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# The Factors Contribute to Career Adaptability of High-School Students<sup>1</sup>

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DOI: http://dx.doi.org/10.14689/ejer.2017.67.11	investigate the factors contributing career			
Keywords Career adaptability perceived social support optimism general self-efficacy multisample structural equation modeling	adaptability of high-school students, which pose beneficial implications for career counseling research and practice. <b>Research Methods</b> : The sample comprised 1,610 students from public (n = 862) and private (n = 748) high schools in Ankara, Turkey. The Multidimensional Perceived Social Support Scale, Life Orientation Test - Revised, General Self-Efficacy Scale, and Career Adapt- Abilities Scale served as data collection instruments. Multisample structural equation modeling (SEM) was used to investigate model			

differences across school type. By the reason of model invariance, single-group SEM was used to examine the model on the entire dataset. Findings: Results indicated that the measurement model fit with the data, while results of multigroup confirmatory factor analysis confirmed measurement equivalence under the assumptions of configural and metric invariance. Results showed that the hypothesized model accounted for 46% of the variance in career adaptability and thus corroborated the effects of perceived social support and optimism in predicting career adaptability via general self-efficacy. Implications for Research and Practice: Findings highlight the role of general self-efficacy, optimism, and social support in high-school students' career adaptability. There is a need for a carefully planned guidance and career education program, beginning in the elementary grades and continuing through secondary school.

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<sup>&</sup>lt;sup>1</sup> This paper is based on a doctoral study and was presented at the Third International Eurasian Educational Research Congress.

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# Introduction

Considerable technological, economic, social and moral changes in the 21<sup>st</sup> century have required new skills in the world of work. Given those transformations, adaptability has become a lifelong skill that helps individuals to navigate today's careers (Savickas, 1997) and master challenging professional circumstances (Hirschi, 2012).

From a traditional perspective, high-school years correspond to an exploration stage of career development (Niles & Harris-Bowlsbey, 2009) at which adolescents are expected to establish vocational identity (Erikson, 1968) by exploring possible careers, generating professional alternatives, and crystalizing their vocational choices (Porfeli & Lee, 2012). Considering salient characteristics of the stage, the need to foster career preparation and improve the decision-making skills of adolescents has come to the fore (Skorikov, 2007). Hirschi (2009) has described career adaptability as a fundamental skill for career development and the professional preparation of adolescents that encompasses behaviors such as planning, exploring oneself and one's environment, and making decisions (cf. Savickas, 1997).

Savickas (2005) has defined career adaptability as "the attitudes, competencies, and behaviors that individuals use in fitting themselves to work that suits them" (p. 45). Multidimensional and hierarchical, the skill of career adaptability includes four components, as outlined by Savickas and Porfeli (2012): concern (i.e., looking ahead and preparing for the future), control (i.e., having decision-making skills), curiosity (i.e., being inquisitive about oneself and occupational options), and confidence (i.e., believing in one's ability to overcome obstacles). Those components serve as psychosocial resources or abilities that facilitate adjustment to various tasks or environments. Career adaptability interrelates with both the development of self and the interaction of the self with the world (Angel, 2012). Thus, career adaptability enables individuals to cope with vocational developmental tasks and work trauma (Savickas, 2005).

Literature on the topic has underlined the impact of career adaptability on improving career development, career preparation, career decision making, and life satisfaction among adolescents (Hirschi, 2009; Soresi, Nota, & Ferrari, 2012). In particular, the optimism that reflects a positive outlook and orientation toward the future (Carver, Scheier, & Segerstrom, 2010) seems to be a pivotal factor in adapting to transitions (Stanojević, Krstić, Jaredić, & Dimitrijević, 2014). Earlier studies indicated the predictive power of optimism over career adaptability (Buyukgoze-Kavas, 2014, 2016; Rottinghaus, Day, & Borgen, 2005), and Ochoa (2011) and Prokopcáková (2015) have characterized higher optimism and higher self-efficacy as positive resources for acting in flexible ways.

As an external resource, perceived social support – that is, perceptions of a range of support such as being valued and getting care from parents, friends or significant others (Sarason, Levine, Basham, & Sarason, 1983) – provides a buffer in response to all stressful conditions (Zimet, Dahlem, Zimet, & Farley, 1988), transitions, and challenges in life (Arce, 1996). In particular, social support strengthens adaptive skills for overcoming career-related issues (Kenny & Bledsoe, 2005) and positively

influences the formation of career adaptabilities (Ebenehi, Rashid, Bakar, & Asimiran 2016). Several studies in the past decade have stressed that role of social support; for instance, Hirschi, Niles, and Akos (2011) found that as perceived social support increases, so does engagement in active career preparation. Wang and Fu (2015) also found that social support enhanced career adaptability as well as mediated the role of career self-efficacy between social support and career adaptability.

Generalized self-efficacy, based upon Bandura's (1995) construct of self-efficacy, connotes beliefs in one's capability in terms of personal competence to overcome challenging circumstances and stressful events (Schwarzer, Mueller, & Greenglass, 1999). Self-efficacy is also regarded as a predictor of career adaptability (Bartley & Robitschek, 2000), and research has shown its influence on career development (e.g., Fouad & Smith, 1996; Panagos & DuBois, 1999). All of the abovementioned relationships underscore that optimists generally perceive themselves to have greater social support (Brissette, Scheier, & Carver, 2002), which affects their perceived self-efficacy (Magaletta & Oliver, 1999; Prokopčáková, 2015; Schwarzer et al., 1999).

In Turkey, high-school students focus on studying for the nationwide university entrance examination instead of exploring themselves and possible occupations (Yeşilyaprak, 2012). The Turkish educational system comprises two major school types – private and public – which differ according to physical conditions, the variety of education materials, the qualifications of the teachers, the number of students in classrooms (Altun & Canca, 2011), the rate of success on the university entrance examination (Uygun, 2003), access to counselling and support services (Karakucuk, 2010), and the socioeconomic levels of parents (Altun & Canca, 2011; Uygun, 2003). By taking into account those differences in school types, this study proposed a model to investigate whether and to what extent optimism, perceived social support, and general self-efficacy predict career adaptability among high-school students in different types of schools in Turkey (Figure 1).

#### Method

#### Research Design

A correlational study was used to investigate the nature and magnitude of associations among perceived social support, optimism, general self-efficacy, and career adaptability of high-school students.

#### Research Sample

The sample consisted of 1,610 students in 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grades, all recruited by convenience sampling, at six public (53.5%) and six private (46.5%) high schools in Ankara.

#### Instruments

*Life Orientation Test:* Life Orientation Test: Revised (LOT-R). The LOT-R (Scheier & Carver, 1985) includes 10 items, consisting of positive items (Items 1, 4, and 10), negative items (Items 3, 7, and 9), and filler items (Items 2, 5, 6, 8), all responded to on a 5-point Likert-type scale. An adaptation of the LOT, whose first form included 12 items, to Turkish (Aydın & Tezer, 1991) ensured a two-factorial structure and adequate internal reliability (.72). Confirmatory factor analysis (CFA) showed that the factor

structure of the LOT-R comprised two dimensions: optimism and pessimism ( $\chi^2$  (7) = 37.045,  $\chi^2/df$  = 4.63, CFI = .98, SRMR = .03, RMSEA = .05). Cronbach's alpha coefficient was .67 for the total sample, and composite reliability (CR) was .78.

*Multidimensional Scale of Perceived Social Support (MSPSS).* The MSPSS (Zimet et al., 1988) consists of 12 items and three subscales – namely, perceived social support from family (Items 3, 4, 8, and 11), friends (Items 6, 7, 9, and 12), and significant others (Items 1, 2, 5, and 10) – responded to on a 7-point Likert-type scale. The adaptation of the MSPSS to Turkish (Eker & Arkar, 1995) confirmed a three-factor structure and internal reliability, while CFA verified the three dimensions [ $\chi^2$  (47) = 134.707,  $\chi^2/df = 2.87$ , CFI = .99, SRMR = .02, RMSEA=.03]. Cronbach's alpha was .85 for the total scale, .87 for the family subscale, .88 for the friends subscale, and .91 for the significant others subscale for the entire sample.

*General Self-Efficacy Scale (GSE).* The GSE (Schwarzer & Jerusalem, 1995) consists of 10 items as a global dimension responded to on a 4-point Likert-type scale. The Turkish adaptation of the instrument yielded two factors, an internal reliability of .83, and a test–retest reliability of .80 (Aypay, 2007). CFA confirmed one dimension  $[\chi^2 (31) = 81.136, \chi^2/df = 2.61, CFI = .99, SRMR = .02, RMSEA = .03,]$  and a high internal reliability of .86.

*Career Adapt-Abilities Scale (CAAS).* The CAAS (Savickas & Porfeli, 2012) consists of 24 items in four dimensions – concern (Items 1–6), control (Items 7–12), curiosity (Items 13–18), and confidence (Items 19 and 20) – responded to on a 5-point Likert-type scale. The CAAS: Turkish High School Form (Karacan–Ozdemir, 2016) includes four subscales [ $\chi^2$  (245) = 730.085,  $\chi^2/df$  = 2.98; CFI = .90, SRMR = .05, RMSEA = .05] with internal reliability. Cronbach's alpha coefficients for the scales were .73, .70, .81, and .80, respectively.

#### Data Analysis

A multi-group structural equation modeling (SEM) by using the maximum likelihood (ML) was employed to evaluate group differences. Given a finding of model invariance, a single-group SEM was run.

#### Results

Prior to analysis, necessary assumption checks ensured no violation. The strongest and weakest correlations ranged from .49 to .28. Table 1 presents the means, standard deviations, and intercorrelations among study variables.

Means, Standard Deviations, and Intercorrelations Among Study Variables							
	М	SD	1	2	3	4	
1. LOT-R	12.85	4.46	-				
2. MSPSS	60.14	14.37	.28**				
3. GSE	31.28	5.33	.30**	.28**			
4. CAAS	90.44	14.72	.34**	.34**	.49**		

 Table 1

 Means, Standard Deviations, and Intercorrelations Among Study Variables

*Note.* N = 1135. LOT-R = Life Orientation Test-Revised; MSPSS = Multi-Dimensional Perceived Social Support; GSE = General Self-Efficacy; CAAS = Career Adapt-Abilities Scale. \*\*p < .01, two-tailed The results of independent sample *t*-tests indicated significant differences among levels of optimism [*t* (1608) = -2.84, *p* = .01], perceived social support [*t* (1608) = -10.87, *p* = .00], general self-efficacy [*t* (1608) = -4.34, *p* = .00], and career adaptability [*t* (1608) = -3.53, *p* = .00] among public and private high-school students.

### Measurement Model

As a precondition for group comparisons in SEM, measurement equivalence was assessed (Drasgow & Kanfer, 1985). First, a preliminary single-group CFA was computed for the entire dataset and for public and private school groups individually to ensure loose cross-validation (Brown, 2006). After slight modification, the fit indices indicated a measurement model fit (Table 2) that confirmed the suggested relationships among variables in all groups.

Multigroup CFA (MG-CFA) was run to gauge configural and metric invariance (Chen, 2008). By comparing the unconstrained model with the constrained one, configural invariance yielded adequate fit (Table 2), meaning that latent variables were similar in both groups. In turn, a chi-square ( $\chi^2$ ) difference test revealed a nonsignificant value (p = .07) by showing metric invariance that reflected the equivalence of indicator loadings and their corresponding factors across groups. The results appear in Table 2. Model validation was supported by standardized residual covariances without any exceptional cases beyond ±4.00 (Field, 2009) and parameter estimates with standardized regression weights around .50 and squared multiple correlations between 11% and 77%. In sum, the equivalent latent constructs and their factor loadings were confirmed across the groups.

#### Table 2.

Results of Measuremen	t Model T	Testing and	Measurement	Equivalence
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	$\chi^2$	df	$\chi^2/df$	CFI	TLI	SRMR	RMSEA	$\Delta \chi^2$
Optimal value			<5.0 <sup>a</sup>	>.90 <sup>b</sup>	>.90°	<.08 <sup>d</sup>	<.06°	
Single-group	• CFA							
Total sample	578.239	142	4.07	.95	.94	.04	.04	
Public high school	353.203	142	2.49	.95	.94	.04	.04	
Private high school	415.955	142	2.93	.94	.93	.04	.05	
Multigroup	CFA							
Configural invariance	769.169	284	2.71	.95	.93	.04	.03	
Metric invariance	797.953	303	2.63	.94	.94	.04	.03	.07

Note. a, b, c Schumacker and Lomax (2004); d, e Hu and Bentler (1999)

Correspondingly, single-group SEM was used on the entire dataset to test the proposed structural model by taking into account invariance across the public and private high-school groups. Results appear in Table 3.

### Structural Model

The structural invariance test was used to test the equivalence of all paths across school types as a prior step (Byrne & van de Vijver, 2010). In a comparison of the unconstrained structural model ( $\chi^2$  (286) = 785.774,  $\chi^2/df$  = 2.75, CFI = .94, SRMR = .04, RMSEA = .03) and fully constrained model ( $\chi^2$  (306) = 823.721,  $\chi^2/df$  = 2.69, CFI = .94, SRMR = .94, SRMR = .04, RMSEA = .03), the comparative fit indices difference test ( $\Delta$ CFI) did not reveal group difference ( $\Delta$ CFI = .002) since it was smaller than .01 (Cheung & Rensvold, 2002).

### Table 3.

Summary of Model Fit Statistics for Hypothesized Model

Goodness-of-fit indices								
	$\chi^2$	df	$\chi^2/df$	CFI	TLI	SRMR	RMSEA	
Proposed model	578.24	142	4.07	.95	.94	.04	.04	

As Table 3 shows, although the chi-square value was significant ( $\chi^2$  (142) = 578.24, (p < .001), the fit indices implied the model's goodness-of-fit (CFI = .95, TLI= .94, SRMR = .04, RMSEA = .03). In support, the normed chi-square value was within an acceptable range: 4.07 (<5.00).

Squared multiple correlation coefficients ( $R^2$ ) indicated that optimism and perceived social support accounted for 27% of the variance in general self-efficacy. In addition, the overall model explained 46% of the variance in career adaptability.

### Hypothesis Testing

According to results, all direct and indirect paths examined by bootstrapping (set at 1,000) and bias corrected bootstrap 95% confidence intervals were statistically significant. Regression coefficients were between .20 and .39 and from small to medium in effect size. Moreover, the relationship between optimism and perceived social support was significantly positive (r = .56, n = 1,610, p < .01). Figure 1 displays the standardized parameter estimates.



Figure 1. The hypothesized model

Regarding direct effects, optimism ( $\beta$  = .24, *p* < .05) and perceived social support ( $\beta$  = .20, p < .05) related significantly to career adaptability. Similarly, significant direct effects of optimism ( $\beta$  = .37, p < .05) and perceived social support ( $\beta$  = .21, p < .05) on general self-efficacy as a mediator variable emerged. More precisely, optimists had higher career adaptability. Similarly, the more social support that highschool students perceived from parents, friends, and significant others, the more career adaptability they had. In turn, perceived social support and optimism influenced general self-efficacy as a mediator variable. Lastly, data suggested how general self-efficacy affected career adaptability ( $\beta$  = .39, *p* < .05).

As for the indirect effects, optimism ( $\beta = .15$ , p < .05) and perceived social support  $(\beta = .08, p < .05)$  contributed to career adaptability as an endogenous variable through general self-efficacy. That is, high-school students who are optimistic and perceive more social support had greater general self-efficacy and career adaptability. In light of those results, all hypotheses were adjusted.

## **Discussion and Conclusion**

The model of career adaptability exploring contributing factors did not differ across school types. For both private and public high-school students, all model variables interacted similarly, possibly because the education system in Turkey requires all high-school students regardless of school type to take the university entrance examination and make vocational choices based on their scores. In other words, the university exam requirement for all students might have acted as an environmental factor that resulted in similar interactions among model variables. However, that tentative assumption needs to be further assessed in future studies.

The first hypothesis confirmed the positive association between optimism and perceived social support, which was consistent with previous studies showing that optimists perceive greater social support (e.g., Dougall, Hyman, Hayward, McFeeley, & Baum, 2001) or are perceived as socially more attractive, hence their greater social networks (e.g., Vollmann, Renner, & Weber, 2007).

Regarding direct relationships, the proposed paths from optimism and perceived social support to general self-efficacy were also confirmed. By conceiving of a social network as a source of positive self-perspective, an individual could enhance his or her self-efficacy beliefs (Bandura, 1994). Subsequently, optimists believe in their potential to go further and overcome obstacles (Prokopčáková, 2015). As a supportive continuation of the literature, the results of this study indicate that high-school students with perceived social support are more optimistic (e.g., Luszczynska, Gutiérrez–Don, & Schwarzer, 2005) and evaluate themselves more efficaciously.

Accordingly, optimism was associated positively and directly with students' career adaptability, as reported in earlier studies (Buyukgoze-Kavas, 2016; Santilli, Marcionetti, Rochat, Rossier, & Nota, 2016). As for environmental factors, the positive impact of perceived social support on career adaptability meant that high-school students who perceived more support from their parents, peers, or significant others had a higher level of career adaptability. That result was somewhat consistent with other findings (Ulaş & Yıldırım, 2015; Wang & Fu, 2015), but not with all (Yousefi, Abedi, Baghban, Eatemadi, & Abedi, 2011). Such results suggest that providing high-school students with positive future orientation may improve their career adaptability before they transition from high school to university or work. In particular, considering the relationship between social support and career adaptability, school counselors should focus on identifying students with low social support from their peers, parents, and teachers.

Results also indicated a strong relationship between general self-efficacy and career adaptability, which extends the findings of related research. Although efficacious students can be expected to be more adaptive (Morton, Mergler, & Boman, 2014), which supports the finding of the present study, research on the association of general self-efficacy with career adaptability (e.g., Hirschi, 2009; Oncel, 2014) remains limited.

Concerning indirect relationships, results indicated the influences of optimism and social support on career adaptability via general self-efficacy. Optimistic highschool students who perceive more social support have greater general self-efficacy beliefs and, in turn, greater career adaptability. Previous research has provided somewhat congruent results by showing that self-efficacy beliefs mediated the relationships of personal and environmental variables such as optimism (Nauta, 2004) and social support (Keller & Whiston, 2008; Wang & Fu, 2015) with careerrelated variables such as adaptability. Such a finding of the mediator role of general self-efficacy contributes to research on the topic of career adaptability.

Of course, researchers should pay attention to the limitations of this study. First, 12th-grade students could not be included in the sample since they were preparing

for the university entrance examination and were absent from school during the study period. That exclusion might limit the generalization of the findings to highschool students at all grade levels. Second, the private and public schools in the study were selected from Ankara. To investigate differences in school type, researchers could incorporate students from a wide range of public and private schools in other cities. Third, a variety of exogenous variables such as personality, hope, career optimism, and socioeconomic status, as well as other mediators such as career decision-making self-efficacy and self-regulation, might be included in the model in future studies.

Career adaptability is a critical psychosocial resource for the career development of adolescents in order to manage requirements and challenges of the 21st century (Patton & Creed, 2007). The above findings have underscored the contributions of personal and environmental variables – namely, optimism, perceived social support, and general self-efficacy – to the career adaptability of high-school students regardless of school type, which extends literature on career adaptability in light of career construction theory. Apart from the direct influences of optimism and perceived social support on career adaptability, general self-efficacy mediates their relationships. Thus, a deeper understanding of factors contributing to the career adaptability of adolescents can help school counselors to design career counseling and development programs accordingly.

### References

- Altun S., & Canca D. (2011). Do primary school students' level assessment examination points vary according to learning style, school type, and gender? e-*Journal of New World Sciences Academy*, 6(1), Retrieved from http://www.newwsa.com
- Angel, T. L. L. (2012). The Study of Career Perception of International Students in Japan and Japanese Companies. Unpublished master's thesis. Waseda University, Japan.
- Arbuckle, J. L. (2009). Amos 18 user's guide. Chicago, IL: Small Waters.
- Arce, E. M. (1996). The effects of social support and self-esteem on career. Paper presented at the Annual Meeting of the AERA New York, NY Indecision: A Cross-Cultural Comparison Between Two Groups of Undergraduate Students. Retrieved from the ERIC database. (ED415356)
- Aydın, G., & Tezer, E. (1991). The relations among optimism, health problem and academic success. *Journal of Psychology*, 7(26), 2-9.
- Aypay, A. (2007). Investigating the factors that determine adult imprudent behaviors. Unpublished doctoral dissertation. Ankara University, Ankara.
- Bandura, A. (1994). *Self-efficacy*. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H.

Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp.1-45). New York, NY: Cambridge University Press
- Bartley, D. F., & Robitschek, C. (2000). Career exploration: A multivariate analysis of predictors. *Journal of Vocational Behavior*, 56, 63-81.
- Brissette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. *Journal of Personality and Social Psychology*, 82, 102-111. doi: 10.1037//0022-3514.82.1.102
- Brown, T. A. (2006). Confirmatory factor analysis for applied research. New York: Guilford.
- Buyukgoze-Kavas, A. (2014). Validation of the Career adapt-abilities scale Turkish form and its relation to hope and optimism. *Australian Journal of Career Development*, 23(10), 125-132. doi: 10.1177/1038416214531931
- Buyukgoze-Kavas, A. (2016). Predicting career adaptability from positive psychological traits. *The Career Development Quarterly*, 64(2), 114-125.doi: 10.1002/cdq.12045
- Byrne, B. M., & Van de Vijver, F. (2010). Testing for measurement and structural equivalence in large-scale cross-cultural studies: Addressing the issue of nonequivalence. *International Journal of Testing*, 10, 107-132. doi: 10.1080/15305051003637306
- Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review*, 30, 879-889. doi: 10.1016/j.cpr.2010.01.006
- Chen, F. F. (2008). What happens if we compare chopsticks with forks? The impact of making inappropriate comparisons in cross-cultural research. Journal of Personality and Social Psychology, 95(5), 1005-1018. doi: 10.1037/a0013193
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233- 255. doi:10.1207/S15328007SEM0902\_5
- Dougall, A. L., Hyman, K. B., Hayward, M. C., McFeeley, S., & Baum, A. (2001). Optimism and traumatic stress: The importance of stress and coping. *Journal* of Applied Social Psychology, 31(2), 223-245. doi:10.1111/j.15591816.2001.tb00195.x
- Drasgow, F., & Kanfer, R. (1985). Equivalence of psychological measurement in heterogeneous populations. *Journal of Applied Psychology*, 70(4), 662-680. doi: 002I-9010/85/S00.75

- Ebenehi, A. S., Rashid, A. M., Bakar, A. R., & Asimiran, S. (2016). An exploration of confirmatory factor analysis of career adaptability skill among technical and vocational education students in Nigeria. *The International Journal of Humanities & Social Studies*, 4(1), 89-99.
- Eker, D., & Arkar, H. (1995). Factorial structure, validity, and reliability of the multidimensional scale of perceived social support. *Turkish Journal of Psychiatry*, 34, 45-55.
- Erikson, E. H. (1968). Identity, youth, and crisis. New York: Norton.
- Field, A. P. (2009). *Discovering statistics using SPSS: And sex and drugs and rock* 'n' roll (third edition). London: Sage Publications.
- Fouad, N. A., & Smith, P. L. (1996). A test of a social cognitive model for middle school students: Math/science. *Journal of Counseling Psychology*, 43(3), 338-346.
- Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effects on sense of power and life satisfaction. *Journal of Vocational Behavior*, 74(2), 145-155. doi: 10.1016/j.jvb.2009.01.002
- Hirschi, A. (2012). The career resources model: An integrative framework for career counsellors. *British Journal of Guidance & Counselling*, 40(4), 369-383.
- Hirschi, A., Niles, S. G., & Akos, P. (2011). Engagement in adolescent career preparation: Social support, personality, and the development of choice decidedness and congruence. *Journal of Adolescence*, 34(1), 173-182.
- Hu, L., & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. doi: 10.1080/10705519909540118
- Karacan-Ozdemir, N. (2016). *The factors contribute career adaptability of high school students*. Unpublished doctoral dissertation. Middle East Technical University, Ankara, Turkey.
- Karakuçuk, S. (2010). A study of physical/spatial conditions of the school guidance services (In context of guidance teachers' spatial perceptions). *The Journal of Enstitute of Social Sciences of Erciyes University*, 28(1), 421-440.
- Keller, B. K., & Whiston, S. C. (2008). The role of parental influences on young adolescents' career development. *Journal of Career Assessment*, 16(2), 198-217.
- Kenny, M. E., & Bledsoe, M. (2005). Contributions of the relational context to career adaptability among urban adolescents. *Journal of Vocational Behavior*, 66(2), 257–272, doi:10.1016/j.jvb.2004.10.002
- Luszczynska, A., Gutie´rrez-Don, A. B., & Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*, 40(2), 80-89.

- Magaletta, P., & Oliver, J. (1999). The hope construct, will, and ways: The relations with self-efficacy, optimism and general well-being. *Journal of Clinical Psychology*, 55, 539-551.
- Morton, S., Mergler, A. G., & Boman, P. (2014). Managing the transition: The role of optimism and self-efficacy for first-year Australian university students. Australian Journal of Guidance and Counselling, 24(1), 90-108. doi: 10.1017/jgc.2013.29.
- Nauta, M. M. (2004). Self-efficacy as a mediator of the relationships between personality factors and career interests. *Journal of Career Assessment*, 12(4), 381-394. doi: 10.1177/1069072704266653
- Niles, S. G., & Harris-Bolwlsbey, J. A. (2009). *Career development interventions in the* 21st century (3rd ed.). Upper Saddle River, NJ: Pearson.
- Ochoa, A. (2011). Contingent faculty: Helping or harming students? *The Journal of the Professoriate, 6*(1), 136-151. Retrieved from http:0-eds.a.ebscohost.com/.
- Oncel, L. (2014). Career Adapt-Abilities Scale: Convergent validity of subscale scores. *Journal of Vocational Behavior*, 85(1), 13-17. doi: 10.1016/j.jvb.2014.03.006
- Panagos, R. J., & DuBois, D. L. (1999). Career self-efficacy development and students with learning disabilities. *Learning Disabilities Research and Practice*, 14(1), 25-34. doi: 10.1207/sldrp1401\_3
- Patton, W., & Creed, P. (2007). The relationship between career variables and occupational aspirations/expectations for Australian high school adolescents. *Journal of Career Development*, 34(2), 127-148. doi: 10.1177/0894845307307471
- Porfeli, E. J., & Lee, B. (2012). Career development during childhood and adolescence. New Directions for Youth Development, 2012(134), 11-22. doi:10.1002/yd.20011
- Prokopcáková, A. (2015). Personal need for structure, anxiety, self-efficacy and optimism. *StudiaPsychologica*, 57(2), 147-162.
- Rottinghaus, P. J., Day, S. X., & Borgen, F. H. (2005). The Career Futures Inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment*, 13(1), 3-24.
- Santilli, S., Marcionetti J., Rochat, S., Rossier, J., & Nota, L., (2016). Career adaptability, hope, optimism and life satisfaction in Italian and Swiss adolescents. *Journal of Career Development*, 85(1), 67-74. doi:10.1177/0894845316633793
- Sarason, I. G., Levine, H. M., Basham, R. B., Sarason, B. R., (1983). Assessing social support: The Social Support Questionnaire. *Journal of Personality and Social Psychology*, 44(1), 127-139. http://dx.doi.org/10.1037/0022-3514.44.1.127
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, lifespace theory. *The Career Development Quarterly*, 45(3), 247-259.

- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: Wiley.
- Savickas, M. L., & Porfeli, E. J. (2012). The Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 744-747 (this issue). doi:10.1016/j.jvb.2012.01.011
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implication of generalized outcome expectancies. *Health Psychology*, 4(3), 219-247. doi: 10.1037/0278-6133.4.3.219
- Schumacker, R. E., & Lomax, R. G. (2004). A beginner's guide to structural equation modeling. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). England: NFER-NELSON.
- Schwarzer, R., Mueller, J., & Greenglass, E. (1999). Assessment of perceived general self-efficacy on the Internet: Data collection in cyberspace. *Anxiety, Stress, and Coping*, 12(2), 145-161. doi: 10.1080/10615809908248327
- Skorikov, V. B. (2007). Continuity in adolescent career preparation and its effects on adjustment? *Journal of Vocational Behavior*, 70(1), 8-24.
- Soresi, S., Nota, L., & Ferrari, L. (2012). Career adapt-abilities scale Italian form: Psychometric properties and relationships to breadth of interests, quality of life, and perceived barriers. *Journal of Vocational Behavior*, 80(3), 705-711.
- Stanojević, D., Krstić, M., Jaredić, B., & Dimitrijević, B. (2014). Proactive coping as a mediator between resources and outcomes: A structural equations modeling analysis. *Applied Research in Quality of Life*, 9(4), 871-885.
- Ulaş, O., & Yıldırım, I. (2015). Predictors of career maturity among high school students. *Hacettepe University Journal of Education*, 30(2), 151-165.
- Uygun, S. (2003). The development of private schools in Turkey. *Ankara University Journal of Faculty of Educational Sciences*, 36(1-2). 1-14.
- Vollmann, M., Renner, B., & Weber, H. (2007). Optimism and social support: The providers' perspective. *The Journal of Positive Psychology*, *2*, 205-215.
- Wang, Z., & Fu, Y. (2015). Social support, social comparison, and career adaptability: A moderated mediation model. *Social Behavior and Personality*, 43(4), 649-659. doi: 10.2224/sbp.2015.43.4.649
- Yeşilyaprak, B. (2012). The paradigm shift of vocational guidance and career counseling and its implications for Turkey: An evaluation from past to future. *Educational Sciences: Theory & Practice*, 11(4), 5-26.

- Yousefi, Z., Abedi, M., Baghban, I., Eatemadi, O., & Abedi, A. (2011). Personal and situational variables, and career concerns: predicting career adaptability in young adults. *The Spanish Journal of Psychology*, 14(1), 263-71.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41. doi:10.1207/s15327752jpa5201\_2

# Lise Öğrencilerinin Kariyer Uyum Yeteneklerini Yordayan Faktörler

### Atıf:

Karacan-Ozdemir, N., & Yerin Guneri, O. (2017). The factors contribute to career adaptability of high school students. *Eurasian Journal of Educational Research*, 67, 183-198. http://dx.doi.org/10.14689/ejer.2017.67.11

### Özet

Problem Durumu: 21. yüzyıl ile gelen sosyal, teknolojik, ekonomik ve ahlaki değişimler kişilerin iş dünyasında birden fazla işle meşgul olabilme, kendilerini yenileyebilme ve değişen koşullara uyum sağlayabilme becerilerine sahip olmalarını gerekli kılmaktadır. Ayrıca "garanti iş" kavramının yerini proje bazlı çalışmalara ve mobil çalışanlara bırakması ve sınırları olmayan organizasyonların biçimlenmeye başlaması iş geçişleri ve değişimlerin sıklaşması gerçeğini doğurmuştur. Bu noktada kişilerin bu değişimler karşısında kendini merkezde tutarak kariyeri ile kişisel yaşamını uyumlaştırması ve yeniden yapılandırması, bu doğrultuda da uyum yeteneklerini artırması önemli hale gelmiştir. Lise yılları ilk mesleki seçimlerin yapılması ve okuldan iş hayatı ya da üniversiteye geçiş gibi bazı önemli değişimleri içermesi açısından odaklanılması gereken bir dönemdir. Bu dönemde ergenlerin yaşam boyu ihtiyaç duyacakları kariyer uyum becerileri açısından desteklenebilmesi önem taşımaktadır. Bu nedenle kariyer uyum yeteneklerini etkileyen değişkenlerin belirlenmesi ortaöğretim düzeyinde verilecek kariyer danışmanlığı ve mesleki rehberlik çalışmalarının biçimlendirilmesinde önemli katkı sağlayacaktır. Öte yandan, Türkiye'deki eğitim sistemi içinde aileler imkânları doğrultusunda çocuklarının daha iyi eğitim fırsatlarından yararlanabilmesi için özel okullara göndermeyi tercih edebilmektedir. Özel okul ve devlet okulları arasındaki farklılıklar göz önünde bulundurularak öğrencilerin kariyer uyum yeteneklerini etkileyen unsurların değişeceği varsayılabilir. Bu farklılıkların araştırılması ve önerilen model doğrultusunda ortaya konulması kariyer danışmanlığı çalışmalarının okul türüne göre yapılandırılabilmesine ışık tutacaktır.

*Araştırmanın Amacı:* Bu araştırmanın temel amacı; yapılandırmacı kariyer kuramı çerçevesinde lise öğrencilerinin kariyer uyum yeteneğini yordayan bazı olası faktörleri belirlemeye çalışmaktır. Bu doğrultuda, kariyer uyum yeteneği ile algılanan sosyal destek, iyimserlik ve genel öz-yeterlik değişkenleri arasındaki yapısal ilişki ve bu değişkenlerin kariyer uyum yeteneğine katkıları araştırılmıştır. Ayrıca, araştırılan modelin okul türüne göre farklılaşıp farklılaşmadığı incelenmiştir.

*Araştırmanın Yöntemi:* Araştırma, ilişkisel bir araştırma desenine sahiptir. Bu araştırmanın örneklemini Ankara'daki 6 devlet ve 6 özel liseden kolay ulaşılabilirlik yöntemiyle seçilmiş 1610 (862 devlet, okulu 748 özel okul) lise öğrencisi oluşturmuştur. Devlet okulları Mamak, Keçiören, Sincan ve Etimesgut ilçelerinden seçilirken, özel okullar Çankaya bölgesinden alınmıştır. Üniversite sınavına hazırlandıkları gerekçesiyle okullarda bulunmayan 12. sınıf öğrencileri araştırmada yer alamamış, bu nedenle veriler 9, 10 ve 11. sınıf öğrencilerinden toplanmıştır. Bu çalışmada, Çok Boyutlu Algılanan Sosyal Destek Ölçeği (ÇBASDÖ; Zimet ve ark., 1988), Gözden geçirilmiş Yaşam Yönelimi Testi (YYT-R, Scheiver ve Carver, 1985), Genel Öz-yeterlik Ölçeği (GÖYÖ; Schwarzer ve Jerusalem, 1995) ve Kariyer Uyum Yetenekleri Ölçeği (KUY; Porfeli ve Savickas, 2012) veri toplama aracı olarak kullanılmıştır. Çoklu grup yapısal eşitlik modellemesi (YEM) kullanılarak önerilen modelin veriye uygunluğu test edilmiş, ancak sonuçların okul türüne göre (özeldevlet) fark göstermemesi üzerine, model, tek örneklemli YEM ile bütün katılımcılar üzerinde sınanmıştır.

*Araştırmanın Bulguları*: Devlet okulu, özel okul ve bütün grup üzerinde ayrı ayrı uygulanan tek örneklemli Doğrulayıcı Faktör Analizi (DFA) sonuçlarına göre ölçüm modelini onaylanmıştır. Ayrıca, modelin okul türüne göre incelenebilirliği ölçüm modeli karşılaştırmaları ile kanıtlanmıştır. Öte yandan, çok örneklemli yapısal eşitlik modellemesi modelin okul türüne göre farklılaşmadığını ortaya koymuştur. Bu nedenle tek örneklemli YEM analizi uygulanmış ve ki-kare/serbestlik derecesi 2.78, CFI değeri .96, SRMR değeri .03 ve RMSEA değeri .04 olarak bulunmuştur. Kabul edilebilir uyum indeksleri içerisinde yer alan bu sonuçlara göre, modelin veriye uyum sağladığını görülmüştür. Modelde kariyer uyum yeteneklerini yordayabileceği düşünülen yolların hepsi istatistiksel olarak anlamlı çıkmış, bu değişkenler arasında en yüksek ilişki genel öz-yeterlik ile kariyer uyum yeteneği arasında, en düşük ilişki ise algılanan sosyal destek ile kariyer uyum yeteneği arasında bulunmuştur. R<sup>2</sup> (çoklu korelasyon katsayısının karesi) değerlerine göre, algılanan sosyal destek ve iyimserlik genel öz-yeterlik üzerindeki varyansın %27'sini açıklarken, hepsi birlikte kariyer uyum yeteneği üzerindeki varyansın %46'sını açıklamıştır.

*Araştırmanın Sonuç ve Önerileri:* Modelin okul türüne göre farklılık göstermemesi Türkiye'deki eğitim sistemi içinde ister özel okul ister devlet okulu olsun bütün öğrencilerin aynı sınav sistemine tabi olması ile açıklanabilir. Ayrıca, kişinin mesleğinin bir kimlik göstergesi olarak görülmesi ve bu nedenle okul türü ne olursa olsun bütün öğrencilerin kariyer gelişimini önemsemeleri, bu durumun da kariyer uyum yeteneklerinin okul türüne göre farklılık göstermemesine yol açmış olabileceği şeklinde açıklanabilir. Öte yandan araştırma sonuçları, genel öz-yeterlik, iyimserlik ve algılanan sosyal desteğin ergenlerin kariyer uyum yetenekleri üzerindeki rolünü ortaya koymuştur. Bu bağlamda araştırma bulguları, okullarda yapılacak kariyer danışmanlığı çalışmalarının yapılandırılmasında önemli doğurgular taşımaktadır. Kariyer uyum yetenekleri Türkiye'de yeni çalışılmaya başlanmış bir konudur. Lise öğrencilerine yönelik yapılacak mesleki rehberlik çalışmalarının öğrencilerin özellikleri ile mesleklerin özelliklerini eşleştirmeye dayalı çalışmaların ötesinde beceri gelişimine dayalı kariyer yapılandırması ve eğitimine yönelik programları içermesinin gerekliliği vurgulanabilir. Bu nedenle gelecek çalışmalar için, kariyer uyum yeteneklerini etkileyen unsurların daha derinlemesine incelenmesi, daha farklı değişkenleri içeren yeni modellerin test edilmesi, farklı okul türlerinin (Güzel Sanatlar Lisesi, Fen Lisesi, Temel Lise vb.) de dahil edilerek örneklem grubunun genişletilmesi ve kariyer uyum yetenekleri yüksek ve düşük olan öğrencilerin boylamsal olarak incelenmesi önerilebilir.

*Anahtar Kelimeler:* Kariyer uyum yeteneği, sosyal destek, iyimserlik, genel özyeterlik, çoklu grup yapısal eşitlik modellemesi.

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