can be a significant deficiency. Understanding the components that increase career indecision and providing interventions are extremely valuable for young people in the career decision-making period. Although no studies address these variables, there are parallel studies that support these results. Creed et al. (2002) concluded in their study that individuals with high optimism engage in high levels of career planning and research, are more confident in their career decisions, and have more career goals. In addition, it was determined that those with high pessimism had low knowledge about career decision-making and experienced more career indecision. In their study, Perez and Gati (2017) concluded that an advanced decision-making status was negatively related to career decision-making difficulties and non-reactive coping strategies. Since pessimism is associated with individuals' negative outcome expectations, it can put the individual in a difficult situation in career decision-making situations. In addition, the harmful nature of pessimism may trigger the idea of defensive pessimism to prepare the individual against all kinds of negative possibilities. The individual who thinks about these negative possibilities may also create a lot of negative emotions. To get away from these emotions, he may exhibit behaviors such as gathering information about making a career decision, choosing options, or running away from the internal conflicts he is experiencing.

Recommendations and Limitations

The study concluded that pessimism and career indecision are related and that defensive pessimism and avoidant coping mediate this. Based on these results, it may be essential to identify the variables that are effective in the career counseling process for clients and to develop interventions to reduce the negative impact of pessimism

and defensive pessimism on the individual's career decision. These career-related pessimism, such as defensive pessimism, can be addressed with short-term interventions such as cognitive-behavioral therapies typical of the career counseling process. The counseling to be offered here may include identifying dysfunctional thoughts that may cause individuals' adverse emotional reactions, such as pessimism and defensive pessimism regarding career decisions, and restructuring these thoughts. In addition, the results of this study may contribute to the development and implementation of intervention programs to prevent career indecision. Group guidance activities for high school students, seminars, coping with career decision-making difficulties, and recognizing and reducing the harmful components that affect career decisions may be among the focuses of the programs to be created. In addition, understanding the structure of pessimism, especially defensive pessimism, making people realize that this is not a helpful structure, and teaching how to deal with the negative thoughts created by this structure are other vital issues. In this model, pessimism and defensive pessimism were considered as negative emotions. Other negative variables affecting career indecision may be addressed in further studies. In addition, other coping styles related to career indecision can be examined. In addition, the defensive pessimism discussed in this study arises from the parenting styles formed due to the cultural structure of Turkey. In future studies, parenting styles, defensive pessimism, coping styles, and career indecision variables will be studied together.

This research has several limitations. First, the model suggests causal relationships using Structural Equation Modeling, but given the study's cross-sectional design, the proposed causality needs to be tested further. In future studies, a longitudinal study in which the variables included in this study will be monitored throughout the decision-making process may be necessary. This research was conducted in a large, developed city in Turkey. For this reason, the variables considered may bring different results in different samples. The sample can be differentiated in future studies, and cultural differences can also be addressed. This study used an inventory developed in Turkey to measure career indecision. Measurement tools developed in different cultures can address career indecision from different dimensions.

Acknowledgements

The author was not funded by an institution. Since the research has a single author, all chapters were prepared by the author.

Statement of Responsibility

Responsibility for the writing process of the article belongs to the author.

Conflicts of Interest

There is no conflict of interest.

Ethical Statement

The research was found appropriate in terms of scientific research ethics by the Decision numbered 41 of the Bursa Uludag University Ethics Committee.

References

- Amir, T., & Gati, I. (2006). Facets of career decision-making difficulties. *British Journal of Guidance and Counseling*, 34(4), 483–503. <https://doi.org/10.1080/03069880600942608>
- Argyropoulou, E. P., Sidiropoulou-Dimakakou, D., & Besevegis, E. G. (2007). Generalized self-efficacy, coping, career indecision, and vocational choices of senior high school students in Greece: Implications for career guidance practitioners. *Journal of Career Development*, 33(4), 316-337. <https://doi.org/10.1177/0894845307300412>
- Bayram, N. (2016). *Yapısal eşitlik modellemesine giriş*. Ezgi.
- Bedel, A., Işık, E., & Hamarta, E. (2014). Psychometric properties of the KIDCOPE in Turkish adolescents. *Eğitim ve Bilim*, 39(176), 227-235.
- Benyamini, Y. (2005). Can high optimism and high pessimism co-exist? Findings from arthritis patients coping with pain. *Personality and Individual Differences*, 38(6), 1463-1473. <https://doi.org/10.1016/j.paid.2004.09.020>
- Boo, S., & Kim, S. H. (2020). Career indecision and coping strategies among undergraduate students. *Journal of Hospitality & Tourism Education*, 32(2), 63-76. <https://doi.org/10.1080/10963758.2020.1730860>
- Braunstein-Bercovitz, H., Benjamin, B. A., Asor, S., & Lev, M. (2012). Insecure attachment and career indecision: Mediating effects of anxiety and pessimism. *Journal of Vocational Behavior*, 81(2), 236–244. <https://doi.org/10.1016/j.jvb.2012.07.009>
- Brown, S. D., & Lent, R. W. (Eds.). (2008). *Handbook of counseling psychology* (4rd ed.). Hoboken, John Wiley & Sons Inc.
- Brown, S. D., & Rector, C. C. (2008). Conceptualizing and diagnosing problems in vocational decision making. In S. D. Brown, R. W. Lent (Eds.). *Handbook of counseling psychology* (pp. 392–407). Wiley.
- Büyüköztürk, Ş. (2002). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Pegem.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2017). *Bilimsel araştırma yöntemleri* (23. Baskı). Pegem.
- Çakır, M. A. (2004). Mesleki karar envanterinin geliştirilmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(2), 1-14.
- Cantor, N. (1990). From thought to behavior: “Having” and “doing” in the study of personality and cognition. *American Psychologist*, 45(6), 735–750. <https://psycnet.apa.org/doi/10.1037/0003-066X.45.6.735>
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267. <https://psycnet.apa.org/doi/10.1037/00223514.56.2.267>
- Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology*, 66(1), 184-195.
- Chang, E. C. (2001). *Optimism and pessimism: Implications for theory, research, and practice*. American Psychological Association.

- Creed, P. A., Patton, W., & Bartrum, D. (2002). Multidimensional properties of the LOT-R: Effects of optimism and pessimism on career and well-being related variables in adolescents. *Journal of Career Assessment*, 10(1), 42-61. <https://doi.org/10.1177/1069072702010001003>
- Çalışkan, H., & Uzunkol, E. (2018). Ergenlerde iyimserlik-kötümserlik ölçeğinin geliştirilmesi: Geçerlilik ve güvenirlik çalışması. *The Journal of Happiness & Well-Being*, 6(2), 78-95.
- Çelik-Örücü, M. (2013). Psychometric evaluation of the Turkish version of the defensive pessimism scale. *Eurasian Journal of Educational Research*, 53, 115- 130.
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2016). *Sosyal bilimler için çok değişkenli istatistik SPSS ve LISREL uygulamaları* (4th ed.). Anı.
- Dunkley, D. M., & Blankstein, K. R. (2000). Self-critical perfectionism, coping, hassles, and current distress: A structural equation modeling approach. *Cognitive Therapy and Research*, 24(6), 713-730. <https://doi.org/10.1023/A:1005543529245>
- Eysenck, M. W. (1992). *Anxiety: The cognitive perspective*. Psychology.
- Gaskin, J. (2016). *Specific Indirect Effects_Path and Serial Mediation Estimand*. Gaskination's Statistics.
- Gati, I., Krausz, M., Osipow., S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(4), 510-526. <https://psycnet.apa.org/doi/10.1037/0022-0167.43.4.510>
- Gati, I., Asulin-Peretz, L. ve Fisher, A. (2012). Emotional and personality-related aspects of career decision making difficulties: A 3-year follow-up. *The Counseling Psychologist*, 40(1), 6-27. <https://doi.org/10.1177/0011000011398726>
- Gati, I., & Levin, N. (2014). Counseling for career decision-making difficulties: Measures and methods. *The Career Development Quarterly*, 62(2), 98-113. <https://doi.org/10.1002/j.2161-0045.2014.00073.x>
- Germeijs, V., & De Boeck, P. (2003). Career indecision: Three factors from decision theory. *Journal of Vocational Behavior*, 62(1), 11-25. [https://doi.org/10.1016/S0001-8791\(02\)00055-6](https://doi.org/10.1016/S0001-8791(02)00055-6)
- Ginevra, M. C., Sgaramella, T. M., Ferrari, L., Nota, L., Santilli, S., & Soresi, S. (2017). Visions about future: A new scale assessing optimism, pessimism, and hope in adolescents. *International Journal for Educational and Vocational Guidance*, 17, 187-210. <https://doi.org/10.1007/s10775-016-9324-z>
- Ginevra, M. C., Santilli, S., Di Maggio, I., Nota, L., & Soresi, S. (2020). Development and validation of visions about future in early adolescence. *British Journal of Guidance & Counselling*, 48(2), 155-167. <https://doi.org/10.1080/03069885.2018.1550188>
- Ghanem, I., Castelo, B., Jimenez-Fonseca, P., Carmona-Bayonas, A., Higuera, O., Beato, C., ... & Calderon, C. (2020). Coping strategies and depressive symptoms in cancer patients. *Clinical and Translational Oncology*, 22(3), 330-336. <https://doi.org/10.1007/s12094-019-02123-w>
- Guay, F., Ratelle, C. F., Senécal, C., Larose, S., & Deschênes, A. (2006). Distinguishing developmental from chronic career indecision: Self-efficacy, autonomy, and social

- support. *Journal of Career Assessment*, 14(2), 235-251. <https://doi.org/10.1177/1069072705283975>
- Hacker, J., Carr, A., Abrams, M., Brown, S. D. (2013). Development of the career indecision profile: Factor structure, reliability, and validity. *Journal of Career Assessment*, 21(1), 32–41. <https://doi.org/10.1177/1069072712453832>
- Hackett, G., Betz, N.E. (1995). Self-efficacy and career choice and development. In: Maddux, J.E. (eds) *Self-efficacy, adaptation, and adjustment*. The Plenum Series in Social/Clinical Psychology. Springer.
- Hammontree, S. R., & Ronan, G. F. (1992, August). *Optimism, pessimism and defensive pessimism: The role of personal problem-solving*. Paper presented at the 100th Annual Convention of the American Psychological Society.
- Hayes, A.F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A Regression-based approach*. Guilford.
- Hazlett, A., & Molden, D. (2011). Hoping for the best or preparing for the worst? Regulatory focus and preferences for optimism and pessimism in predicting personal outcomes. *Social Cognition*, 29(1), 74–96. <https://doi.org/10.1521/soco.2011.29.1.74>
- Kelly, K. R., & Shin, Y. J. (2009). Relation of neuroticism and negative career thoughts and feelings to lack of information. *Journal of Career Assessment*, 17(2), 201-213. <https://doi.org/10.1177/1069072708329029>
- Jones, D. R., Lehman, B. J., Kirsch, J. A., & Hennessy, K. G. (2017). Pessimism moderates negative emotional responses to naturally occurring stress. *Journal of Research in Personality*, 69, 180-190. <https://doi.org/10.1016/j.jrp.2016.06.007>
- Lancaster, B. P., Rudolph, C. E., Perkins, T. S., & Patten, T. G. (1999). The reliability and validity of the career decision difficulties questionnaire. *Journal of Career Assessment*, 7(4), 393–413. <https://doi.org/10.1177/106907279900700405>
- Lazarus, R. S., and Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lee, K. H. (2005). Coping with career indecision: Differences between four career choice types. *Journal of Career Development*, 31(4), 279-289. <https://doi.org/10.1177/089484530503100405>
- Lent, R. W. (2013). Career-life preparedness: Revisiting career planning and adjustment in the new workplace. *The Career Development Quarterly*, 61(1), 2-14. <https://doi.org/10.1002/j.2161-0045.2013.00031.x>
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557–568. <https://psycnet.apa.org/doi/10.1037/a0033446>
- Lipshits-Braziler, Y., Gati, I., & Tatar, M. (2015). Strategies for coping with career indecision: Concurrent and predictive validity. *Journal of Vocational Behavior*, 91, 170-179. <https://doi.org/10.1016/j.jvb.2015.10.004>
- Lipshits-Braziler, Y., Gati, I., & Tatar, M. (2016). Strategies for coping with career indecision. *Journal of Career Assessment*, 24(1), 42–66. <https://doi.org/10.1177/1069072714566795>

- Lipshits-Brazilier, Y., Tatar, M., & Gati, I. (2017). The effectiveness of strategies for coping with Career indecision: Young adults' and career counselors' perceptions. *Journal of Career Development, 44*(5), 453-468. <https://doi.org/10.1177/0894845316662705>
- Marcoulides, G., & Schumacher, R. (2001). *New developments and techniques in structural equation modelig*. Lawrence Erlbaum Associates.
- Nielsen, M. B., & Knardahl, S. (2014). Coping strategies: A prospective study of patterns, stability, and relationships with psychological distress. *Scandinavian Journal of Psychology, 55*(2), 142-150. <https://doi.org/10.1111/sjop.12103>
- Norem, J. (2001b). *The positive power of negative thinking*. Basic Books.
- Norem, J., & Cantor, N. (1986). Defensive pessimism: Harnessing anxiety as motivation. *Journal of Personality and Social Psychology, 51*(6), 1208-1217. <https://psycnet.apa.org/doi/10.1037/0022-3514.51.6.1208>
- Norem, J. K., & Cantor, N. (1986a). Anticipatory and post hoc cushioning strategies: Optimism and defensive pessimism in 'risky' situations. *Cognitive Therapy and Research, 10*(3), 347-362. <https://doi.org/10.1007/BF01173471>
- Norem, J. K., & Illingworth, K. S. S. (1993). Strategy-dependent effects of reflecting on self and tasks: Some implications of optimism and defensive pessimism. *Journal of Personality and Social Psychology, 65*(4), 822-835. <https://psycnet.apa.org/doi/10.1037/0022-3514.65.4.822>
- Norem, J. K. (2001a). Defensive pessimism, optimism and pessimism. In E. C. Chang (Ed.), *Optimism, and pessimism: Implications for theory, research, and practice* (pp. 77-100). APA.
- Norem, J. K., & Chang, E. C. (2002). The positive psychology of negative thinking. *Journal of Clinical Psychology, 58*(9), 993-1001. <https://doi.org/10.1002/jclp.10094>
- Norem, J. K. (2008). Defensive pessimism, anxiety, and the complexity of evaluating self-regulation. *Social and Personality Psychology Compass, 2*(1), 121-134. <https://doi.org/10.1111/j.1751-9004.2007.00053.x>
- Osipow, S. H., & Gati, I. (1998). Construct and concurrent validity of the career decision-making difficulties questionnaire. *Journal of Career Assessment, 6*(3), 347-364. <https://doi.org/10.1177/106907279800600305>
- Öğrenci Seçme ve Yerleştirme Merkezi [ÖSYM], (2023). Erişim adresi: https://www.youtube.com/watch?v=ZtQmkl3LS4&list=RDCMUcGc3VJYdM_R8oKGRuXxUbKQ&index=21
- Patton, W., Bartrum, D. A., & Creed, P. A. (2004). Gender differences for optimism, self-esteem, expectations and goals in predicting career planning and exploration in adolescents. *International Journal for Educational and Vocational Guidance, 4*, 193-209. <https://doi.org/10.1007/s10775-005-1745-z>
- Perez, M., & Gati, I. (2017). Advancing in the career decision-making process: The role of coping strategies and career decision-making profiles. *International Journal of Educational and Vocational Guidance, 17*, 285-309. <https://doi.org/10.1007/s10775-016-9334-x>
- Piper, A. (2022). Optimism, pessimism and life satisfaction: an empirical investigation. *International Review of Economics, 69*(2), 177-208.

- Prescott, P. (2012). What pessimism is. *Journal of Philosophical Research*, 37, 337–56.
- Raisi Sarteshnizi, P., Kaveh Farsani, Z., & Rabiei, M. (2023). Mediating role of academic performance and job search self-efficacy in correlation between career optimism and pessimism and students' employability perception. *Positive Psychology Research*, 9(2), 43–64.
- Roth, S., & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41(7), 813–819. <https://psycnet.apa.org/doi/10.1037/0003-066X.41.7.813>
- Saka, N., Gati, I., & Kelly, K. R. (2008). Emotional and personality-related aspects of career decision-making difficulties. *Journal of Career Assessment*, 16(4), 403–424. <https://doi.org/10.1177/1069072708318900>
- Saunders, D. E., Peterson, G. W., Sampson, J. P., Jr., & Reardon, R. C. (2000). Relation of depression and dysfunctional career thinking to career indecision. *Journal of Vocational Behavior*, 56(2), 288–298. <https://doi.org/10.1006/jvbe.1999.1715>
- Savickas, M. L. (1995). Constructivist counseling for career indecision. *The Career Development Quarterly*, 43(4), 363–373. <https://doi.org/10.1002/j.2161-0045.1995.tb00441.x>
- Savickas, M. L. (2013). Career construction theory and practice. In S. D. Brown, R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work*. 2nd ed. (pp. 147–183). Wiley.
- Skorikov, V. B. (2007). Adolescent career development and adjustment. In V. B. Skorikov & W. Patton (Eds.), *Career development in childhood and adolescence* (pp. 237–254). Sense.
- Söner, O. (2021). Kariyer karar verme güçlüğünde cinsiyet farklılıkları: bir meta analiz çalışması. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (57), 401–424
- Suárez, J. M., & Fernández, A. P. (2005). Escalas de evaluación de las estrategias motivacionales de los estudiantes [Scales assessing students' motivational strategies]. *Anales de Psicología*, 21(1), 116–128.
- Suárez J. M., & Fernández A. P. (2011). A model of how motivational strategies related to the expectative component affect cognitive and metacognitive strategies. *Electronic Journal of Research in Educational Psychology*, 9(24), 641–658. <https://doi.org/10.25115/ejrep.v9i24.1460>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Allyn&Bacon, Inc
- Thropp, J. E., Szalma, J. L., Ross, J. M., & Hancock, P. A. (2003, October). Individual differences in dispositional pessimism, stress, and coping as a function of task type. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 47, No. 9, pp. 1073–1077). Sage. <https://doi.org/10.1177/154193120304700906>
- Türkiye İstatistik Kurumu [TÜİK], (2023). Erişim adresi: <https://data.tuik.gov.tr/Bulten/Index?p=Isgucu-Istatistikleri-Ekim-2023-49377>
- Xu, H., & Bhang, C. H. (2019). The structure and measurement of career indecision: A critical review. *The Career Development Quarterly*, 67(1), 2–20. <https://doi.org/10.1002/cdq.12159>

-
- Viola, M. M., Musso, P., Inguglia, C., & Lo Coco, A. (2016). Psychological well-being and career indecision in emerging adulthood: The moderating role of hardiness. *The Career Development Quarterly*, 64(4), 387-396. <https://doi.org/10.1002/cdq.12073>
- Weinstein, F. M., Healy, C. C., & Ender, P. B. (2002). Career choice anxiety, coping, and perceived control. *The Career Development Quarterly*, 50(4), 339-349. <https://doi.org/10.1002/j.2161-0045.2002.tb00582.x>
- Wood, S. K., & Bhatnagar, S. (2015). Resilience to the effects of social stress: Evidence from clinical and preclinical studies on the role of coping strategies. *Neurobiology of Stress*, 1, 164-173. <https://doi.org/10.1016/j.ynstr.2014.11.002>
- Ziegler, D. J., & Hawley, J. L. (2001). Relation of irrational thinking and the pessimistic explanatory style. *Psychological Reports*, 88(2), 483-488. <https://doi.org/10.2466/pr0.2001.88.2.483>