

Research Article

Career adaptability and academic motivation as predictors of student teachers' attitudes towards the profession: A mixed methods study

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The attitudes towards the teaching profession reflect teachers' perception of the profession and strongly shape their professional behavior. As understanding the teaching profession and developing positive attitudes requires a long process, it is important to determine factors affecting attitudes towards teaching profession before the students engage in actual work behavior. Therefore, this study aims to determine the predictive power of career adaptability and academic motivation on student teachers' attitudes towards the teaching profession. The study was carried out through convergent parallel mixed methods design. 251 student teachers participated in the quantitative part of the study. For the qualitative part, five voluntary students attended the focus group interview. Quantitative data were collected with three scales while the qualitative data were collected through a focus group interview. The quantitative data were analyzed through stepwise multiple regression analysis and the qualitative data were analyzed through content analysis. Quantitative findings indicated that career adaptability and academic motivation predicted the attitudes towards the teaching profession, significantly. Correspondingly, the qualitative data also gave parallel results with the quantitative data, indicating that students' adaptation to career and their academic motivation were important predictors of their attitudes towards the teaching profession.

Keywords: Career adaptability; Academic motivation; Attitude; Teacher training; Education

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1. Introduction

Attitudes towards the teaching profession has been seen as one of the most important endeavors for strengthening the quality of teaching and increasing teachers' success (Chakraborty & Mondal, 2014; Polat, 2019). It is generally associated with a love of profession, commitment, and being aware that the teaching profession is socially necessary and important (Temizkan, 2008). Research emphasizes that a positive attitude towards the profession plays a significant role in a teacher's self-efficiency (Güneyli & Aslan, 2009), performance (Chakraborty & Mondal, 2014; Rimm-Kaufman & Sawyer, 2004), effectiveness (Giovannelli, 2003) and teaching efficacy (Kartal, 2020). It can also help student teachers in their career construction process by lowering their anxiety (Doğan & Çoban, 2009), reducing the risk of reality shock at the beginning of their career (Garvis et

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al., 2011), and developing inner motivation (Andronache et al., 2014), problem solving skills (Ballantyne et al., 2020), confidence and resilience (Mansfield et al., 2020).

Studies on student teachers' attitudes towards the teaching profession are mostly based on comparisons in terms of demographic characteristics such as age, gender, school type or grade (Balan et al., 2012; Çağlar, 2013; Tok, 2011). Research findings emphasize that student teachers have both positive (Çağlar, 2013; Terzi & Tezci, 2007) and negative attitudes towards teaching (Egwu, 2015; Pancholi & Bharwad, 2015). Özgüngör and Kapkiran (2008) emphasize that student teachers do not choose the teaching voluntarily and have negative attitudes towards the teaching profession, which affects their motivation and success in teaching adversely. Given the variation in results and the significance of the topic, there is a need for further studies to determine the factors affecting teachers' attitudes towards the profession (Müller et al., 2009; Rimm-Kaufman & Sawyer, 2004; Schussler et al., 2010). Such studies can help teacher education programs in their efficacy to develop positive attitudes among student teachers towards the teaching profession (Jain, 2007; Parylo et al., 2015; Shoffner et al., 2014; Schussler et al., 2010).

In this study, we specifically focus on two independent variables, career adaptability and academic motivation, which have not received much attention in the literature despite being quite relevant to student teachers' experiences within the profession during their education. Research has shown that career adaptability can weaken the fears related to the transition from school to work (Hirschi & Vondracek, 2009; Kanten, 2012) and help develop the confidence needed to deal with the difficulties and complex problems related to the occupation (Savickas & Porfeli, 2012). We therefore suggest that higher career adaptability might boost student teachers' positive attitudes towards the profession by lowering their fears about it and increasing their confidence in terms of handling related tasks efficiently (Chan & Mai, 2015; McLennan et al., 2017; Stoeber et al., 2016). These experiences call for career adaptability; thus, promoting career adaptability could serve as a protective factor as young people get prepared for the future (Ozdemir, 2019). Therefore, in order for schools to adaptively prepare students for their future works, career adaptability and its link with the other academic outcomes should be examined together.

Academic motivation as the other independent variable of this study is one the significant academic outcomes that is positively related to all dimensions of career adaptability. Students who have a strong desire to succeed academically have higher levels of career concern, curiosity, and confidence (Letawsky Shultz, 2017). By providing support for individuals' performance, curiosity, persistence, and learning (Vallerand et al., 1992), academic motivation can contribute to student teachers' success and devotion (Kontas, 2016). Such attributes that come with greater academic motivation might also help student teachers to develop positive attitudes toward the profession (Abbas, 2015; Zembat et al., 2018). Accordingly, highly motivated teachers will work more enthusiastically at work and have positive attitudes towards teaching profession; thus, they engage in teaching, which will inevitably increase the quality of education (Erdem & Gözel, 2014).

Despite a considerable amount of research having been carried out on certified teachers' attitudes towards the profession, little is known about the attitudes of student teachers. In addition, the expectation that engaging in career-adaptive behavior will lead to positive outcome in student motivation (Brown et al., 2021) and the link between academic motivation and attitude towards teaching profession (Bedel, 2015; Kontas, 2016) have been investigated quite more frequently. However, specifically, the possible effects of career adaptability and academic motivation on attitudes towards the teaching profession have not received much attention despite being highly relevant. It is therefore crucial to investigate if career adaptability and academic motivation predict student teachers' attitudes towards the profession. It is also important to explore student teachers' views on the factors related to their career adaptability, academic motivation and attitudes towards the teaching profession and the findings might provide important implications for teacher education programs. Improving student teachers' academic motivation and attitudes towards teaching profession will also contribute to their success and involvement in their professional lives.

Accordingly, the following research questions form the study:

RQ 1) What is the predictive power of career adaptability and academic motivation on student teachers' attitudes towards the teaching profession?

RQ 2) When career adaptability, academic motivation and attitude towards teaching profession are taken into consideration, what are the student teachers' views about

- a) the factors affecting their career adaptability,
- b) the factors affecting academic motivation and
- c) causes of attitudes towards the teaching profession?

1.1. Career Adaptability

Individuals encounter several career alternatives, job transitions, uncertainties, and changes in every aspect of their lives. Thus, choosing the most suitable career path is very important in today's dynamic and unpredictable working environment. One of the most crucial concepts in this regard is career adaptability, which allows individuals to adapt to and cope with changes and unpredictable situations in circumstances where there are challenges and ambiguities. Career adaptability is seen as a key element in the success of individuals' transition to business life and their future career moves (Hirschi & Vondracek, 2009; Kanten, 2012). The term holds great importance since it provides individuals with the resources to solve unfamiliar, complex, and ill-defined problems that occur in vocational tasks, occupational transitions, and work traumas (Savickas & Porfeli, 2012).

Savickas (1997) defined career adaptability as "the readiness to cope with the predictable tasks of preparing for and participating in the work role and with unpredictable adjustments prompted by changes and working conditions" (pp. 254). Likewise, Rottinghaus et al. (2005) define career adaptability as the way individuals view their capacity to adjust to changing career plans and work responsibilities. Based on the theory developed by Savickas and Porfeli (2012), career adaptability consists of the four dimensions as concern, control, curiosity, and confidence. Concern helps individuals prepare for the future, control enables them to take responsibility of constructing their career and shaping themselves. With the help of curiosity, individuals explore themselves in different situations and roles in order to find the most appropriate one. These activities and experiences help individuals gain confidence to implement career choices into their life span. As an inseparable part of the dynamic working environment, career adaptability of teachers and student teachers need to develop. Higher levels of career adaptability will help teachers to gain the ability of dealing with various challenges related to career transitions and uncertainties that they encounter during their careers.

The existing studies on career adaptability in educational settings suggest that the concept is positively related to job satisfaction (Wang et al., 2015), career optimism (Eren, 2012; Fang et al., 2018; McLennan et al., 2017), professional learning (McIlveen et al., 2019), self-efficacy (McLennan et al., 2017), academic achievement (Negru-Subtricia & Pop, 2016), and career motivation (Fang et al., 2018). Further, it plays a crucial role in decreasing burnout and turnover of teachers (Wang et al., 2015). Cabras and Mondo (2018) also state that university students who are confident in their career adaptability are more satisfied with life because they are confident about prospects. Being confident and adaptive towards the future will enhance their career success and well-being by giving them opportunities to find a suitable job for themselves (Hartung & Taber, 2008; Hirschi, 2010), thereby increasing motivation (Fang et al., 2018; Pouyaud et al., 2012).

1.2. Academic Motivation

Academic motivation is not a new research topic, but it is becoming increasingly popular in the field of education since it influences individuals' behaviors and performances as well as giving them the power to cope with challenges. Vallerand et al. (1992) define academic motivation as the energy required for academic work, while Woolfolk (2004) addresses it as an internal condition that reveals, directs, and ensures behavior. As motivation has a multi-dimensional structure that is related to academic achievement and performance (Green et al., 2006; Karagüven, 2012), many

different theories are proposed to explain this term in education. One of them is Deci and Ryan's (1985) self-determination theory, which examines academic motivation according to three dimensions, namely, intrinsic motivation, extrinsic motivation, and amotivation. According to this theory, intrinsic motivation enables individuals to behave for self-pleasure and self-satisfaction. Extrinsic motivation is related to behaviors that aim to reach an end or gather a reward. On the other hand, individuals are amotivated when they do not perceive contingencies between outcomes and their actions (Vallerand et al., 1992).

According to Shin and Lee (2017), intrinsically motivated teachers focus on teaching itself, and the joy of teaching is the driving force for them. Similarly, students who are intrinsically motivated to attend college tend to be extroverted, agreeable, conscientious, and open to new experiences, while those who lack motivation tend to be disagreeable and careless (Clark & Schroth, 2009). Being intrinsically motivated by the teaching profession reduces the risk factors for teachers that are associated with unhealthy, stress-related behaviors and experiences (Reichl et al., 2014) and increases the intention of student teachers to remain long-term in the teaching profession (Bruinsma & Jansen, 2010; Sinclair, 2008). Overall, the more student teachers are motivated, the more they can be expected to stay committed to their profession (Sinclair et al., 2006), and more likely to choose the teaching profession upon graduation (Rots et al., 2014).

1.3. Attitude towards the Teaching Profession

Attitude is defined as a tendency which manifests by evaluating a particular entity with some degree of favor or disfavor (Eagly & Chaiken, 1993). Positive attitudes occur when an individual develops positive feelings, behaviors and thoughts towards a subject while negative attitudes emerge when individuals have unpleasant feelings, behaviors or thoughts. Having a positive or negative attitude towards a situation, object, person or event can directly affect individuals' thoughts and behaviors (Cherry, 2020). As attitude is seen as the main predictor of teacher efficiency (Güneyli & Aslan, 2009) and performance (Chakraborty & Mondal, 2014; Rimm-Kaufman & Sawyer, 2004), it continues to be at the center of educational research. Thus, the teacher's learning experience during their studies forms the basis of their professional understanding.

The unpredictability and challenges of the teaching profession can contribute to pessimism and discouragement among student teachers. Osunde and Izevbigic (2006) point out that student teachers can lose their sense of belonging and develop negative attitudes towards teaching due to various reasons when they start. Consequently, negative attitudes towards profession cause a decrease in efficiency (Güneyli & Aslan, 2009), effectiveness (Giovannelli, 2003) and performance (Chakraborty & Mondal, 2014; Rimm-Kaufman & Sawyer, 2004). It is therefore crucial to determine the factors that influence student teachers' attitude toward their profession and also to provide insights into possible ways of improving their attitudes.

1.4. Current Study

Student teachers' positive attitudes towards the teaching profession could change due to their experiences in the teacher education process. In her longitudinal study based on student teachers' changing attitudes towards teaching, Tok (2011) emphasizes that student teachers' attitude changes significantly between their freshman and senior years. It is concluded that students' positive attitudes decrease in their senior years. On this basis, career adaptability could be an important factor in helping student teachers to develop and maintain positive attitudes towards the teaching profession. By developing higher career adaptability, they would be better prepared for the vocational future (concern), take responsibility of their career (control), explore themselves in different situations and roles (curiosity), and gain confidence needed to implement career choices into their life (confidence) (Savickas, 2005). Students that possess these characteristics should intend to invest effort in their school tasks since it is one of the first steps that they must do in their career construction (Avram et al., 2019). Consequently, we expect that career adaptability

is one of the important predictors of attitude towards teaching profession since these investments and efforts of students might reflect in their attitudes.

Along with career adaptability this study focuses on academic motivation as an important variable in student teachers' experiences. Academic motivation as the inner force that provides support for an individual's school performance, curiosity, persistence, and learning (Vallerand et al., 1992) would give student teachers power and energy in their academic work. Higher level of engagement with their academic work as well as the consequent increase in their efficacy and actual performance are more like to have positive influence student teachers' attitude towards the teaching profession positively (Bedel, 2015).

We argue that career adaptability and academic motivation can serve as a predictor of attitude towards teaching for a few reasons. Academic motivation plays a strong role in academic performance (Datu & Yang, 2021), and career adaptability that can often influence one's career options and choices is positively associated with academic performance (Avram et al., 2019; Datu et al., 2021; Negru-Subtirica & Pop, 2016; Pop et al., 2016); thus, a relationship may exist between academic motivation and career adaptability (Brown et al., 2021;). Accordingly, Letawsky Shultz (2017) suggests that academic motivation is positively related to career adaptability, and students who have a strong desire to succeed academically have higher levels of career concern, control, curiosity, and confidence. This indicates that adolescents with a strong future orientation tend to perform better in school and have positive outlook on their vocational future (Negru-Subtirica & Pop, 2016). Teachers who show a positive attitude towards teaching also play an important role in the learning processes. On the other hand, negative attitudes might hinder the professional progression of teachers. Therefore, the professional careers of teachers might be said to depend on their attitudes towards their profession (Deringöl, 2020). Consequently, it is reasonable to assume that career adaptability is associated with academic motivation while the academic motivation is also linked to attitudes towards teaching profession. To date, more proof for these relations is needed to provide better and deeper understanding how career adaptability and academic motivation are associated with attitude towards teaching profession.

2. Methodology

2.1. Research Design

The study was carried out through convergent parallel mixed method design. As the aim of this study is both to determine the predictive power of career adaptability and academic motivation on attitude towards the teaching profession and to understand student teachers' mindset on factors affecting these three main variables of the study. This type of research design enabled researchers to include both quantitative and qualitative data in the current study. Creswell (2012) states that convergent parallel mixed method design consists of collecting quantitative data and qualitative data concurrently without giving priority to either of them. In this vein, the quantitative and qualitative data are analyzed separately, and the researchers try to understand whether there is a convergence on the interpretation of the findings (Creswell & Plano Clark, 2017).

2.2. Participants

The participants of the study included 251 student teachers, studying on teacher education programs at different state and foundation universities in Turkey. The convenience sampling technique (Palinkas et al., 2015) was applied to collect data from participants who were easily accessible to the researchers.

As can be seen in Table 1, 189 of the participants were female while 62 of them were male. 17-19 age group constituted the majority of the participants (n=178) while 20-22 age group included 64 students, 23-25 age group included six students, and 25+ age group included three students. Among the student teachers, 38 of them were enrolled on Computer Education and Information Technologies Teaching program, 96 of them were enrolled in Early Childhood Education program,

Table 1
Characteristics of the participants

Demographic Information		<i>f</i>	%
Gender	Female	189	75
	Male	62	25
Age	17-19	178	71
	20-22	64	25
	23-25	6	2
	25+	3	2
Department	Computer Education and Information Technologies Teaching	38	15
	Early Childhood Education	96	38
	English Language Teaching	81	32
	Special Education	36	15
Total		251	100

81 of them were enrolled in English Language Teaching program, and 36 of them were enrolled in Special Education program. For the qualitative portion of the study, five voluntary students attended the focus group interview.

2.3. Data Collection Instruments

The data were collected through different quantitative and qualitative instruments. Quantitative data collection instruments included three different scales, namely, Attitudes towards Teaching Profession Scale, Career Adaptability Scale, and Academic Motivation Scale. Qualitative data were collected through a focus group interview.

2.3.1. Career adaptability scale (CAAS)

Developed by Savickas and Porfeli (2012), CAAS is a scale to measure individuals' career adaptability. The original scale is a five-point Likert type scale consisting of 24 items under four factors. The sub-scales, each having six items, measure concern, control, curiosity, and confidence. Higher scores in the scale imply that the individual tends to display higher career adaptability. The Turkish adaptation of the scale was conducted by Kanten (2012). The adaptation analyses confirmed the validity of a four-factor structure of the scale in Turkish. The researcher also found out that Cronbach's alpha for the factors ranged between .61 and .81, which confirmed the inner consistency of the instrument.

2.3.2. Academic motivation scale (AMS)

Developed by Vallerand et al., (1992), AMS is a scale used to determine whether an individual's motivation in a learning setting is intrinsic or extrinsic. The original scale is a five-point Likert type scale consisting of 28 items under seven factors. The factors measure intrinsic motivation, extrinsic motivation and amotivation. Karagüven (2012) made the adaptation of AMS into Turkish. Factor analyses confirmed the seven-factor structure of the scale. The calculation of Cronbach's alpha values also indicated that the sub-scores were between .67 and .87, which confirmed the reliability of the adapted scale.

2.3.3. Attitudes towards teaching profession scale (ATPS)

Developed by Üstüner (2006), ATPS is an instrument to examine the attitudes of student teachers pursuing a degree in faculties of education, towards the profession of teaching. The scale is a one-factor five-point Likert type scale consisting of 34 items. Construct validity studies indicated that factor loadings of the items varied between .74 and .41, explaining the 30% variance. In addition, the internal consistency of coefficient was calculated as .93, which confirmed that the scale was a

valid and reliable instrument. The higher scores gained from the scale imply that student teachers have positive attitudes towards the teaching profession.

2.3.4. Focus group interview

After collecting the quantitative data, the researchers organized a focus group interview to obtain a detailed picture of factors affecting the variables of interest. The interviewees were five student teachers who volunteered to take part in the study. It took nearly an hour to discuss the topic and understand their viewpoints. Two researchers attended the interview and the opinions of two field experts were taken into consideration to ensure the reliability of the interview questions.

2.4. Data Analysis

The data obtained from the quantitative portion of the study were analyzed through multiple regression analysis by using the SPSS statistical software program. Stepwise multiple regression analysis was chosen for this study to determine the predictive power of career adaptability and academic motivation on attitude towards the teaching profession. As for the qualitative portion of the study, content analysis was carried out. In content analysis, researchers read the transcribed data that were gathered from the focus group interview to uncover hidden facts by creating codes, categories and themes and merging similar concepts by creating meaningful patterns (Glesne, 2012; Yin, 2011). In this respect, the researchers initially transcribed the gathered data from the focus group interview. Two researchers separately and meticulously read the transcribed data to find codes and relate these codes to form categories and themes. After the analyses, they compared the findings and created final categories and themes by reaching a consensus. During the process, the opinions of two field experts concerning the codes, categories, and themes reached were also taken into account.

To ensure the validity and reliability of the qualitative portion of the study, Lincoln and Guba's (1985) credibility, transferability, dependability, and confirmability terms were referred to. For the credibility of the study, separate qualitative data collection instruments were used instead of depending on only one source. The transferability of the study was ensured through thick description of the data collection process. For the dependability of the study, the analyses conducted by the researchers were carefully examined and expert opinions were upheld. Finally, the confirmability of the study was ensured through asking participants' confirmation of the codes, categories, and themes for the accuracy of the analyses.

3. Results

3.1. The Predictive Power of Career Adaptability and Academic Motivation on Student Teachers' Attitude towards Teaching Profession

The first research question aimed at finding out the predictive power of career adaptability and academic motivation on student teachers' attitude towards the teaching profession. Table 2 presents the descriptive statistics of the variables.

Table 2

The descriptive statistics of the variables

<i>Variables</i>	<i>N</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SE</i>	<i>SD</i>
Career Adaptability	251	73	22	95	79.53	.73	11.59
Academic Motivation	251	86	49	135	106.82	1.02	16.25
Attitude	251	124	46	170	129.07	1.60	25.41

Table 2 demonstrates that the arithmetic mean of students' career adaptability is 79.53 (max. 120), academic motivation is 106.82 (max. 196) and attitude towards the teaching profession is 129.07 (max. 170). Before starting the regression analysis, it is a necessary assumption that all the independent variables show a linear relationship with the dependent variable. To examine the

relationships, the correlation analysis was conducted before the regression analysis. The correlation values between the dependent and the independent variables are illustrated in Table 3.

Table 3

Correlation coefficients among career adaptability and academic motivation on student teachers' attitude towards teaching profession

	Career Adaptability	Career Adaptability	Attitude
Career Adaptability	1.00		
Career Adaptability	.57**	1.00	
Attitude	.41**	.46**	1.00

Note. **Correlation is significant at the level of 0.01

As can be seen in Table 3, the relationship between career adaptability and academic motivation ($r = .57, p < 0.01$) and attitude towards teaching profession ($r = .41, p < 0.01$) is positive and significant. Likewise, academic motivation correlates with attitude ($r = .46, p < 0.01$) in a significant way. Lastly, there is a positive and significant relationship between career adaptability and attitude ($r = .41, p < 0.01$). After the correlation analysis, the regression analysis for the predictive power of career adaptability and academic motivation on student teachers' attitude towards the teaching profession was conducted. The results are illustrated in Table 4.

Table 4

The predictive power of career adaptability and academic motivation on attitude towards teaching profession

Variables	B	SE	β	t	p
Career Adaptability	.46	.14	.21	3.16	.00
Academic Motivation	.54	.10	.34	5.16	.00
Attitude	34.07	10.68		3.18	.00

Note. $R = .50$ $R^2 = .25$ $p < 0.05$

Results indicate that career adaptability and academic motivation explain 25% ($R^2 = .25$) of the total variance in attitude towards the teaching profession. This means that student teachers' career adaptability and academic motivation predict their attitude towards the teaching profession positively and significantly.

3.2. Views on the Factors Affecting Career Adaptability and Academic Motivation, and the Causes of Attitude towards Teaching Profession

As part of the qualitative part of the study, we investigated factors affecting student teachers' career adaptability and academic motivation.

3.2.1. Career adaptability

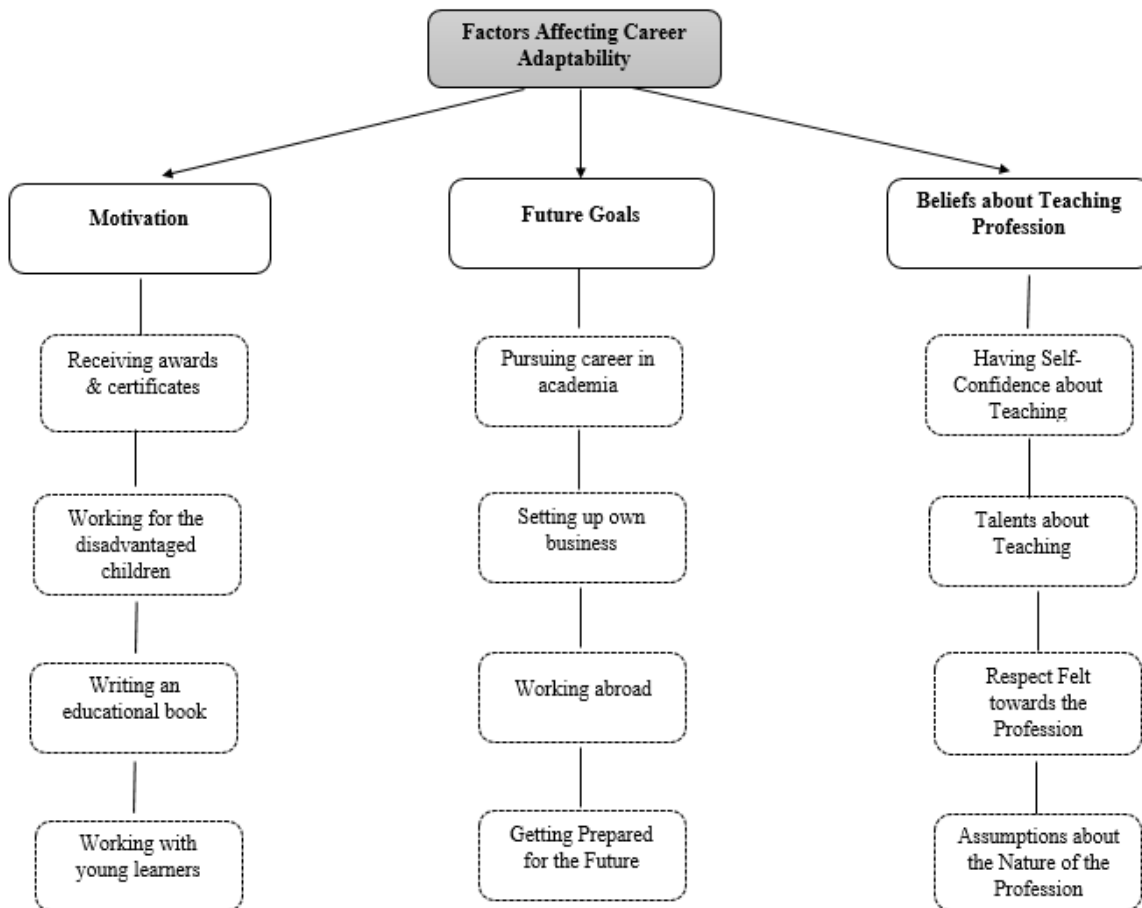
The first step was about exploring the factors affecting student teachers' career adaptability from student teachers' views. At the end of the content analysis, three categories, namely motivation, future goals, and beliefs about the teaching profession were reached under the main theme.

Most of the participants stated that their motivation affected their career adaptability. They mentioned receiving awards and certificates, working with the disadvantaged children, and writing an educational book, as motivators in their career adaptability.

"I have an inner motivation towards the profession. I would like to attend the necessary courses and obtain important teaching certificates and awards in my field. I want to prove my knowledge and expertise in this field by receiving these certificates." (S10, Male, 20).

"I have dreamed of being a teacher since my childhood. I believe that I was born to become a teacher to work with children who really need my support. I never feel that courses at the faculty are a kind of burden for me. Instead, I think I am getting ready for my career." (S2, Female, 20).

Figure 1
Factors affecting career adaptability



They mentioned their future goals such as pursuing a career in academia, setting up their own business, or working abroad. When mentioning these, they stated that their goals had an influence on their career adaptability.

"I want to work in a good school, to be a good teacher who has improved himself and is always open to improvement in all areas. I would like to be a teacher who is not bored of learning and teaching. I can say that my future goals and my adaptation to the teaching profession are related." (S36, Female, 18).

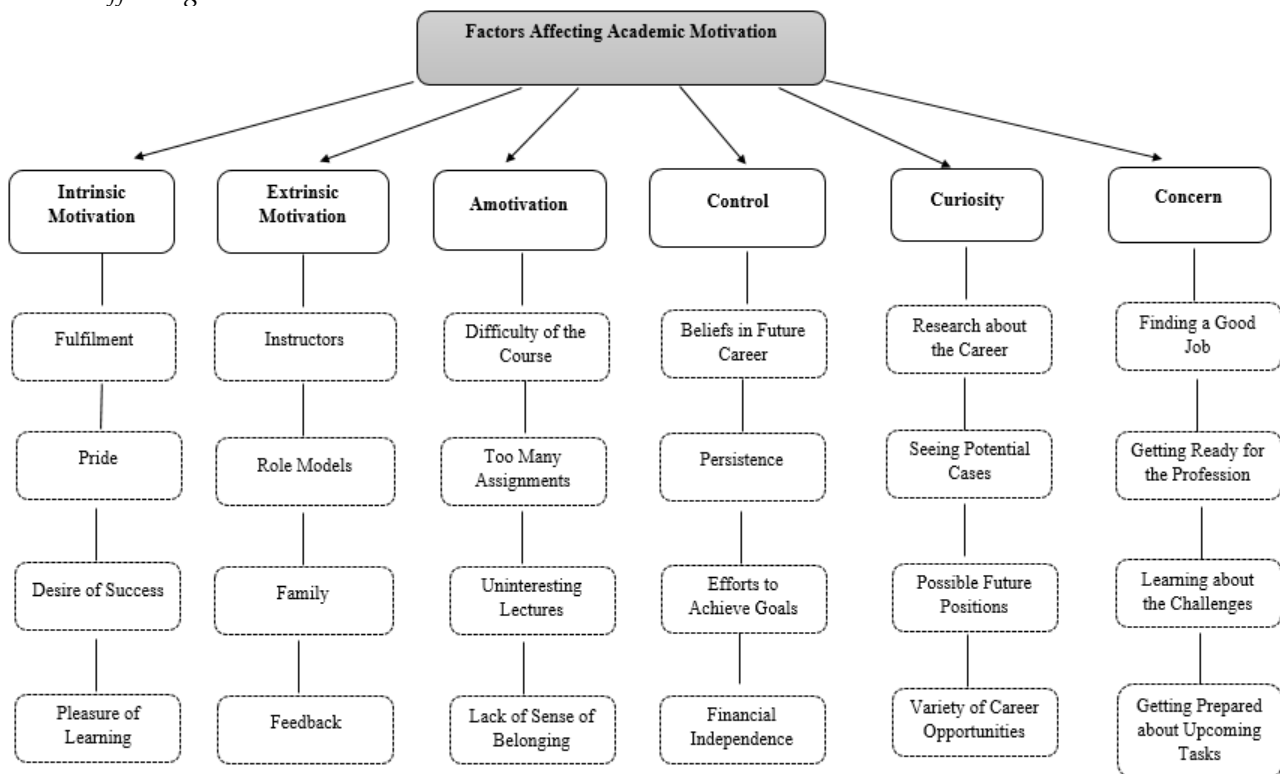
Lastly, the participants referred to their beliefs about the teaching profession and added that these beliefs contributed to their career adaptability. For instance, they pointed out that having self-confidence, talent, and respect for the profession, all had effects on career adaptability.

"Every member of my nuclear family is an educator. I grew up in a place where there were long conversations about education. I respect the job and I believe that I am a suitable person for the profession like the rest of my family." (S6, Female, 19).

3.2.2. Academic motivation

We also investigated the factors affecting academic motivation. Six categories emerged under the main theme: intrinsic motivation, extrinsic motivation, amotivation, control, curiosity, and concern.

Figure 2
Factors affecting academic motivation



Regarding academic motivation, one of the issues mentioned by the participants was intrinsic motivation. Under this category, they stated that the desire for success, the pride of being a teacher, and the pleasure of learning all contributed to their academic motivation. Extrinsic, as well as intrinsic motivation affected the participants' academic motivation: instructors, role models, family members, and the feedback they got had an important share in their academic motivation.

"...The biggest source of inspiration for me is the belief that one day I will become a teacher and teach my own students. This really keeps me on track." (S109, Female, 18).

"I know I am a conscientious student, but I am highly motivated to learn from my instructors who always help me hear my own inner voice. They always welcome my questions, give me feedback about my assignments, and they show interest in my personal growth. This really makes me feel eager to come to the faculty!" (S92, Male, 21).

Thirdly, participants stated that difficult courses, uninteresting lectures, or having too many assignments had negative effects on their academic motivation. Two examples of such statements are:

"My motivation is ruined when I feel that I will not be able to submit my assignments on time! Sometimes I feel that the instructors' expectations are way too high." (S1, Female, 20).

"When I cannot get the essence of the lesson, I feel disconnected, especially in the block sessions." (S17, Male, 19).

Participants also emphasized the importance of three dimensions of career adaptability, namely, control, curiosity, and concern, as factors influencing their academic motivation. In the control category, the participants stressed the importance of their beliefs in their future career, their efforts to achieve their goals to become teachers, and financial independence, as contributing to academic motivation. Moreover, under the curiosity category, they added that they were interested in seeing potential cases in educational settings and possible future positions. Lastly, the participants pointed out that their concerns about finding a good job and the need to learn about possible challenges increased their academic motivation.

"I see lots of different cases in the classes; this is really motivating for me. By seeing them, I draw my own conclusions and try to set up my knowledge base towards the profession. It's really motivating." (S68, Male, 22)

"My beliefs about the profession shape my vision, career path, and decisions about the future." (S21, Female, 20).

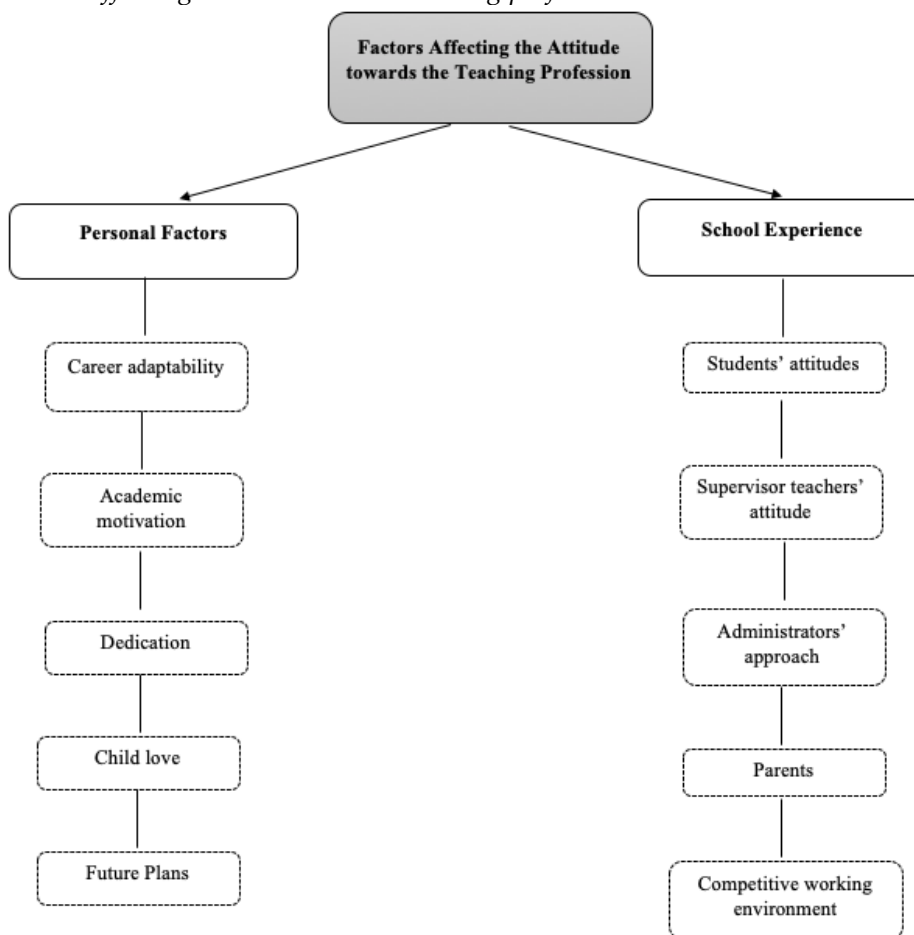
"What makes me come to the faculty and attend class is my desire to learn every aspect of teaching, including the difficulties that are waiting for me in the future. Me and my friends always have conversations about the possible challenges that we may experience and try to generate solutions for the possible problems." (S34, Female, 21).

3.2.3. Attitude towards the teaching profession

As part of the qualitative dimension, we also investigated the causes of student teachers' attitude towards the teaching profession. Under the main theme, two categories emerged at the end of the analysis, namely, personal factors and school experience.

Figure 3

Factors affecting attitude towards teaching profession



Findings gathered from the content analysis indicated that the attitude towards teaching profession was influenced by some personal factors and experiences as an intern. The interviewees pointed out that their adaptation to the career and their academic motivation were important predictors of their attitude towards the teaching profession. In addition to this, they stated that some other personal factors such as dedication, love for the children, and future plans, all shaped their attitude. Apart from personal factors, they also mentioned the effect of school experience on their attitude. They stated that teachers', students', administrators' and parents' attitude towards them affected their overall attitude towards the teaching profession. They also stated that they

were negatively affected if their place of work had a competitive environment, or they were exposed to mobbing attempts.

“Student teachers should not regard teaching as a source of income; instead, they need a strong dedication and a love for children to develop a positive attitude towards the profession.” (S4, Female, 19)

“The place you work as an intern, parents’ background, students’ behaviors towards you, even the administrators of the institution you are affiliated to affect your attitude towards teaching. If you are exposed to mobbing in the workplace, this will also affect your attitude. When you work in a non-oppressive environment and have the chance to produce things with your own will, all the positive aspects continue to accumulate and affect your attitude positively.” (S5, Female, 20)

4. Discussion

The initial aim of this study was firstly to determine the predictive power of career adaptability and academic motivation on student teachers’ attitude towards the teaching profession. The quantitative analysis indicated that career adaptability and academic motivation together predicted attitudes towards the teaching profession significantly. Ginevra et al. (2016) state that career adaptability help individuals gain confidence in handling tasks and changes, resulting in the development of positive feelings in the pursuit of their career goals. Likewise, academically motivated individuals tend to be enthusiastic about learning and are driven to accomplish with the help of an internal control locus (Beaudoin, 2006). Teachers who show a positive attitude towards teaching play an important role in the learning processes. They can work hard and effectively. On the other hand, negative attitudes might hinder the professional progression of teachers. Therefore, the professional careers of teachers might be said to depend on their attitudes towards their profession (Deringöl, 2020). In this respect, career adaptability and academic motivation can be said to have a strong predictive power on student teachers’ attitude. These results are consistent with the previous literature which indicated the impact of career adaptability and academic motivation on attitude. Chan et.al (2015) emphasize that there is a strong relationship between career adaptability and career attitudes of university students, while Eryılmaz and Askeroğlu (2019) suggest that career adaptability positively affects students’ attitudes towards future. Our results expand the existing knowledge by highlighting the role of career adaptability in affecting attitude towards the profession.

Our findings also revealed that academic motivation played an important role in predicting attitude towards the teaching profession. If student teachers are motivated for teaching, they are more committed to the profession (Sinclair et al., 2006), more likely to choose the teaching profession upon graduation (Agbaria, 2013; Rots et al., 2014), and are more adaptable and optimistic to the teaching profession (McLennan et al., 2017). Supporting career adaptability and the academic motivation of student teachers thus might enable them to adapt to the profession, and to give them the power and energy in handling tasks efficiently, which will provide confidence and positive attitude towards the profession. Accomplishing this can be made possible by providing student teachers with enough opportunities for understanding the facets of a teaching career, identifying their motives for teaching, and developing positive attitudes towards the profession. This finding is also consistent with other studies in Turkey (Bedel, 2015; İman, 2014; Zembat et al., 2018) as well as in other contexts (Bukidnon & Tan, 2017; Watt & Richardson, 2008).

Another aim of the study was to explore factors affecting career adaptability, academic motivation, and the causes of attitudes towards the teaching profession. Regarding the factors affecting career adaptability, the qualitative dimension of the study demonstrated that motivation, future goals, and beliefs about teaching profession had the influence. Motivated individuals are expected to put more effort to develop their skills during their undergraduate education. They tend devote themselves for achievement, explore opportunities to shape their career, and evaluate different alternatives (Koyuncuoğlu, 2021). Future goals are personal ambitions that an individual aspires to achieve, and they are personal objectives for their own lives. Having future goals about the occupation help individuals make strong connections with their future job and regulate their

plans accordingly (Ginevra et. al, 2021). Likewise, McAlexander et. al (2022) assert that students' prior experiences, abilities, beliefs, and values directly motivate their choices in their career path. Taken together, motivation, goals, and beliefs might be said to be important for student teachers in the sense that they affect their career adaptability interchangeably. In a similar study conducted by Bassi et al. (2007), it was revealed that students with high self-efficacy and motivation exhibited higher academic expectations, attitudes, and career decidedness. Likewise, findings of the study conducted by Tadele and Terefe (2016) support the view that career beliefs correlate with and predict career exploration.

Regarding the factors affecting their academic motivation, the qualitative dimension indicated that the desires for success, professional pride, and the pleasure of learning were the intrinsic motivators of academic motivation, while instructors, role models, family members, and the feedback the student teachers received were their extrinsic motivators. On the other hand, difficult courses, uninteresting lectures, or having too many assignments had negative effects on their academic motivation. Bergmark et. al (2018) suggest that student teachers have three different motives. These can be extrinsic (e.g. salary, status), intrinsic (e.g. meaning of teaching, passion for teaching) and altruistic (e.g. teaching as a valuable and important profession, desire to support children's development and making a difference in society). As stated by Deci and Ryan (1985), individuals can be motivated in different ways and it is essential to understand what motivates students during their teacher education program. Thus, it could be possible to remove the things that negatively affect their motivation and attitude.

About the causes of student teachers' attitude towards the profession of teaching, findings belonging to the quantitative portion of the study have also been validated with the qualitative dimension of the study. Student teachers drew attention to both personal and school-related factors that influence their attitude towards the teaching profession. In addition to dedication, child love, and future plans, career adaptability and academic motivation were among the personal factors that affected their attitude. Ölçü-Dinçer and Seferoğlu (2019) imply that student teachers' preferences and career decisions are shaped in the early years of their education, adding that preoccupied beliefs have a strong impact on their attitudes. In this respect, the participants of the focus group interview might have mentioned personal factors such as child love, dedication, and future career plans to shape their attitude. In a similar study, Balan et al. (2012) found that passion for the profession, pleasure of working with children, pleasure in teaching, and personal and professional development were among the intrinsic motives of students. Student teachers in our study also emphasized that their interaction with teachers, parents, administrators, and students during internship might change their attitudes towards the teaching profession. School experience is another important determinant of how student teachers perceive the profession and how they feel towards it. Similarly, the internship process has such a key role in student teachers' attitudes that it could even determine the decision to remain in the profession or change career plans (Goos et al., 2009; Inman & Marlow, 2004). In this respect, participants of the focus group interview might have highlighted school-related issues based on their experience. Many researchers have also indicated that student teachers' attitudes and motivation can alter because of the nature of the profession and quality of education during teacher training (Carrinus & Fokkens-Burinsma, 2014; Rots et al., 2014; Watt & Richardson, 2008; Yuan & Zhang, 2017). Correspondingly, the qualitative data also gave parallel results with the quantitative data by indicating that students' adaptation to career and their academic motivation were important predictors of their attitudes towards the profession.

4.1. Implications

Based on the findings gathered in this study, teacher education programs should offer authentic opportunities to develop student teachers' career adaptability through field experience and interactive environments that encourage them to discuss their views, beliefs, experiences and understanding of teaching. This can help them to improve their adaptability to the teaching career

and develop positive attitudes towards the teaching profession. They can then understand what motivates and demotivates them.

The findings of the study also underline the importance of future research that can be conducted about student teachers' transformations into being novice teachers, and then experts, to see how this process is experienced and what changes are observed regarding their attitude towards the teaching profession in a longitudinal perspective. Moreover, it is strongly recommended to conduct more in-depth qualitative studies to offer a theoretical grounding concerning how teachers' identities and attitudes are shaped over time. Lastly, future studies can focus on theoretical relationships among other psychological or emotional variables to understand their effect on attitude towards the teaching profession.

4.2. Limitations

This study is limited to freshmen, studying at five different branches of teacher education programs in Turkey. Examining junior, sophomore, and senior students' studying in some other departments might have provided the study with in-depth understanding of student teachers' views. In addition, the study is limited to self-report of the participants, which may cause subjectivity, thus comprising the reliability of the answers. To overcome this limitation, additional data collection techniques such as observation or document analysis could be administered in the forthcoming studies with different samples. Lastly, this study is limited to student teachers, which may have negative implications for the generalizability of the results. To get more insights about the teaching profession and the relationships among the constructs of career adaptability, academic motivation, and attitude towards the teaching profession, in-depth studies can be carried out with in-service teachers in future studies.

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References

- Abbas, S. H. (2015). The relationship between Iraqi EFL student teachers' academic motivation, attitude toward teaching profession, and TEFL knowledge. *Journal of Educational and Psychological Sciences*, 122, 63-801.
- Agbaria, Q. A. (2013). Self- efficacy and participation in choosing the teaching profession as predictors of academic motivation among Arab student's girls. *Australian Journal of Teacher Education*, 38(3), 75-91. <https://doi.org/10.14221/ajte.2013v38n3.7>
- Andronache, D., Bocos, M., Bocos, V., & Macri, C. (2014). Attitudes towards teaching profession. *Procedia Social and Behavioral Sciences*, 142, 628-632. <https://doi.org/10.29333/pr/5732>
- Avram, E., Burtaverde, V., & Zanghiescu, A. Ş. (2019). The incremental validity of career adaptability in predicting academic performance. *Social Psychology of Education*, 22(4), 867-882. <https://doi.org/10.1007/s11218-019-09505-6>
- Balan, C. C., Bujor, L., & Serdenciuc, N. L. (2012). The role of the initial psycho-pedagogical training in structuring motivational and attitudinal dynamic toward teaching career. *Procedia-Social and Behavioral Sciences*, 33, 463-467. <https://doi.org/10.1016/j.sbspro.2012.01.164>
- Ballantyne, J., Flynn, L., & Olm-Madden, T. (2020). Problem-seeking in teacher education: Empowering students to grapple with the complexities of the profession. *Australian Journal of Teacher Education*, 45(5), 38-61. <https://doi.org/10.14221/ajte.2020v45n5.3>
- Bassi, M., Steca, P., Delle Fave, A., & Caprara, G. V. (2007). Academic self-efficacy beliefs and quality of experience in learning. *Journal of Youth Adolescence*, 36(3), 30-312. <https://doi.org/10.1007/s10964-006-9069-y>

- Beaudoin, C. M. (2006). Competitive orientations and sport motivation of professional women football players: An internet survey. *Journal of Sport Behavior*, 29(3), 201-212.
- Bedel, E. F. (2015). Exploring academic motivation, academic self-efficacy and attitudes toward teaching in pre-service early childhood education teachers. *Journal of Education and Training Studies*, 4(1), 142-149. <http://doi.org/10.11114/jets.v4i1.561>
- Bergmark, U., Lundström, S., Manderstedt, L., & Palo, A. (2018). Why become a teacher? Student teachers' perceptions of the teaching profession and motives for career choice. *European Journal of Teacher Education*, 41(3), 266-281. <https://doi.org/10.1080/02619768.2018.1448784>
- Brown, J. L., Dollinger, M., Hammer, S. J., & McIlveen, P. (2021). Career adaptability and career adaptive behaviors: A qualitative analysis of university students' participation in extracurricular activities. *Australian Journal of Career Development*, 30(3), 189-198. <https://doi.org/10.1177/10384162211067014>
- Bruinsma, M., & Jansen, E. P. (2010). Is the motivation to become a teacher related to preservice teachers' intentions to remain in the profession?. *European Journal of Teacher Education*, 33(2), 185-200. <https://doi.org/10.1080/02619760903512927>
- Bukidnon, G. S., & Tan, D. A. (2017). Motives, attitudes and performance of teacher education students. *International Journal of Scientific & Technology Research*, 6(10), 20-25.
- Cabras, C., & Mondo, M. (2018). Future orientation as a mediator between career adaptability and life satisfaction in university students. *Journal of Career Development*, 45(6), 597-609. <https://doi.org/10.1177/0894845317727616>
- Canrinus, E. T., & Fokkens-Bruinsma, M. (2014). Changes in student teachers' motives and the meaning of teacher education programme quality. *European Journal of Teacher Education*, 37(3), 262-278. <https://doi.org/10.1080/02619768.2013.845162>
- Chakraborty, A., & Mondal, B. C. (2014). Attitude of prospective teachers towards teaching profession. *American Journal of Social Sciences*, 2(6), 120-125.
- Chan, K. Y., Uy, M. A., Moon-ho, R. H., Sam, Y. L., Chernyshenko, O. S., & Yu, K. Y. T. (2015). Comparing two career adaptability measures for career construction theory: Relations with boundaryless mindset and protean career attitudes. *Journal of Vocational Behavior*, 87, 22-31. <https://doi.org/10.1016/j.jvb.2014.11.006>
- Chan, S. H. J., & Mai, X. (2015). The relation of career adaptability to satisfaction and turnover intentions. *Journal of Vocational Behavior*, 89, 130-139. <https://doi.org/10.1016/j.jvb.2015.05.005>
- Cherry, K. (2020). *Attitudes and behaviour in psychology*. Retrieved from <https://www.verywellmind.com/attitudes-how-they-form-change-shape-behavior-2795897>
- Clark, M. H., & Schroth, C. A. (2010). Examining relationships between academic motivation and personality among college students. *Learning and Individual Differences*, 20(1), 19-24. <https://doi.org/10.1016/j.lindif.2009.10.002>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson Education, Inc.
- Creswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research*. Sage Publications.
- Çağlar, C. (2013). The relationship between the levels of alienation of the education faculty students and their attitudes towards the teaching profession. *Educational Sciences: Theory & Practice*, 13(3), 1497-1513.
- Datu, J. A. D., & Buenconsejo, J. U. (2021). Academic engagement and achievement predict career adaptability. *The Career Development Quarterly*, 69(1), 34-48. <https://doi.org/10.1002/cdq.12247>
- Datu, J. A. D., & Yang, W. (2021). Academic buoyancy, academic motivation, and academic achievement among Filipino high school students. *Current Psychology*, 40(8), 3958-3965. <https://doi.org/10.1007/s12144-019-00358-y>
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*, 19(2), 109-134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)
- Deringöl, Y. (2020). Teaching motivation and attitude towards teaching profession: The case of pre-service primary school teachers. *Erzincan University Journal of Education Faculty*, 22(2), 295-310. <https://doi.org/10.17556/erziefd.526330>
- Doğan, T., & Çoban, A. E. (2009). The investigation of the relations between students' attitude toward teaching profession and anxiety level in faculty of education. *Education and Science*, 34(153), 157-168.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt, Brace, & Janovich.
- Egwu, S. O. (2015). Attitude of students towards teaching profession in Nigeria: Implications for education development. *Journal of Education and Practice*, 6(29), 21-25.

- Erdem, A. R., & Gözel, E. (2014). Motivation levels of prospective primary school teachers concerning teaching profession. *ASOS Journal*, 2(1), 49-60.
- Eren, A. (2012). Prospective teachers' future time perspective and professional plans about teaching: The mediating role of academic optimism. *Teaching and Teacher Education*, 28(1), 111-123. <https://doi.org/10.1016/j.tate.2011.09.006>
- Eryılmaz, A., & Askeroglu, K. (2019). An investigation of career adaptability in terms of life satisfaction and attitudes towards the future. *The Journal of International Education Science*, 6(19), 67-76.
- Fang, W., Zhang, Y., Mei, J., Chai, X., & Fan, X. (2018). Relationships between optimism, educational environment, career adaptability and career motivation in nursing undergraduates: A cross-sectional study. *Nurse Education Today*, 68, 33-39. <https://doi.org/10.1016/j.nedt.2018.05.025>
- Garvis, S., Fluckiger, B., & Twigg, D. (2011). Exploring the beliefs of commencing early childhood education graduate students: providing insights to improve teacher education programs. *Australian Journal of Teacher Education*, 37(1), 6. <http://dx.doi.org/10.14221/ajte.2012v37n1.3>
- Ginevra, M. C., Pallini, S., Vecchio, G. M., Nota, L., & Soresi, S. (2016). Future orientation and attitudes mediate career adaptability and decidedness. *Journal of Vocational Behavior*, 95, 102-110.
- Ginevra, M. C., Maggio, I. D., Santilli, S., & Nota, L. (2021). The role of career adaptability and future orientation on future goals in refugees. *British Journal of Guidance & Counselling*, 49(2), 272-286. <https://doi.org/10.1080/03069885.2020.1865874>
- Giovannelli, M. (2003). Relationship between reflective disposition toward teaching and effective teaching. *The Journal of Educational Research*, 96(5), 293-309. <https://doi.org/10.1016/j.jvb.2016.08.003>
- Glesne, C. (2015). *Becoming qualitative researchers: An introduction*. Pearson Education, Inc.
- Goos, M., Arvold, B., Bednarz, N., DeBlois, L., Maheux, J., Morselli, F., & Proulx, J. (2009). School experience during pre-service teacher education from the students' perspective. In R. Even & D. L. Ball (Eds.), *The professional education and development of teachers of mathematics* (pp.83-92). Springer.
- Green, J., Nelson, G., Martin, A. J., & Marsh, H. (2006). The causal ordering of self-concept and academic motivation and its effect on academic achievement. *International Education Journal*, 7(4), 534-546.
- Güneyli, A., & Aslan, C. (2009). Evaluation of Turkish prospective teachers' attitudes towards teaching profession (Near East University case). *Procedia-Social and Behavioral Sciences*, 1(1), 313-319. <https://doi.org/10.1016/j.sbspro.2009.01.059>
- Hartung, P. J., & Taber, B. J. (2008). Career construction and subjective well-being. *Journal of Career Assessment*, 16(1), 75-85. <https://doi.org/10.1177/1069072707305772>
- Hirschi, A. (2010). The role of chance events in the school-to-work transition: The influence of demographic, personality and career development variables. *Journal of Vocational Behavior*, 77(1), 39-49. <https://doi.org/10.1016/j.jvb.2010.02.002>
- Hirschi, A., & Vondracek, F. W. (2009). Adaptation of career goals to self and opportunities in early adolescence. *Journal of Vocational Behavior*, 75(2), 120-128. <https://doi.org/10.1016/j.jvb.2009.05.005>
- Iman, E. D. (2014). Examining preschool teacher candidates' liking child and motivations for teaching professions. *Journal of Theoretical Educational Science*, 7(4), 482-505.
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124(4), 605-614.
- Jain, R. (2007). A study of teaching effectiveness of teachers and their attitudes towards teaching profession. *Journal of Indian Education*, 33, 77-89.
- Kanten, S. (2012). Career adaptabilities scale: A study of validity and reliability. *Journal of Süleyman Demirel University Institute of Social Sciences*, 2(16), 191-205.
- Karagüven, M. (2012). The adaptation of academic motivation scale to Turkish. *Educational Sciences: Theory and Practice*, 12(4), 2611-2618.
- Kartal, B. (2020). Pre-service science and mathematics teachers' teaching efficacy beliefs and attitudes toward teaching: A partial correlation research. *Australian Journal of Teacher Education*, 45(9), 42-61.
- Kontas, H. (2016). The effect of an education-themed movie on the academic motivation of teacher candidates and their attitude towards teaching profession. *Journal of Education and Training Studies*, 4(6), 93-103. <http://dx.doi.org/10.11114/jets.v4i6.1483>
- Koyuncuoğlu, Ö. (2021). An investigation of academic motivation and career decidedness among university students. *International Journal of Research in Education and Science (IJRES)*, 7(1), 125-143. <https://doi.org/10.46328/ijres.1694>

- Letawsky Shultz, N. (2017). *Crossing the finish line: Career adaptability and its relationship to athletic identity, academic motivation, and role conflict for division I student-athletes* [Unpublished doctoral dissertation]. University of Minnesota, USA.
- Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage.
- Mansfield, C. F., Beltman, S., & Weatherby-Fell, N. L. (2020). "I actually felt more confident": An online resource for enhancing pre-service teacher resilience during professional experience. *Australian Journal of Teacher Education*, 45(4), 30-48. <https://doi.org/10.14221/ajte.2020v45n4.3>
- McAlexander, S. L., McCance, K., Blanchard, M. R., & Venditti, R. A. (2022). Investigating the experiences, beliefs, and career intentions of historically underrepresented science and engineering undergraduates engaged in an academic and internship program. *Sustainability*, 14(1486), 1-14. <https://doi.org/10.3390/su14031486>
- McIlveen, P., Perera, H. N., Baguley, M., van Rensburg, H., Ganguly, R., Jasman, A., & Veskova, J. (2019). Impact of teachers' career adaptability and family on professional learning. *Asia-Pacific Journal of Teacher Education*, 47(2), 103-117. <https://doi.org/10.1080/1359866X.2018.1444141>
- McLennan, B., McIlveen, P., & Perera, H. N. (2017). Pre-service teachers' self-efficacy mediates the relationship between career adaptability and career optimism. *Teaching and Teacher Education*, 63, 176-185. <https://doi.org/10.1016/j.tate.2016.12.022>
- Müller, K., Alliata, R., & Benninghoff, F. (2009). Attracting and retaining teachers: A question of motivation. *Educational Management Administration & Leadership*, 37(5), 574-599. <https://doi.org/10.1177/1741143209339651>
- Negru-Subtirica, O., & Pop, E. I. (2016). Longitudinal links between career adaptability and academic achievement in adolescence. *Journal of Vocational Behavior*, 93, 163-170. <https://doi.org/10.1016/j.jvb.2016.02.006>
- Osunde, A. U., & Izevbigie, T. I. (2006). An Assessment of teachers' attitude towards teaching profession in Midwestern Nigeria. *Education*, 126(3), 462-467.
- Ozdemir, N. K. (2019). Qualitative exploration of career adaptability of Turkish adolescents. *Australian Journal of Career Development*, 28(2), 83-91. <https://doi.org/10.1177/1038416218821451>
- Ölçü-Dinçer, Z. & Seferoğlu, G. (2020). Factors affecting pre-service English teachers' career plans in Turkey: institutions and regions. *Journal of Education for Teaching*, 46(1), 4-19. <https://doi.org/10.1080/02607476.2019.1708622>
- Özgüngör, S., & Kapıkıran, Ş. (2008). Fine Arts Education Students' Motivation and Achievement Levels in Teacher Education. *Pamukkale University Journal of Faculty of Education*, 1(23), 47-60.
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42, 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pancholi, A., & Bharwad, A. B. J. (2015). Student-teachers' attitude towards teaching profession. *International Journal of Research in Humanities and Social Sciences*, 3(8), 40-43.
- Parylo, O., Süngü, H., & Ilgan, A. (2015). Connecting attitudes toward teaching and pedagogical formation courses: A study of Turkish pre-service teachers. *Australian Journal of Teacher Education*, 40(5), 85-102.
- Polat, Ü. (2019). The effects of genders of prospective teachers on their attitudes towards teaching profession: A meta-analysis. *Pedagogical Research*, 4(1), 1-12. <https://doi.org/10.29333/pr/5732>
- Pop, E. I., Negru-Subtirica, O., Crocetti, E., Opre, A., & Meeus, W. (2016). On the interplay between academic achievement and educational identity: A longitudinal study. *Journal of Adolescence*, 47, 135-144. <https://doi.org/10.1016/j.adolescence.2015.11.004>
- Pouyaud, J., Vignoli, E., Dosnon, O., & Lallemand, N. (2012). Career adapt-abilities scale-France form: Psychometric properties and relationships to anxiety and motivation. *Journal of Vocational Behavior*, 80(3), 692-697. <https://doi.org/10.1016/j.jvb.2012.01.021>
- Reichl, C., Wach, F. S., Spinath, F. M., Brünken, R., & Karbach, J. (2014). Burnout risk among first-year teacher students: The roles of personality and motivation. *Journal of Vocational Behavior*, 85(1), 85-92. <https://doi.org/10.1016/j.jvb.2014.05.002>
- Rimm-Kaufman, S. E., & Sawyer, B. E. (2004). Primary-grade teachers' self-efficacy beliefs, attitudes toward teaching, and discipline and teaching practice priorities in relation to the "responsive classroom" approach. *The Elementary School Journal*, 104(4), 321-341.

- Rots, I., Aelterman, A., & Devos, G. (2014). Teacher education graduates' choice (not) to enter the teaching profession: does teacher education matter? *European Journal of Teacher Education*, 37(3), 279-294. <https://doi.org/10.1080/02619768.2013.845164>
- 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. <https://doi.org/10.1177/1069072704270271>
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly*, 45(3), 247-259. <https://doi.org/10.1002/j.2161-0045.1997.tb00469.x>
- 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). Wiley.
- Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior*, 80(3), 661-673. <https://doi.org/10.1016/j.jvb.2012.01.011>
- Schussler, D. L., Stooksberry, L. M., & Bercaw, L. A. (2010). Understanding teacher candidate dispositions: Reflecting to build self-awareness. *Journal of Teacher Education*, 61(4), 350-363. <https://doi.org/10.1177/0022487110371377>
- Shin, Y. J., & Lee, J. Y. (2017). Attachment, career-choice pessimism, and intrinsic motivation as predictors of college students' career adaptability. *Journal of Career Development*, 44(4), 311-326. <https://doi.org/10.1177/0894845316653472>
- Shoffner, M., Sedberry, T., Alsup, J., & Johnson, T. S. (2014). The difficulty of teacher dispositions: Considering professional dispositions for preservice English teachers. *The Teacher Educator*, 49(3), 175-192. <https://doi.org/10.1080/08878730.2014.917528>
- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36, 79-104. <https://doi.org/10.1080/13598660801971658>
- Sinclair, C., Dowson, M., & McInerney, D. M. (2006). Motivations to teach: Psychometric perspectives across the first semester of teacher education. *Teachers College Record*, 108(6), 1132-1154.
- Stoeber, J., Mutinelli, S., & Corr, P. J. (2016). Perfectionism in students and positive career planning attitudes. *Personality and Individual Differences*, 97, 256-259. <https://doi.org/10.1016/j.paid.2016.03.065>
- Tadele, G. & Terefe, E. (2016). Influence of career self-efficacy beliefs on career exploration behaviours among TVET college students in Wollega zones town. *Science, Technology and Arts Research Journal*, 5(1), 108-114. <https://doi.org/10.4314/star.v5i1.17>
- Temizkan, M. (2008). Türkçe öğretmen adaylarının öğretmenlik mesleğine yönelik tutumları üzerine bir araştırma [An evaluation on the attitudes of Turkish teacher candidates their professions]. *Türk Eğitim Bilimleri Dergisi*, 6(3), 461-486.
- Terzi, A.R., & Tezci, E. (2007). Necatibey faculty of education students' attitudes to teaching profession. *Theory & Practice of Educational Administration*, 52, 593-614.
- Tok, Ş. (2011). Pre-service primary education teachers' changing attitudes towards teaching: a longitudinal study. *European Journal of Teacher Education*, 34(1), 81-97. <https://doi.org/10.1080/02619768.2010.534130>
- Üstüner, M. (2006). Reliability and validity study of an attitude scale of teaching profession. *Educational Administration: Theory and Practice*, 45, 109-127.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1017. <https://doi.org/10.1177/0013164492052004025>
- Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, 47, 120-130. <https://doi.org/10.1016/j.tate.2014.12.005>
- Watt, H. M., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, 18(5), 408-428. <https://doi.org/10.1016/j.learninstruc.2008.06.002>
- Woolfolk, A. E. (2004). *Educational Psychology* (9th ed.). Pearson.
- Yin, R. K. (2011). *Qualitative research from start to finish*. The Guilford Press.
- Yuan, R., & Zhang, L. J. (2017). Exploring student teachers' motivation change in initial teacher education: A Chinese perspective. *Teaching and Teacher Education*, 61, 142-152. <https://doi.org/10.1016/j.tate.2016.10.010>

Zembat, R., Akşın-Yavuz, E., Tunçeli, H. İ., & Yılmaz, H. (2018). Examination of the relationship between attitude towards teaching profession, academic motivation and achievement. *Journal of Theoretical Educational Science*, 11(4), 789-808. <https://doi.org/10.30831/akukeg.351404>