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## The Role of Self-Esteem in Predicting Pedagogical Formation Students' Career Adaptabilities\*

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### Abstract

The rapid changes in life standards and technology affect the social lives of individuals as well as world of work, job finding, work environments and career development. This rapid change also affects individuals' career adaptabilities, professional success and competences. Teaching profession is also affected by these changes. The aim of this study is to investigate the relationship between pedagogical formation students' career adaptability and self-esteem. A total of 235 volunteering pedagogical formation students who graduated from different faculties and received pedagogical formation education, including 190 females and 45 males, participated in this study. In order to collect data in the study, Personal Information Form (PIF), Career Adapt-Abilities Scale (CAAS) and Self-Liking/Self-Competence Scale (SLSC) were applied to the participants. The findings of the analyses show that there is a significant and positive relationship between career adaptabilities, self-liking and self-competence. Additionally, in the analysis conducted in order to test the predictability of the career adaptabilities by self-liking and self-competence, they were found to be significant predictors of the pedagogical formation students' career adaptabilities ( $R^2 = .37$ ,  $p < .01$ ). The findings of the research revealed the need for career counseling once again.

**Key words:** Career adaptability, Self-esteem, Pedagogical formation education, Career counseling, Vocational guidance.

### Introduction

As a result of the developments in the world, there are changes in world of work, job and career. Nowadays, the requirements of professions are changing rapidly, and this change becomes uncertain. This situation causes individuals to have more difficulties in their career transition (Cohen-Scali, Rossier & Nota, 2018). Individuals' career is not completed by getting a job because it is a life-long process. In addition, the career includes pre-occupational and post-occupational tasks as well as leisure activities and other roles undertaken in the society (Brown & Lent, 2013). The changes and consequences of globalization on the world of work life and employees are directly reflected in the career/vocational guidance and career counseling services. In modern societies, people are educated in schools before they are put into work life and they have a career in education (Cordoso & Sales, 2019), therefore, the vision of teachers about students also affects their career development. The teacher, who has such a responsibility, is a professional with different specialties. The most important effort for all nations in the time of rapid development and change is to train qualified individuals who are qualified to keep up with this process of change. Education and schools are the most effective tool in achieving this goal, and teachers are one of the important elements of this effective tool (Cohen-Scali, Rossier & Nota, 2018). In 2018 in Turkey, 440.311 pre-service teacher had applied to Student Selection and Placement Centre (ÖSYM) to become teachers in public institutions (ÖSYM, 2018). An important part of these pre-service teachers are students of pedagogical formation certificate program who have completed an undergraduate program other than faculties of education. As the pedagogical formation students do not take their undergraduate education in a field related to teaching, such as the faculty of education, the adequacy of pedagogical program is still being discussed (Bakaç & Özen, 2017; Çocuk, Yokuş & Tanrıseven, 2015; Kartal & Afacan, 2011; Kiraz & Kurul, 2018; Özcan & Genç, 2016; Süral & Sarıtaş, 2015). Teacher training in Turkey is one of the most controversial issues in the education system because of the failure to develop a coherent policy of teacher training. Different teacher

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education models were also tried in Turkey despite all the criticism. One of these models is pedagogical training program (Kiraz & Kurul, 2018; Uluyol & Şahin, 2018). Considering that around 20,000 new teachers start working in public schools every year, it may be argued that there is a need for the improvement of the career adaptabilities and competences of the rest.

It is known that individuals who take role models in career development are also effective (Garcia et al., 2019) and teachers are role models for their students. In this context, teachers' career adaptability functions in terms of both themselves and their students. The governments in Turkey have tried different teacher education policies since the proclamation of the Republic of Turkey and in 1993, teacher training institutions were organized within the faculties of education (Memduhoğlu & Kayan, 2017). This continuous change in teacher education policies has brought with it some difficulties such as instability, difficulties in adaption, and lack of professional identity development (Doğan & Çoban, 2009; Memduhoğlu & Kayan, 2017). In addition to all these problems in recent years, there is a significant difference between the number of the graduates from Faculties of Education and the number of teachers who are needed by Turkish Ministry of National Education (MEB). On the other hand, the number of pre-service teachers is increasing with the addition of students who receive pedagogical formation certificate to the students who graduated from faculties of education and this situation causes anxiety on pre-service teachers (Doğan & Çoban, 2009; Kiraz & Kurul, 2018). As pedagogical formation students do not graduate from a faculty of education like other pre-service teacher, their professional competence, occupational anxiety and career expectations are subjects of research (Balaman & Gelibolu, 2018; Süral & Sarıtaş, 2015). It is thought that the development of pedagogical formation students' career adaptabilities will help them to overcome this challenging process. A lot of studies during the past years have sought to explain components and predictors of career adaptability (Büyükgöze-Kavas, 2016; Neureiter & Traut-Mattausch, 2017; Rudolph, Lavigne & Zacher, 2017; Wilkins et al., 2018).

Nowadays, it is almost impossible to think about teaching and learning environments independently of technology so teaching profession requires different skills along with technological developments. Therefore, teachers' professional development both in Turkey (Dilmaç et al., 2009; Doğan & Çoban, 2009 Efiltili & Çıkkılı, 2017) as well as in the world (Afdal & Spernes, 2018; Lancaster & Bain, 2019) is seen as an important research area. Communication skills, career planning, decision making skills, career adaptability, resilience, life expectancy, economic situation, hope, education etc. affect the career development of individuals (Fasbender et al., 2019; Yeşilyaprak, 2012). Career adaptability, which has been increasingly emphasized by researchers in recent years, is seen as an important variable especially in the transition of individuals from academic life to work life and the success of future career movements (Garcia et al., 2019; Kanten, 2012; Rudolph, Lavigne & Zacher; Maree, 2012; Tak, 2012; Wilkins et al., 2018). Career adaptability can be defined as individuals' ability to cope with unexpected career changes, occupational transitions and potential barriers to work life (Savickas, 2013). Career adaptability is relevant today as it helps people to conform to the changes in the contemporary world of work and job-related roles. Career adaptability is considered as a basic structure that involves the attitudes, competencies and behaviors necessary for the young individuals to adapt to their jobs and changing work lives during the career development process (Savickas & Porfeli, 2012). According to the career construction theory, career adaptability has a four-dimensional structure: concern, control, curiosity, and confidence (Savickas, 2013; Savickas & Porfeli, 2012). Career concern is the individual's thought about future career and career options, making plans and adapting to his / her future. Career control is an individual's perceptions of himself / herself in decision-making and responsibility-taking skills in career development. Career curiosity, individual's interest, ability, value and personality characteristics in terms of recognizing himself and acquiring knowledge about the world of work as a result of testing the suitability between them. At last career confidence is an individual's beliefs in overcoming unexpected and sudden obstacles, difficulties and changes in career development (Savickas, 2013). In the research studies, it was found that, there was a positive relationship between pre-service teachers' career adaptability, career calling, career optimism and self-efficacy (Eryılmaz & Kara, 2018; McLennan, McIlveen & Perera, 2017). For this reason, this study is expected to contribute to counselors in career counseling studies as it is conducted to investigate pedagogical formation students' career adaptability and related variables.

The other variable of the study is self-esteem, which is seen as an important concept in the well-being of individuals, and it affects career development (Cohen-Scali, Rossier & Nota, 2018; Olenik-Smesh, Heiman & Keshet, 2018). Self is one of the main factors that affects the individual's emotions, thoughts, behavior and personality (Rosenberg, 1986; Snyder & Lopez, 2009) and self-esteem is a concept associated with self. Rosenberg (1986) states that self-esteem is related to the level of being satisfied with the perceptions of the individual. It is thought that self-esteem affects the daily lives of individuals in many ways (Brown & Lent, 2008). It is emphasized in the literature that self-esteem can be developed (Güler & Bedel, 2018; Orth, Erol & Luciano, 2018). Therefore, the explanation of the relationship between self-esteem and career adaptability will

pave the way for future studies. The aim of this study is to investigate the relationship between pedagogical formation students' career adaptability and self-esteem. In addition, satisfaction with program, satisfaction with undergraduate education and whether gender has an impact on career adaptability and self-esteem were investigated.

## Method

The correlational design is employed in this quantitative study. Correlational design gives opportunity to researchers to explain the relationship among variables and predict scores (Creswell, 2012, p.338; Fraenkel, Wallen & Hyun, 2012, p.330). In this study, the relationships between pedagogical formation students' career adaptabilities, self-esteem and other variables gender, satisfaction etc. were investigated.

### The Participants

The study group consists of pedagogical formation students who are studying pedagogical formation in a state university in Istanbul. A total of 235 volunteer pedagogical formation students' including 190 females and 45 males participated in this study. The age average of participants was 26.5. In addition, participants were asked about their satisfaction (Satisfied, Not sure, Dissatisfied) with the undergraduate education and undergraduate program and detailed information is presented in Table 1 below.

Table 1. Descriptive statistics of participants

Variables		N	Percentage (%)
Satisfaction with undergraduate education	Satisfied	98	41.7
	Not sure	67	28.5
	Dissatisfied	70	29.8
Satisfaction with undergraduate program	Satisfied	164	69.8
	Not sure	38	16.2
	No not satisfied	33	14
Gender	Female	190	80.8
	Male	45	19.2
Total		235	100

### Instruments

In order to collect data, Personal Information Form (PIF), Turkish adaptation of the Career Adaptabilities Scale (CAAS) and Self-Liking/Self-Competence Scale (SLSC) were applied to the participants.

#### Personal Information Form (PIF)

In order to collect some demographic information about participants, a personal information form was developed by the researcher. In the PIF, questions such as age, gender, satisfaction from the university and profession etc. were included.

#### Career Adaptabilities Scale (CAAS)

In order to measure participants' career adaptabilities, Turkish adaptation of the Career Adapt-Abilities Scale (CAAS) which was developed by Savickas and Porfeli (2012) was used. Adaptation of the Turkish version of CAAS was done by Kantan (2012). Original form of the CAAS is a 5-point Likert-type scale consisting of 24 items and four sub-dimensions. In the adaptation of CAAS to Turkish, 5 items were excluded from the scale and a 19-item scale was obtained. The subscales of the scales were concern (3 items;  $\alpha = .83$ ), control (5 items;  $\alpha = .74$ ), curiosity (5 items;  $\alpha = .79$ ) and confidence (6 items;  $\alpha = .85$ ) (Kantan, 2012). The reliability coefficients of the CAAS was calculated again for this study and the results are presented in Table 2 below.

#### Self-Liking/Self-Competence Scale (SLSC)

Self-esteem, another variable of the study, was measured by the Self-Liking/Self-Competence Scale (SLSC), which was developed by Tafarodi and Swan (2001), and adapted to Turkish by Doğan (2011). SLSC is a 16-item, 5-point Likert-type measurement tool consisting of two sub-dimensions "self-liking" and "self-competence". Psychometric properties of SLSC were examined with confirmatory factor analysis (CFA) and criterion-related validity methods. The CFA result was confirmed in the original form of the scale as well as its two-factor structure. The Cronbach's alpha internal consistency coefficient was .83 for the self-liking subscale and .74 for the self-competence sub-dimension. Test-retest reliability coefficient was found as .72 for both sub-

dimensions (Doğan, 2011). The reliability coefficients of the CAAS and SLSC was calculated again for this study and the results are presented in Table 2.

Table 2. The Cronbach's alpha coefficient of the scales

<i>Scale</i>	<i>Alpha(<math>\alpha</math>)</i>
CAAS-Total	.89
CAAS-Concern	.80
CAAS- Control	.75
CAAS-Curiosity	.85
CAAS- Confidence	.81
SLSC-Total	.90
SLSC-Self-liking	.88
SLSC-Self-competence	.81

The Cronbach's alpha coefficient for the reliability of instruments should be over .70 (Creswell, 2012; Fraenkel, Wallen and Hyun, 2012; Tabachnick & Fidell, 2013). In this context, it can be said that all data collection tools used within the scope of the research are reliable in terms of both the subscales and the whole scale.

### Data Analysis

After the necessary permissions were obtained, data were collected in two different ways: face to face and online. Data collection tools (PIF, CAAS & SLSC) were applied by the researcher in the classroom environment to pedagogical formation students in an average of 20 minutes and online data were collected with the help of google forms. Before the research data were analyzed, the scales that the students completed were first transferred to the computer. During this transfer, scales belonging to 12 participants whose scales were incomplete and incorrectly filled were excluded from the data set. After the data was coded to the SPSS 21 program, the distribution characteristics of the data set were examined, and it was examined whether it was suitable for the stepwise multiple regression analysis which is a parametric analysis. As a result, the skewness and kurtosis coefficients of the data (max = .03 min = -.75) were between -1.5 and +1.5 in some references (Tabachnick and Fidell, 2013) and in some of them +2 with -2 (George & Mallory, 2016) and distributions were accepted as normal due to the normal distribution of variable errors in histogram and p-plot graphs. In addition, multiple linearity assumptions tested and Variance Inflation Factor (VIF) checked by examining VIF values. It was found that all values where there was no problem in the variance inflation factors were below 10 and there was no tolerance value close to 0.10 (Hair et al., 2013). Since the data shows normal distribution, the analysis of the data is based on parametric tests; t-test ANOVA, frequency, percentage, correlation and stepwise multiple regression analyzes were used.

### Findings

In the analysis of the data, first of all, correlation analysis was conducted in order to test the relationship between career adaptabilities, self-esteem, and the sub-dimensions of these variables. The relationships between variables were examined by Pearson Product-Moment Correlation Analysis method and test results are presented in Table 3.

Table 3. Pearson correlation coefficients of variables

Variable	$\bar{X}$	Ss	<i>r</i>							
			1	2	3	4	5	6	7	8
1.CAAS-Total	77.88	9.07	-	.78*	.69*	.82*	.77*	.61*	.57*	.54*
2.CAAS-Concern	11.36	2.37			.45*	.55*	.50*	.42*	.46*	.27*
3.CAAS- Control	21.45	2.78				.37*	.36*	.50*	.54*	.35*
4.CAAS-Curiosity	19.27	3.66					.50*	.45*	.34*	.49*
5.CAAS- Confidence	25.79	2.93						.52*	.43*	.51*
6.SLSC-Total	56.60	10.10							.92*	.88*
7.SLSC-Self-liking	30.50	6.09								.64*
8.SLSC-Self-competence	25.09	5.04								-

\*:  $p < .01$

When Table 3 is examined, it is seen that there is a positive and significant relationship between the career adaptability score and the self-esteem scores of the participants ( $r = .61$ ,  $p < .01$ ). In addition, it was observed that there was a positive and significant relationship between the participants' career adaptability scores and self-liking scores ( $r = .57$ ,  $p < .01$ ) and self-competence scores ( $r = .54$ ,  $p < .01$ ) which were sub dimensions of the self-esteem.

In order to test whether self-liking and self-competence significantly predict career adaptability, a stepwise multiple regression analysis was performed. The results of stepwise multiple regression analyses are presented in Table 4.

Table 4. Results of stepwise multiple regression analysis

Dependent Variable	Model	Predictor Variables	B	SE <sub>B</sub>	$\beta$	t	F	R	R <sup>2</sup>	$\Delta R^2$
Career Adaptability	1	Constant	51.90	2.49		20.82*	113.05*	.57	.33	.32
		Self-liking	.85	.08	.57	10.63*				
	2	Constant	46.43	2.67		17.37*	71.90*	.62	.38	.37
		Self-liking	.55	.10	.37	5.51*				
		Self-Competence	.56	.12	.31	4.38*				

\*:  $p < .01$

When Table 3 is examined, it was observed seen that in the first step of the stepwise multiple regression analysis, the self-liking scores of the participants explained 32% of the variance in the career adaptability [F: 113.05, R = .57,  $\Delta R^2 = .32$ ,  $p < .01$ ]. In the second step of the analysis, the inclusion of self-competence score in the predictor variable group and the variance of the career adaptation scores to the predictor variables increased to 37% [F: 71.90, R = .62,  $\Delta R^2 = .37$ ,  $p < .01$ ]. In other words, self-liking scores have a higher predictive effect than self-competence scores on career adaptability.

After stepwise regression analyses, it was tested with one-way ANOVA whether there was a significant difference between career adaptability and self-esteem scores of the participants according to satisfaction with undergraduate education and analysis results represented in Table 5.

Table 5. ANOVA results depending on satisfaction with undergraduate education

		N	$\bar{X}$	df	F	p	Difference (Tukey)
Career Adaptability	Satisfied (1)	98	80.28	2	9.72	.00**	1-2, 1-3, 2-3
	Not sure (2)	67	78.16	232			
	Dissatisfied (3)	70	72.25	234			
Self-Esteem	Satisfied (1)	98	59.58	2	10.38	.00**	1-3
	Not sure (2)	67	56.35	232			
	Dissatisfied (3)	70	52.65	234			

\*:  $p < .05$ , \*\*:  $p < .01$

According to the results of one-way ANOVA analysis, pedagogical formation students' career adaptability scores differed significantly from the satisfaction with undergraduate education [F (2-232) = 9.72,  $p = .00 < .01$ ]. After one-way ANOVA analysis, the Tukey test was used to determine the source of difference between groups. According to Tukey test results, it was found that there was a significant difference between the satisfied, not sure and dissatisfied groups in favor of the satisfied with undergraduate education group. Also, according to Tukey test difference between not sure and dissatisfied groups, there is a difference in favor of not sure. One-way ANOVA test was also used to determine whether pedagogical formation students' self-esteem scores differ according to satisfaction with undergraduate education and a statistically significant difference was found [F (2-332) = 10.38,  $p = .00 < .01$ ] in favor of the satisfied with undergraduate education group. One-way ANOVA was applied again to test whether participants' career adaptability and self-esteem scores differ according to satisfaction with undergraduate program and the results are presented in Table 6.

Table 6. ANOVA Results depending on satisfaction with undergraduate program

	N	$\bar{X}$	df	F	p	Difference (Tukey)	
Career Adaptability	Satisfied (1)	164	79.06	2	5.31	.00**	1-3
	Not sure (2)	38	76.18	232			
	Dissatisfied (3)	33	73.79	234			
Self-Esteem	Satisfied (1)	164	57.82	2	4.44	.02*	1-3
	Not sure (2)	38	54.63	232			
	Dissatisfied (3)	33	52.75	234			

\*:  $p < .05$ , \*\*:  $p < .01$

According to the Table 6, pedagogical formation students' career adaptability scores differed significantly from the satisfaction with undergraduate program [ $F(2-232) = 5.31, p = .00 < .01$ ]. After one-way ANOVA analysis the Tukey test was used to determine the source of difference between groups. According to Tukey test results, it was found that there was a significant difference between the satisfied and dissatisfied groups in favor of the satisfied with undergraduate program group. One-way ANOVA test was also used to determine whether pedagogical formation students' self-esteem scores differ according to satisfaction with undergraduate program and a statistically significant difference was found [ $F(2-332) = 4.44, p = .02 < .05$ ] in favor of the satisfied with undergraduate program group. According to the gender, the participants' career adaptability and self-esteem scores were examined by t-test and no significant difference was found between the groups.

## Results and Discussion

According to the findings of the study, self-esteem which has two dimensions “*self-liking*” and “*self-competence*” has a positive effect on pedagogical formation students' career adaptability. In recent years, studies on relationship between career adaptability and many different variables have been increasing rapidly in many countries, especially in western societies (Büyükgöze-Kavas, 2016; Cordoso & Sales, 2019; Duffy, 2010; Fasbender et al., 2019; Garcia et al., 2019; Karacan-Özdemir & Yerin-Güneri, 2017; Maree, 2012; McLennan, McIlveen & Perera, 2017; Wilkins et al., 2018). On the other hand, self, self-efficacy, self-esteem is a concept that is thought to be closely related to career and professional development (Bakaç & Özen, 2017; Duffy, 2010; Neureiter & Traut-Mattausch 2017; Rudolph, Lavigne & Zacher, 2017; Zacher, 2014). In addition, there are different studies investigating the relationship between self-efficacy and attitude towards teaching profession (Bakaç & Özen, 2017; Depaepe & König, 2018). Today, self and self-related concept is seen as an important variable in the well-being of individuals due to the effect of positive psychology (Snyder & Lopez, 2009). Pedagogical formation students are at the center of this study and vocational self-esteem is also considered as a key concept for the teaching profession (Depaepe & König, 2018; Dilmaç et al., 2009; Efiltili & Çıkkılı, 2017). Therefore, pedagogical formation students' self-esteem and their vocational self-esteem will affect their professional development (Efiltili & Çıkkılı, 2017). According to the findings of the study, the high self-esteem of pedagogical formation students has a positive effect on career adaptability from this perspective, the findings of the study are consistent with the literature (Bakaç & Özen, 2017; Depaepe & König, 2018; McLennan, McIlveen & Perera, 2017). Since career adaptability is also developed through role model (Garcia et al., 2019) and teachers are also a role model for students, teachers' high career adaptability will benefit both themselves and their students.

When the career development is considered, self-esteem stands out as an important variable (Cohen-Scali, Rossier & Nota, 2018) because career management greatly consists of individual efforts and activities (Kanten, 2012). Additionally, rapid change in the world of work has made career adaptability a necessity to adapt to the work (Taber & Blankemeyer, 2015). Studies on career adaptability indicate that individuals with a high level of career adaptability are more competent in finding better job opportunities, making successful transitions in their jobs and achieving success in their jobs (Duffy, 2010; Fasbender et al., 2018; Garcia et al., 2019; Taber & Blankemeyer, 2015; Zacher, 2014). Nowadays, the requirements of a job are changing rapidly, and this change is becoming increasingly uncertain. This situation causes individuals to have more difficulties in their career transition. For this reason, in order to adapt young people to new situations and to survive the transition stages more comfortable and healthier, adaptability is of great importance. Recent research has shown that variables related “*self*” such as self-knowledge (Fasbender et al., 2019), self-efficacy (Karacan-Özdemir & Yerin-Güneri, 2017; Neureiter & Traut-Mattausch, 2017), self-esteem (Cai et al., 2015) and self-evaluation (Rudolph, Lavigne & Zacher, 2017) are closely related to career adaptability. With this study, it was seen that self-esteem was a significant predictor of career adaptability for Turkish pedagogical formation student sample. Similarly, McLennan, McIlveen & Perera (2017) states that there is a positive relationship between self-efficacy, career

adaptability and career optimism, also Bakaç & Özen (2017) states that there is a positive relationship between self-efficacy and attitudes towards teaching.

According to another finding of the study, it was found that the participants who were satisfied with undergraduate education had a significantly higher career adaptability and self-esteem score than not sure and dissatisfied group. Similarly, the relationship between academic satisfaction and profession satisfaction is explored in many parts of the world (Duffy, Douglass and Autin, 2015; Kanten, 2012). Another finding of the study shown that satisfaction with undergraduate program was also related to career adaptability and self-esteem. In other words, participants who are satisfied with undergraduate program and education have high career adaptability and high self-esteem scores. Career counselor and school counselor are required to help the students to know themselves and to help them settle in a program and university. In the meta-analysis research about self-esteem, Orth, Erol and Luciano (2018) have concluded that there is a very low or insignificant relationship between self-esteem and gender. Similarly, there was no significant relationship between gender and self-esteem in this study. On the other hand, Doğan (2011), who adapted the SLSC used in the study to Turkish, reached the conclusion that the gender was meaningless in the self-liking dimension of the scale and that there was a difference in favor of men in the self-competence dimension. In the study, it was found that gender is not a significant variable when it is investigated whether gender causes a difference on career adaptability. Similarly, Erus & Zeren (2017) were found no significant difference between pedagogical formation students' career adaptability by gender. Career adaptability is closely related to variables such as resilience, optimism, future perspective, adaptation, hope and proactive personality, which are the basic concepts of positive psychology (Büyükgöze-Kavas, 2016; Fasbender et al., 2019; Karacan-Özdemir & Yerin-Güneri, 2017; Rudolph, Lavigne & Zacher). In this study, it is emphasized that the self and perceptions about self-esteem have an effect on the future of the career. The recommendation part of the study was based on these findings and suggestions were given to the researchers.

## Conclusion and Recommendations

According to the findings of the study, Self-esteem is a significant predictor of pedagogical formation students' career adaptability and has a positive effect on it. In the literature, it is stated that self-esteem is a characteristic that can be developed and psycho-education programs to develop self-esteem should be implemented from an early age (Güler & Bedel, 2018; Orth, Erol & Luciano, 2018). In addition, research studies that emphasize that career adaptability can be trained are also reported in the literature (Koen, Klehe, Vianen, 2012). In this context, the importance of career counseling and vocational guidance studies to be carried out by the school Psychological Counseling and Guidance (PCG) services has been seen once again. It is possible to focus on psycho-education studies aiming to develop individuals with high self-esteem under the leadership of school counselors (Brown & Lent, 2013). Firstly, in Turkey, it is necessary to reconsider the national education policy objectives for PCG, vocational guidance career counseling. The policies and systems in this area should be in a structure that considers the paradigm shift, overlapping with the information society economy and country needs (Yeşilyaprak, 2012). According to another finding of the study, it is concluded that pedagogical formation students who have positive self-liking and self-competence perception have higher career adaptability. This result indicates that school PCG services should start from the pre-school period, especially in secondary education, in order to work on vocational guidance which is carried out in order to get people to know themselves and to guide them to the most suitable career. As one of the important findings of the study, the pedagogical formation students who were satisfied with the education received had higher career adaptability and self-esteem scores than those who were not satisfied. Çocuk, Yokuş & Tanrıseven (2015) states that the perceptions of pedagogical formation students about the teaching profession are positive and the perceptions about the pedagogical formation certificate program are negative. Similarly, in the study conducted by Süral & Sarıtaş (2015), 73% of the pedagogical formation students did not get enough of the 2-term education and they stated that pedagogical formation education should be extended to 4-year period just like the education faculties. Based on these findings teacher education policies in Turkey should be reconsidered. In other words, it would be meaningless to expect pre-service teachers who do not think they have received adequate training when they begin their profession.

Although this research has important contributions to literature it has some limitations. Firstly, the data obtained from the research are quantitative afterwards, a more comprehensive result can be obtained by using a combination of quantitative and qualitative designs together. In the Turkish version of CAAS, 5 items were removed during the adaptation process (Kanten, 2012). This can be seen as a limitation of the measured career adaptability. Therefore, in the future studies, a new measurement tool can be developed to measure career adaptability on the Turkish sample. This research is a correlational study, and researchers who will work on this subject may use an experimental design and experimentally test the effect of self-esteem on career adaptation. In

addition, the sample of this study consists of pedagogical formation students who have not stepped into the world of work so future research may focus on different groups of participants, such as individuals already teaching in schools.

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