

Gender Perception, Career Optimism and Career Adaptability Among University Students: The Mediating Role of Personal Growth Initiative*

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Abstract

The current study tested the link between gender perception, career optimism, and career adaptability, and the mediating role of personal growth initiative in this relationship. Multi-stage sampling was used to determine the sample. A total of 2255 undergraduate students (1238 females and 1017 males) from a large state-funded university in Turkey participated in this study. Data were collected via Career Futures Inventory, Gender Perception Scale, Personal Growth Initiative Scale-II, and Personal Information Form. Structural equation modeling was used to test the proposed hypothesized model. Path analyses revealed the association of egalitarian gender perception with career optimism and career adaptability, mediated by personal growth initiative. As a result, students with high egalitarian gender perception scores are likely to have a higher degree of personal growth initiative that will result in enhanced career adaptability and optimism.

Keywords: Gender Perception, Personal Growth Initiative, Career Adaptability, Career Optimism, Path Analysis

DOI: 10.29329/ijpe.2020.329.1

* This study was produced from the research project numbered 2014.KB.SOS.014 supported by Dokuz Eylül University Scientific Research Projects Unit.

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INTRODUCTION

During the developmental period, typically between the ages of 18-29 including college years (defined as emerging adulthood), individuals make some critical choices that would eventually shape their life (Arnett, 2004; Atak & Çok, 2010; Vural Yüzbaşı, 2012). Career plans and preferences play a major role in these choices (Arnett, 2004). In this context, the career life of emerging adults consists of the completion of vocational training, understanding of career choices following vocational training, and finally making a career-related decision that is aligned with their goals (Çelen, 2007).

The notions of career adaptability and career optimism need to be considered when examining the career development and choices of emerging adults. Savickas (1997) defined *career adaptability* as the strength to cope with unexpected changes caused by the occupation or working conditions of individuals while they are preparing for a new professional role or just about to begin such a role. Scholarly studies (Klehe, Zikic, Van Vianen, Koen, & Buyken, 2012; Koen, Klehe, & Van Vianen, 2012) on career adaptability indicated that individuals with high career adaptability tend to be more competent in finding better job opportunities, successfully transitioning between jobs, and obtaining qualified employment. On the other hand, individuals with *career optimism* have expectations that they will always achieve favorable outcomes regarding their future career growth, or they would focus on the positive aspects of events and feel comfortable in the career planning process (Kalafat, 2012).

Gender perception is one of the factors that have an affect on career development and choice. Gendered career choices are one of the main reasons gender inequality exists in the workplace (Bourne & Özbilgin, 2008). Several studies (Correll, 2001; Küskü, Özbilgin, & Özkale, 2007; Michie & Nelson, 2006) have suggested that gender-based perceptions have negative effects on individuals' career choices. However, the relationship between gender perception of university students and their career optimism and career adaptability has not been adequately addressed in the literature. Many studies have suggested that feminine and masculine gender role orientations are more relevant than biological sex in understanding the work attitudes and behavior of employees (Eddleston & Powell, 2008; Kirchmeyer, 1998; Powell & Greenhaus, 2010). Strong empirical evidence exists for the relationship between individuals' career attitudes and their gender role orientation (Eddleston, Veiga, & Powell, 2006; Marshall & Wijting, 1980; Powell & Posner, 1989). Accordingly, it is expected that both masculinity and femininity tend to affect the view individuals have of their career success. In a study on university students, Siyez and Yusupu (2015) examined whether career adaptability and optimism significantly differed according to gender roles. Findings of the study revealed that the career adaptability (skills of coping with career-related changes in the future and exploiting these changes) and career optimism (expectation that one will achieve positive outcomes regarding his/her future career growth) of students who have masculine and androgynous gender roles are better than those who have feminine and ambiguous gender roles. Several studies on this topic can also found in the Western literature. For example, in a cross-cultural study (Morinaga, Frieze, & Ferligoj, 1993) on the attitudes of American, Japanese, and Slovenian university students concerning their career plans and gender roles, several factors that shape career values were found to be different for each country. It was found that these factors were relatively similar between women and men in Japan, whereas those factors were relatively different between men and women in the USA and Slovenia. The traditional work values and career aspirations of students in the USA were generally higher. It was found that women were less traditional compared to men in terms of gender role attitudes among the samples of the three countries. It was also remarkable that students of Japan constituted the largest group who had traditional gender role attitudes. It was suggested that women who have less traditional gender roles (excluding Slovenia) tend to focus more on their career.

Personal growth initiative is another factor that is likely to mediate the relationship between gender perception and career of an individual. It plays a central role in the transition from university to career life, which occurs in the emerging adulthood period. Personal growth initiative has received scholarly attention as a new concept that emphasizes the strength of individuals in the rapidly growing area of positive psychology since 1999 (Shorey, Little, Snyder, Kluck, & Robitschek, 2007). The

active and intentional behavior and involvement of the individual in his/her personal growth process can be regarded as “personal growth initiative” (Robitschek, 1998; Robitschek & Cook, 1999).

University life is an academic environment in which social interactions and friendship gain importance and where people seek to achieve their career goals. Also, university life offers an environment for students where they can actualize themselves and find meaning in life. During this period, individuals begin planning to gradually improve themselves for the future. In particular, students with high personal growth initiative would have active plans to achieve their pre-determined goals (Yalçın & Malkoç, 2013). Throughout university life, individuals would repeatedly attempt to improve both their career and personal growth and face a variety of challenges. In a study by Robitschek and Cook (1999), it was found that individuals with high personal growth initiative are more likely to explore the working environment and conditions related to their profession than those with low personal growth initiative. The same was also true for occupational identity. According to Robitschek (1999), individuals who follow a specific path toward personal growth without the need for approval by others would be more likely to challenge traditional gender roles and exhibit attitudes more egalitarian attitudes. Hence, it can be hypothesized that there is a relationship between the personal growth initiation and non-traditional gender role orientation of an individual. Furthermore, it can be suggested that the correlation between the personal growth initiation and egalitarianism is stronger for men than women. Indeed, Pleck (1981) noted that violation of sex roles could have consequences that are more severe for men than women. In general, research indicates that intentional based growth is positively linked to gender role orientation for men (Robitschek, 1999), and it was emphasized that future research should investigate related topics concerning the similarities or differences between women and men.

In light of the studies mentioned earlier, it can be suggested that gender perception and personal growth initiative have an effect on career adaptability and optimism. Although career adaptability and optimism are considered as key concepts in individual career development, these variables have not been extensively examined in the higher education context (Duffy, 2010). Nevertheless, university life is a period where individuals make critical decisions that shape their career life, which involve choosing a profession and gaining the knowledge and skills required by this profession. In this regard, the current study intends to empirically investigate via structural equation modeling the predictive role of gender perception in career adaptability and optimism among university students, mediated by personal growth initiative. Although the relationship between gender and career development has previously been addressed in Western literature, Turkey is a society with characteristics of a collectivist culture (Aygün & Imamoğlu, 2002; Hofstede, 1980; Pasa, Kabasakal, & Bodur, 2001; Schwartz, 1994; Wasti, 1999), which is unlike Western societies where individualistic values might prevail. Therefore, by examining the relationship between gender and career development, this study can potentially offer valuable insights into the relevant literature.

Given the current available gender studies in Turkish literature regarding university students' attitudes and perception in the higher education context (Pınar, Taşkın, & Eroğlu, 2008; Vefikuluçay, Zeyneloğlu, Eroğlu, & Taşkın, 2007; Yılmaz et al., 2009), it can be seen that many of these studies tend to be descriptive. However, a comprehensive analysis of the possible effects of gender perception on career orientation and development among university students within a representative sample is needed to reach a generalized conclusion. Our study seeks to fill this gap in the literature by performing relevant data analysis in the specific field.

This study aims to examine whether gender perception is related to career adaptability and career optimism by evaluating the mediating role of personal growth initiative (Fig. 1). Therefore, this study examined the following hypotheses:

Hypothesis 1: Traditional gender perception is negatively related to personal growth initiative.

Hypothesis 2: Egalitarian gender perception is positively related to personal growth initiative.

Hypothesis 3: Personal growth initiative is positively related to career adaptability and career optimism.

Hypothesis 4: Personal growth initiative mediates the relationship between traditional gender perception and career adaptability and career optimism.

Hypothesis 5: Personal growth initiative mediates the relationship between egalitarian gender perception and career adaptability and career optimism.

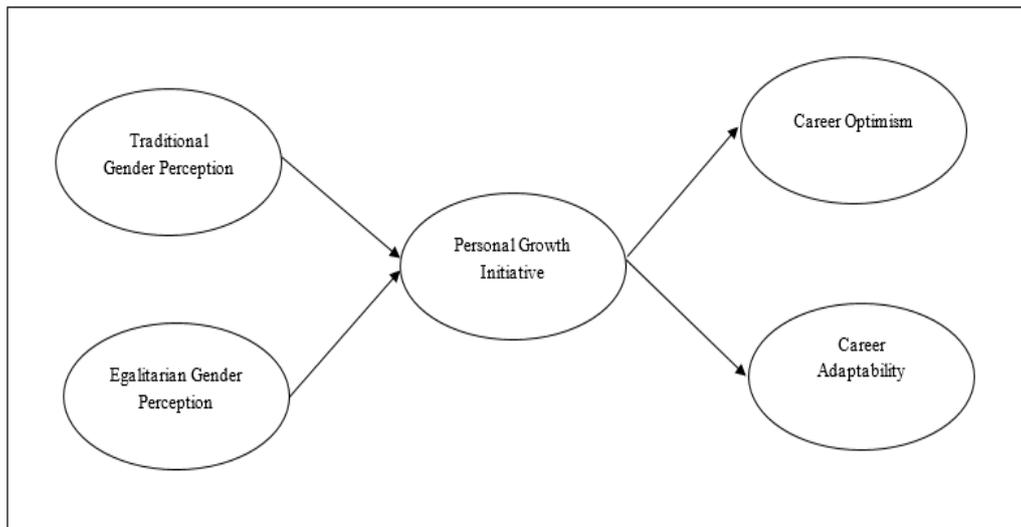


Figure 1. Hypothesized Mediation Model

METHOD

Participants

The population of this study consisted of undergraduate students from one of the largest, state-funded universities in Turkey. Multi-stage sampling was used to recruit participants. First, the sample size was calculated to determine the sample of the study. According to information received from the Registrar's Office of the state university, the total number of students in undergraduate programs (excluding distance education programs) was 42.031 in the academic year of 2014-2015. By using a sample-size calculation program, the sample size was determined to be 1771 for a population consisting of 42.031 students, with a confidence level of 99% and level 3 confidence interval. Stratified and random sampling methods were used in the sampling stages. Each faculty or school was included as a stratum, and 2255 students from 17 faculties/schools formed the sample of the study, taking into consideration the ratio of the number of registered students in those faculties/schools to the population. Finally, the sample consisted of 1238 females (54.9%) and 1017 males (45.1%), which included 719 freshmen, 580 sophomores, 549 juniors, and 407 seniors. Ages of participants ranged from 17 to 45 ($M = 21.32$, $SD = 2.29$). Distribution of the students according to faculty and sex is listed in Table 1.

Table 1. Distribution of Students by Faculty or School and Sex

Faculty	Female		Male		Total	
	f	%	f	%	f	%
Faculty of Economics & Administrative Sciences	291	23.5	216	21.2	507	22.5
Faculty of Engineering	230	18.6	254	25.0	484	21.5
Faculty of Education	190	15.3	90	8.8	280	12.4
Faculty of Law	86	6.9	47	4.6	133	5.9
Faculty of Maritime	22	1.8	96	9.4	118	5.2
Faculty of Business	71	5.7	42	4.1	113	5
Faculty of Science	64	5.2	45	4.4	109	4.8
Faculty of Theology	49	4.0	43	4.2	92	4.1
Faculty of Letters	62	5.0	29	2.8	91	4
Faculty of Medicine	21	1.7	47	4.6	68	3
Faculty of Fine Arts	30	2.4	38	3.7	68	3
Faculty of Nursing	54	4.4	12	1.2	66	2.9
Faculty of Architecture	26	2.1	13	1.3	39	1.7
School of Sport Sciences and Technology	3	0.2	21	2.1	24	1.1
School of Physical Therapy and Rehabilitation	16	1.3	7	0.7	23	1
Faculty of Tourism	13	1.1	8	0.8	21	0.9
School of State Conservatory	10	0.8	9	0.9	19	0.8

Instruments

In this study, Career Futures Inventory was used to evaluate career adaptability and optimism, Gender Perception Scale was used to assess gender perception, and Personal Growth Initiative Scale-II was used for personal growth orientation. To collect data on socio-demographic features, a Personal Information Form was developed for use. Further information about the instruments is provided below.

Career Futures Inventory (CFI) (Rottinghaus, Day, & Borgen, 2005). CFI is an instrument that assesses the positive attitudes of individuals toward career planning. It consists of 25 Likert items that are represented on a 5-point continuum (1 = strongly disagree, 5 = strongly agree) with higher scores indicating greater CFI. The CFI includes three subscales: (a) concerning information about the labor market, (b) career optimism, and (c) career adaptability. CFI was adapted to the Turkish language by Kalafat (2012). The three-factor structure of the Turkish version of CFI was evaluated using confirmatory factor analysis (CFA), and the original three subscales were confirmed. The Cronbach's alpha reliability coefficient of the original version was .83 for the career adaptability subscale, .82 for the career optimism subscale, and .62 for the information about the labor market subscale (Kalafat, 2012). The internal reliability score in the current study was found to be .82 for the career adaptability subscale and .82 for the career optimism subscale.

Gender Perception Scale (GPS) (Altınova & Duyan, 2013): GPS is an instrument that assesses individuals' perception of gender. It consists of 25 Likert items that are represented on a 5-point continuum (1 = strongly disagree, 5 = strongly agree) with higher scores indicating more egalitarian gender perception. The scale was developed originally by Altınova and Duyan (2013) as one-dimensional in exploratory factor analysis. The scale's reliability was evaluated by calculating Cronbach's alpha reliability coefficient, and the alpha value was .87 (Altınova & Duyan, 2013).

In the current study, the gender perception scale (GPS) was generated as two latent variables. GPS was operationalized as traditional gender perception (TGP – 12 items) and egalitarian gender perception (EGP – 9 items) with the item parceling technique. The internal reliability for the GPS construct in this study was found to be .92.

Personal Growth Initiative Scale-II (PGIS-II) (Robitschek et al., 2012): PGIS-II is an instrument that assesses one's active and intentional involvement in changing and developing as a person. It consists of 16 Likert items that are represented on a 6-point continuum (1 = strongly

disagree, 6 = strongly agree) with higher scores indicating a greater degree of a personal growth initiative. The PGIS-II includes four subscales: (a) readiness for change, (b) planfulness, (c) using resources, and (d) intentional behavior. Each of the subscales contains four items. The total score is calculated by summing the subscale scores and then dividing by four. The PGIS-II was adapted into the Turkish language by Yalçın and Malkoç (2013). CFA was performed as part of the validation of the Turkish version of the scale, and the original four-factor structure was determined to be valid for the Turkish sample. The alpha reliability coefficient of the Turkish version of the scale was found to be .91, and the test-retest coefficient was determined as .80 (Yalçın & Malkoç, 2013). In this study, the alpha values for the four PGIS-II subscales, readiness for change, planfulness, using resources, and intentional behavior, were .77, .81, .58, and .80, respectively. Cronbach's alpha value for the total scale was determined as .90.

Personal Information Form: The Personal Information Form was developed to collect information such as age, sex, class, and faculties.

Procedure

Approval was obtained from the Ethical Board of the university. All participants filled out the measures in the fall of 2015. All participants were informed that their participation was voluntary and that they could leave the room if they decided not to participate in the study. It took approximately 30-40 min to complete the measures.

Data Analysis

Data were initially screened to determine the accuracy of data entry; means, standard deviations, distribution attributes, and bivariate correlations were calculated for all variables using SPSS 21.0. Path analysis was used to evaluate the predictive role of gender perception in career adaptability and career optimism, mediated by personal growth initiative. Path analysis was performed using Lisrel 8.51. The purpose of path analysis is to estimate the significance and magnitude of assumed causal relations and make the corresponding inferences (Tabachnick & Fidell, 2001).

Prior to path analysis, data from the whole sample were preliminarily examined using SPSS 21.0 to determine whether the assumption of the normal distribution was met. Structural equation modeling is a technique for large samples, and sample sizes above 200 could be considered as large (Kline, 1998). Therefore, according to this criterion, the sample size of the current study was adequate. The assumption of normality was assessed by evaluating the histogram and calculating the skewness and kurtosis values. Since skewness and kurtosis values were within the range of -1 to +1, the assumption of the normal distribution was met (Tabachnick & Fidell, 2001). Multivariate normality assumption was examined with scatter plots, and no violations were observed. For path analysis, there should also be no multicollinearity among variables, and one of the methods for diagnosing multicollinearity is by examining the bivariate correlations among variables (Tabachnick & Fidell, 2001). Correlation analysis revealed that there was no multicollinearity problem as none of the correlation scores among variables was greater than .85 (Table 2).

Table 2. Summary of Intercorrelations, Means, and Standard Deviations for Scores on Career Adaptability, Career Optimism, Personal Growth Initiative, and Gender Perception

	1	2	3	4	5	<i>M</i>	<i>SD</i>
Career adaptability	-					42.22	5.74
Career optimism	.58**	-				40.31	6.36
Personal Growth Initiative	.48**	.46**	-			3.62	0.66
Traditional gender perception	.21**	.16**	.13**	-		41.77	9.66
Egalitarian gender perception	.23**	.24**	.20**	.64**	-	36.02	6.22

** $p < .01$, *M*: Mean, *SD*: Standard Deviation.

The model fit of the current models was evaluated using the following fit indexes: the goodness-of-fit index (GFI) > .90, the comparative fit index (CFI) > .95, the adjusted goodness-of-fit index (AGFI) > .85, the root mean square error of approximation (RMSEA) < .06, and standardized root mean square residual (SRMR) < .08 (Hu & Bentler, 1999).

RESULTS

Descriptive Statistics

Means, standard deviations, and intercorrelations among the variables are presented in Table 2. Career adaptability was positively correlated with personal growth initiative ($r = .48, p < .01$), traditional gender perception ($r = .21, p < .01$), and egalitarian gender perception ($r = .23, p < .01$). In addition, career optimism was positively correlated with personal growth initiative ($r = .46, p < .01$), traditional gender perception ($r = .16, p < .01$), and egalitarian gender perception ($r = .24, p < .01$).

A two-step procedure recommended by Anderson and Gerbing (1988) was used in the present study to test the hypothesized model. In the first step, CFA was performed to develop an acceptable measurement model, and the structural model was assessed in the second step.

Measurement Model Assessment

Five latent variables (career optimism, career adaptability, traditional gender perception, egalitarian gender perception, and personal growth initiative) were used in the current study. By using the subscales of the CFI, 8 item-bundles for the career optimism latent variable and 11 item-bundles for the career adaptability latent variable were created. To operationalize traditional gender perception (TGP) and egalitarian gender perception (EGP), CFA was performed with the item parceling technique for GPS, and two latent variables were generated. For operationalization, 12 item-bundles and 9 item-bundles were created for the TGP latent variable and EGP latent variable, respectively. For the personal growth initiative latent variable, the bundles consisted of the same 16-items in PGIS-II.

The measurement model was evaluated using the maximum likelihood method, which produced good fit statistics for the five latent variables ($\chi^2 = 3593.96, p = .000, \chi^2/df = 2.44, GFI = .91, CFI = .93, AGFI = .90, SRMR = .04, RMSEA = .04$) and contained no problematic cross-loadings. These goodness-of-fit statistical values indicated that the measurement model was fit (Çokluk, Şekercioğlu, & Büyüköztürk, 2010; Kline, 1998; Şimşek, 2007). All standardized loadings on the latent variables were significant ($p < .001$; range .52-.89), supporting the construct validity of scales. The correlations among the independent (traditional gender perception and egalitarian gender perception), mediating (personal growth initiative), and dependent latent variables (career optimism and career adaptability) were all significant ($p < .001$), ranging from .16 to .62. These results were in support of Hypothesis 1, Hypothesis 2, and Hypothesis 3. Overall, the measurement model was reliable and provided an acceptable fit to the data to assess the structural model.

Structural Model Assessment

The hypothesized model (see Figure 1) did not have a good fit: $\chi^2 = 7695.98, p = .000, \chi^2/df = 5.20, GFI = .87, CFI = .89, AGFI = .85, SRMR = .06, RMSEA = .06$. Furthermore, it demonstrated a non-significant path from traditional gender perception to personal growth initiative, thus excluding the model. Following the recommendations of Jöreskog (1993), an alternative model was evaluated in this study (Fig.2).

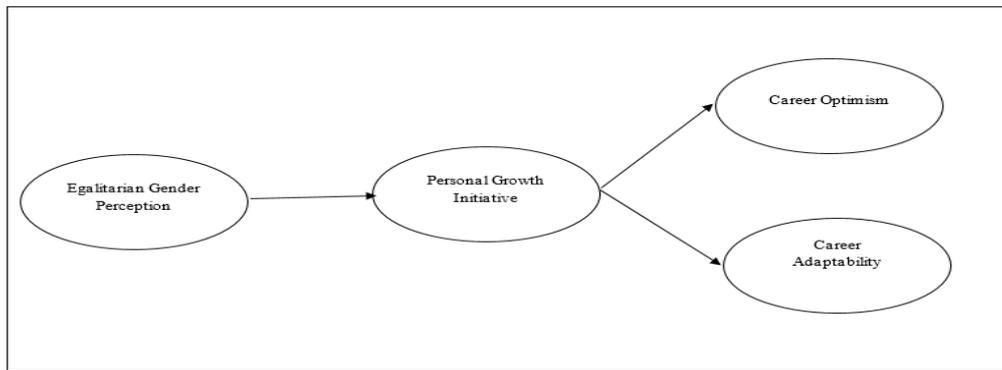


Figure 2. Alternative Model

The alternative model had a good fit: $\chi^2 = 1874.29$, $p = .000$, $\chi^2/df = 2.01$, $GFI = .91$, $CFI = .94$, $AGFI = 90$, $SRMR = .05$, $RMSEA = .04$. A significant positive path was found from egalitarian gender perception to personal growth initiative; as expected, higher levels of egalitarian gender perception were associated with higher personal growth. In addition, there were significant positive paths from personal growth initiative to career optimism and career adaptability. The results indicated that higher levels of personal growth initiative were associated with higher levels of career adaptability and career optimism. As shown in Figure 3, the coefficient of direct effect between egalitarian gender perception and personal growth initiative was $\beta = .26$ ($p < .05$), the coefficient of direct effect between personal growth initiative and career adaptability was $\beta = .62$ ($p < .05$), and the coefficient of direct effect between personal growth initiative and career optimism was $\beta = .54$ ($p < .05$). In addition, Lisrel estimates for the total indirect effect of egalitarian gender perception on career adaptability (0.17 , $p < .01$) and career optimism (0.14 , $p < .01$) through personal growth initiative supported the mediating role of PGI in the model, as shown in Table 3.

Table 3. Path Coefficients of Indirect Effects in the Accepted Model

Independent Variable	Mediating Variable	Dependent Variable	Total Indirect Effect
Egalitarian Gender Perception →	Personal Growth Initiative →	Career Adaptability	$.26 \times .65 = .17$
Egalitarian Gender Perception →	Personal Growth Initiative →	Career Optimism	$.26 \times .55 = .14$

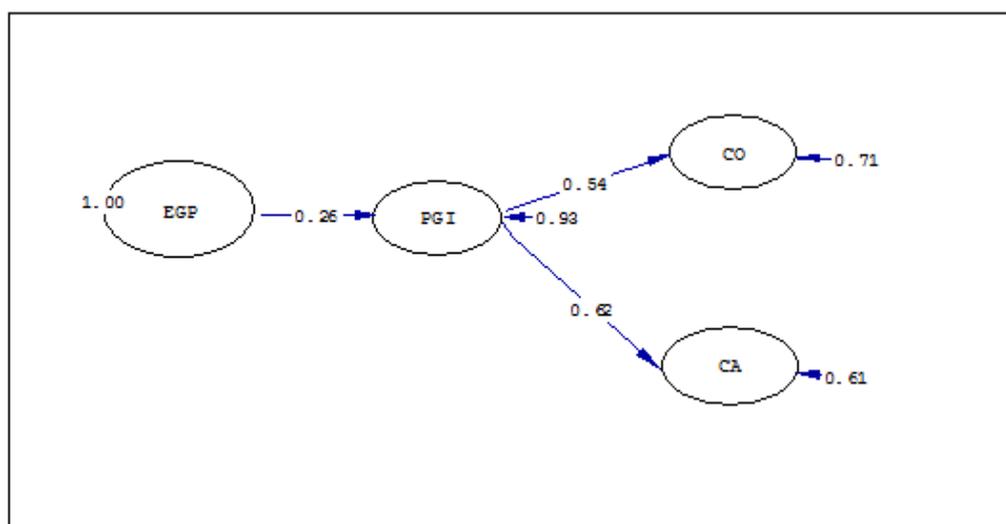


Figure 3. Path Diagram of the Alternative Model

Note: EGP: egalitarian gender perception, PGI: personal growth initiative; CO: career optimism; CA: career adaptability

By drawing a direct path from egalitarian gender perception to career adaptability and career optimism, the analysis was performed once again to confirm the proposed model. The addition of these paths to the model negatively contributed to the goodness-of-fit of the model as opposed to positive contribution ($\chi^2 = 3024.41$, $p < .001$, $\chi^2/SD = 3.22$, GFI = .86, AGFI = .85, CFI = .86, SRMR = .06, RMSEA = .05). Therefore, based on these results, it can be concluded that personal growth initiative can play a fully mediating role in the relationship between egalitarian gender perception and career adaptability and career optimism.

DISCUSSION AND CONCLUSION

In accordance with the objectives established in this study, the effects of gender perception on career adaptability and career optimism through personal growth initiative among college students have been investigated. Analysis of the proposed model demonstrated via structural equation modeling that personal growth initiative could play a fully mediating role in the relationship between egalitarian gender perception and career adaptability and career optimism. This suggests that gender perception can be associated with career adaptability and career optimism through the personal growth initiative variable. When the personal growth initiative variable was excluded, the ability of egalitarian or traditional gender perception to predict career adaptability and career optimism was removed. Consequently, individuals who have a relatively more egalitarian perception regarding gender are predicted to have the initiative toward personal growth without requiring the approval of others, and they are better adapted to explore their work environment and surrounding conditions. Indeed, Robitschek (1999) also indicated that individuals with higher personal growth initiatives are more likely to challenge traditional gender roles and tend to be more egalitarian. This supports the conclusions drawn from the current study, which implied the positive correlation between egalitarian gender perception and personal growth initiative; however, the path analysis of the proposed model did not reveal any significant correlation between traditional gender perception and personal growth initiative. In cases of traditional gender perception, individuals act in accordance with the gender roles expected of them by society. These roles, assigned to women and men, dictate women to care for infants and elders as well as to be responsible for the household; thus, they play family roles and assume only an identity in motherhood, ignoring their personal development and career priorities (Powell & Greenhaus, 2010). Nevertheless, personal growth initiative defines itself through individuals instead of traditional gender roles, and it expresses the importance of growth based on the individual. Indeed, college students with higher egalitarian gender perception are predicted to realize their personal capabilities and act more independently in developing personal skills and making their own choices without being limited by socially constructed gender roles (Altinova & Duyan, 2013)

Emerging or young adulthood is also the period that corresponds to college life; during this period, individuals aim for occupation and obtain the required knowledge, skills, and abilities while continuously making critical choices about their career (Konstam, 2007; Smith, Christoffersen, Davidson, & Herzog, 2011; Arnett, 2004). They plan for the future and set clear targets, all of which are the main traits of identity searching and identity questioning (Luyckx, Lens, Smits, & Goossens, 2010; Seginer & Noyman, 2005). As in many other areas, in the field of career development, personal growth initiative is considered as a vital concept that strengthens individual identities and shapes the career preferences of emerging adults (Luyckx & Robitschek, 2014). Personal growth initiative determines future goals and endeavors in achieving these goals (Shorey et al., 2007). Indeed, the findings of a study conducted by Robitschek and Cook (1999) on college students revealed that individuals with higher personal growth initiative levels tend to explore relatively more of the conditions required by their professions and positions and thus have a higher professional identity and attachment. Those with higher personal growth initiative levels were also observed to act proactively on their personal development (Luyckx & Robitschek, 2014) and are more willing to invest in their careers. All these findings appear to be consistent with the outcomes of the present study. For these

reasons, it can be concluded that the drive of individuals with high personal growth initiative toward a planned and targeted development throughout the self-realization process will have a positive effect on career adaptability and career optimism. It has been well proven that such individuals are aware of the changes occurring to themselves and actively seek out opportunities that facilitate their career targets.

Young adults between the ages of 15 to 24 (i.e. 12,782,381 people) make up 16.5% of Turkey's population (77,695,904 people). The unemployment rate of the young population in 2014 is 20.4% for women and 16.6% for men of the same age group (Turkish Statistical Institute [TUIK] 2014). Among all the Organization for Economic Co-operation and Development (OECD) countries, Turkey has one of the lowest female employment rates at 29% (OECD, 2013). Moreover, approximately one-third of women included in the employment rates are categorized as unpaid family workers (TUIK, 2014). A study on why women were absent from the workforce (TUIK, 2014) revealed that it was mostly because of their engagement in household responsibilities (57%). This finding clearly depicts a situation where women are more disadvantaged than men in employment and workforce participation. It should be emphasized that college youths are a key group in establishing egalitarian gender roles. Indeed, these young adults start their professional lives and careers right after college education and bring the gender roles they have adapted to their professional life. In another study involving gender roles and career plans among college students who live in different cultures and environments (Morinaga et al., 1993), it was found that women with less traditional gender roles or more egalitarian gender roles are more career-oriented; this is similar to the outcomes of the present study.

In recent decades, changes and uncertainty in the field of business and career options require individuals to be constantly prepared when new situations arise and to develop the necessary skills, competence, attitudes, and behaviors to perform effectively in such cases (Siyez & Yusupu, 2015). At this point, the concepts of career adaptability and career optimism become relevant. Career adaptability can be defined as readiness to cope with unexpected changes caused by occupation or working conditions while preparing for a new professional role or when just about to begin such a role (Savickas, 1997). Although career adaptability is believed to be shaped from the earliest stages of life (Hartung, Porfile, & Vondracek, 2008), it is a particularly valuable characteristic for young adults who need to make career-related decisions during their university years. University graduates with high career adaptability are better at planning and making realistic decisions (Ebberwein, Krieschok, Ulven, & Prosser, 2004) when aiming for better job opportunities and thus have a better chance of being employed (Klehe et al., 2012; Koen et al., 2012). For students, these skills may be developed during college years by exposing them to situations in which they can take initiatives for various practices, workshops, case studies, and scenarios, or by offering them an environment where they can discover these opportunities for themselves. In addition, optimistic character traits should also be considered when investigating the career adaptability of young adults (Rottinghaus et al., 2005). Individuals with high career optimism would focus on the positive aspects of their careers and expect positive outcomes. Therefore, they are predicted to be more successful compared with pessimistic individuals in handling possible obstacles, difficulties, and ambiguities throughout their careers (Patton, Bartrum, & Creed, 2004; Kluemper, Little, & DeGroot, 2009; Rand, 2009; Scheier, Carver, & Bridges, 1994).

The outcomes of this study will shed light on how interventions are designed and contribute to changing college students' gender stereotypes. The scope and content of the intervention programs designed specifically for the career growth of college students should include topics relating to gender equality and personal growth initiative. At present, the inclusion of courses and modules based on gender equality in the curricula of all faculties and departments would serve as a good starting point for the development of gender sensitivity and awareness among students. Young adults who embrace gender equality would be more independent, free, and self-confident when they make important decisions that may significantly affect their careers, and they will invest more in their personal growth, becoming individuals with high career adaptability and career optimism. It is expected that breaking away from traditional gender perceptions and developing intervention techniques based on gender

equality and personal growth initiative will have a constructive and positive role in career adaptability and career optimism among college students.

The current study has its strengths as well as some limitations. The study performed stratified sampling and random sampling methods on a large sample group with high representation capacity, thereby enhancing the methodological robustness of the research and the reliability and validity of its findings. Conversely, the study may be considered limited because data were collected using a pen and paper test from only one city and the same university in Turkey. Moreover, the study was not supported by different data collection techniques such as observation and in-depth interviews. Future studies should test the model suggested in the current study with different geographical, cultural environments, and universities to improve its generalizability. Furthermore, any future studies on different sample groups, including the inclusion of qualitative research methods and adoption of the triangulation approach in research design, will contribute to the comprehensive evaluation of the constructs of career adaptability and career optimism.

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