

2019

## Alternative Teacher Certification Students' Motivations of Teaching

Ebru Öztürk Akar  
*Bolu Abant İzzet Baysal University, Turkey*

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>



Part of the [Teacher Education and Professional Development Commons](#)

---

### Recommended Citation

Öztürk Akar, E. (2019). Alternative Teacher Certification Students' Motivations of Teaching. *Australian Journal of Teacher Education*, 44(11). <https://doi.org/10.14221/ajte.2019v44.n11.3>

This Journal Article is posted at Research Online.  
<https://ro.ecu.edu.au/ajte/vol44/iss11/3>

## Alternative Teacher Certification Students' Motivations Of Teaching

Ebru Öztürk-Akar,  
Bolu Abant İzzet Baysal University, Turkey

*Abstract: This study investigates the Alternative Certification Program (ACP) students' motivations to become teachers. Fit-Choice Scale is used. Sample of the study consists of 248 participants in three groups i.e. Health, Sports and Mathematics. Descriptive and inferential statistics, and content analysis are used to examine ACP students' reasons to want to become teachers, and to investigate differences regarding their primary career choices, age and gender. The results showed that social, intrinsic career and personal utility values are the highly rated motivation factors. Teaching is perceived as a highly skillful occupation and a high status profession by the ACP students. Relationships between ACP students' motivations and perceptions with their primary career choices, age and gender are identified. Health group had higher motivation for time for family, and Sports group had higher motivation for ability and job security. Mathematics group's motivation for job transferability, perception scores of salary and social status of teaching profession and career choice satisfaction were lower than the other groups. Yet their perception scores of difficulty was higher than the others. ACP students older than the mean age of 26 had higher scores of self-perceptions of ability, intrinsic career value, job transferability and work with children factors than their young classmates. Significant differences are observed between male and female participants' motivation of having time for family. Together with contrasting findings and particular similarities with the previous research, these relationships are used to conclude that ACP students themselves have different motivation patterns. Influence of sample characteristics and contextual features are also acknowledged.*

**Keywords:** motivation, alternative teacher certification, Turkey

### Introduction

Shortages and increasing demand for teaching force may have caused the growth of alternative teacher certification programs (ACPs) worldwide (Wang and Fwu, 2001). ACPs have proliferated across the countries, and they are now becoming a recognizable part of the teacher education systems e.g. in the USA, UK, New Zealand, Australia, Taiwan, the Netherlands, and Turkey (Brouwer, 2007; Wang and Fwu, 2001; Harker and Chapman, 2006; Priyadharshini and Robinson-Pant, 2003; Richardson and Watt, 2005).

As described by Adelman (1986), ACPs – a route that enrolls noncertified individuals with at least a bachelor's degree- offer a special program leading to eligibility for a standard teaching certificate. It is expected that professional teaching competence will be attained in a

shorter period of time, and the participants' earlier work and life experiences facilitate the transfer of their already existing competencies and knowledge into teaching profession (Brouwer, 2007). Therefore, ACPs have targeted different groups of people as teacher candidates. Besides people from a wide variety of careers i.e. midcareer switchers, retired military personnel, young graduates in the fields of science, mathematics and special education, engineers, doctors, psychologists, people already teaching in private schools, have competitively sought enrollment into these programs (Watt and Richardson, 2012; Zeichner and Schulte, 2001).

People of different ages, trainings, life and work experiences, and motivations to teach (Brouwer, 2007) form heterogeneous groups in ACPs. There are people from lower and higher status careers (Wang and Fwu, 2001) who are attracted to teaching due to various reasons i.e. pulls and pushes. 'Pulls' attract people into teaching and 'pushes' make people decide to quit their previous careers. A variety of these pulls and pushes are linked to people's values, work, family and task experiences (Anthony and Ord, 2008). Dissatisfaction with the previous career is identified as the major factor pushing people to change careers to teach (Priyadharshini and Robinson-Pant, 2003). Changed perspectives on life, utilization of available knowledge and need of financial stability/security are identified as the most significant pulls. Personal developmental factors have major influences on people's career decisions (Williams, 2010). In the need of fulfilling goals of nurturing or mentoring the next generation and/or making a difference to children's lives (Erikson, 1963; in Williams, 2010), people may change the direction of their work lives. Before embarking on a new career pathway, people consider if they have the personal qualities to become good teachers, and if they will be rewarded in terms of values and challenge. Their pragmatic decisions are also as important as their intrinsic motivations (Williams and Forgasz, 2009). They consider financial issues and provided advantages such as family-friendliness and social status compared with current positions (Anthony and Ord, 2008; Richardson and Watt, 2005; Williams and Forgasz, 2009).

It appears that a combination of reasons is needed to explain what attracts ACP students into teaching and what factors influence their choices of career change (Anthony and Ord, 2008). Although, research provides insights into the entry motivations of teacher candidates in regular programs, ACP students' motivations and commitments are reported in a number of studies. Considering the fact that ACP students' motivations may differ from regular teacher education students' motivations as they have different characteristics i.e. age, work and life experiences, and previous training, entry motivations reported for the ones in regular teacher education programs cannot be considered as a reference point in developing teacher education policies to attract a suitably qualified workforce in ACPs and to retain them in teaching (Priyadharshini and Robinson-Pant, 2003). The scarcity of research on ACP students with this respect warrants further examination to provide policy makers, teacher educators, recruitment bodies and university governance with evidence of the kind of students ACPs attracted and how committed these students are (Richardson and Watt, 2006; Wang and Fwu, 2001). As the ACPs were developed in response to critical teacher shortages in certain fields and often in low-income schools (Wang, Coleman, Coley and Phelps, 2003), relationship between ACP students' motivations and commitments should not be overlooked. Research findings imply that the identification of more committed individuals would be possible if their entry motivations are known in advance (Wang and Fwu, 2001). Such a knowledge may also help to project who continues teaching. For instance, it is reported that intrinsically motivated individuals are more committed whereas the ones attracted by extrinsic incentives are less committed to teaching career (Wang and Fwu, 2001). Thus, knowing the applicants' motivations in advance helps to develop more appropriate policies and practices to counter teacher shortages.

## Purpose of the Study

Turkey has a long tradition of ACPs. Starting from the early years of the Republic ACPs were employed as the backup of regular teacher education programs as a result of continuing teacher shortages. Hiring of ACP graduates for secondary subject areas became a routine process when regular teacher education programs were unable to meet the teacher demand due to lack of long term planning on teacher need based on the high population growth and policy changes in the school system and teacher education. It is estimated that nearly 110,000 people were hired as teachers through these programs before 2000s (Yıldırım and Ok 2002). Besides the graduates of Faculties of Arts and Sciences remained as the main target group that they have difficulty in finding employment in their fields and ill-advised teacher employment policies have supported and fortified the continuation of their faculties (Sezgin Nartgün, 2016). With the recent updates, both undergraduate students and university graduates with a degree relevant to secondary school subject areas i.e. not only the graduates of Faculties of Arts and Sciences but also the graduates of Theology, Health, Fine Arts, Sports and Physical Education, and Economics Faculties and High Schools are accepted to these programs (HEC 2014). Today, ACPs are open at 92 out of 183 universities that have Faculties and/or Departments of Education/Educational Sciences. Student quota was limited with 15,000 students. Rules and regulations of ACPs were determined by the Higher Education Council i.e. supervisor of higher education system in Turkey.

Despite a long tradition, research findings about ACPs and what kinds of teachers, these programs bring into teaching are not known in Turkey. Demographics, academic competencies and motivations are never put under examination. Concerns are voiced and various assumptions and explanations about what motivates ACP students to want to become teachers circulate among teacher educators, policy makers, politicians and the general public. Yet, only research can reveal what makes teaching attractive as a second career (Watt and Richardson 2012).

This study intends to investigate the ACP students' motivations to become teachers in Turkey. Identification of Turkish ACP students' motivations to become teachers broadens not only the Turkish but also the international knowledge base on this issue. Findings can be used to compare and conjoin ACP students' motivations nationally and internationally. Conclusions drawn can be used to guide the policies to target appropriate candidates, and to attract and retain a suitably qualified teaching workforce. This study also intends to compare ACP students' motivations and perceptions as regards their primary career choices i.e. first career choices, nursing, mathematics and sports in particular in this study, and age. The influence of gender on ACP students' secondary career choices i.e. teaching, is also explored. Examining the influences of ACP students' age, gender and primary career choices on their motivations and perceptions hints how they are attracted to teaching, and how contextual factors influence their decisions.

The research question guiding the study was "What motivates ACP students in a Turkish university to want to become teachers?" It is also hypothesized that ACP students' demographics have an influence on their teaching career choices. Hypotheses tested and the bases for these hypotheses are presented below:

More people with prior experiences in other occupations are reported to enter secondary teaching (Anthony and Ord, 2008; Richardson and Watt, 2005). Is it because their primary career choices are not congruent with their personality orientation, desired work environments, job satisfaction and/or performance (Donohue, 2006)? Is it because teaching is more socially meaningful and/or give them more time for family than their primary choices (Berger and D'Ascoli, 2012)? ACP students' motivations and perceptions of teaching as

regards their primary career choices is therefore examined to see their reasons to move towards teaching.

*Hypothesis 1:* ACP students' primary career choices would influence (a) their scores of teaching motivations and (b) their scores of perceptions about the profession.

*Hypothesis 2:* There is a relationship between ACP students' primary career choices and their career choice satisfaction.

Previous research related age to the decision to persist in or change career. Since the rate of career change starts climbing at rather young ages (Nooney, Unruh and Yore, 2010), differences are expected in the way ACP students in different age groups acknowledge the social utility values and/or material rewards for teaching (Joseph and Green, 1986; Serow and Forest, 1994). Therefore, age is identified to have possible influences on ACP students' teaching career choices (Carless and Arnup, 2011; Tsabari, Tziner and Meir, 2005).

*Hypothesis 3:* ACP students in different age groups would have different scores of motivations and career choice satisfaction.

Numerous studies and surveys (Carrington, 2002; Johnson, 2008) reported teaching profession to become increasingly feminized (Watt, Richardson and Devos, 2012). Gender imbalance, in favor of women, has been reported in Australia (Richardson and Watt, 2005). Previous research with Turkish preservice teachers were dominated with female participants and teaching was identified as a first career choice for them. Gender differences were obtained in responses considering social dissuasion (Kılınç et al., 2012; Öztürk Akar, 2012; Yüce, Şahin, Koçer and Kana, 2013). There is also an international stereotype relating teaching as a family-flexible career (Watt and Richardson, 2012), and the Turkish society holds a view that teaching is a feminine profession (Öztürk Akar, 2012). Therefore, the influence of gender on ACP students' secondary career choices is explored. Female ACP students are expected to dominate the study sample and have higher motivation scores than their male classmates in this study.

*Hypothesis 4:* Female ACP students would score higher on motivations for choosing teaching profession than male ACP students.

## Teaching Motivations in Turkey

Studies on teaching career choice in Turkey mostly focus on motivations for teaching as a primary career choice. Salary, social status, intrinsic career value, social influences, making social contribution, love of children and working with them are among the mostly cited motivations (Boz and Boz 2008, Gürbüz Türk and Genç, 2004; Özbek, 2007). Helping others and perceived personal suitability are identified (Aksu et al., 2010). Good working conditions and opportunities, holidays, flexible working hours and love of the subject area are also listed (Ok and Önkol 2007). Job security is another significant motivation source for choosing teaching (Aksu et al. 2010; Aydın and Baskan 2005). The influence of individuals' family background i.e. low levels of socioeconomic status, one parent working families and lower levels of educational achievement, was highlighted as their seek of a status of a teaching career (Kılınç, Watts and Richardson, 2012). Further, the examination system may have a major influence in the teaching career choice (Semerci and Taşpınar 2003). Due to their low scores in this exam, a considerable number of individuals enroll on teacher education programs (Kılınç and Mahiroğlu, 2009) as Turkish teacher education programs have generally low admission requirements (Öztürk Akar, 2012).

Among few studies exploring motivations for teaching as a secondary career choice, Öztürk Akar (2014) highlighted difficult working conditions and limited employment

opportunities of primary career choices. Social influences and practicing teaching were also significant. Personal utilities such as holidays, regular income, short working hours, spending longer time with family were last in the list. Polat (2014) also pointed to difficult working conditions and lack of job satisfaction i.e. lack of communication, low salary and feeling hopeless as ACP students' reasons to move towards teaching. Job security and personal utilities of teaching also attracted them. Majority of ACP students in Önder and Tagay (2015)'s study find their personalities suitable for teaching profession.

Common for the findings of the above mentioned studies, generalization was limited due to sample sizes and the methods used. Due to lack of a national knowledge base for ACP students' motivations to become teachers, large-scale and longitudinal studies are needed in the Turkish context. Cross-cultural studies are called to help identify common influences and relevancy of different contextual explanations (Nuttall, Murray, Seddon and Mitchell, 2006; Richardson and Watt, 2006).

## Method

### Research Design

In order to collect information about participants' reasons to choose teaching profession a cross-sectional survey was used. Data collection instrument was directly administered by the researcher in class groups. Researcher explained the study and answered participants' questions before they completed the scale (Fraenkel and Wallen 1996).

### Sample

Sample of the study consists of ACP students in a Turkish state university. The university meets the Higher Education Council's criteria to open an ACP. There is a Faculty of Education with 120 scholars. ACP has been implemented since 2011, and has attracted a great number of applicants each year. There were seven groups i.e. mathematics, science, literature, health, sports, arts and theology at the time when data were collected. Each group had two to three sections. Total number of ACP students was 1500 i.e. 10% of all ACP students in the country. Sample was opportune. Through convenience sampling 360 students from six sections in three groups i.e. 2 mathematics, 2 health and 2 sports sections, were called. The sample consisted of 248 students with a response rate of 69%. They represent 16% of all students enrolled in ACP at that time. Female participants were 59.6% of the sample (See Table 1). 52.5% of the participants was older than the mean age of 26 ( $M=26$ ). Participants from the Health and Sports groups were equally represented in the sample i.e. 35.9%.

		%	N
Gender	Female	59.6	146
	Male	40.4	99
Group	Mathematics	28.2	70
	Health	35.9	89
	Sports	35.9	89
Age	<26 years	47.5	116
	≥26 years	52.5	128

**Table 1: Summary of Participant Characteristics**

### *Instrument*

In order to address what motivates Turkish ACP students to want to become teachers, the Fit-Choice Scale was used. It is a well-known and widely used, reliable and valid model developed and validated in Australia (Watt and Richardson 2007). It is also tested and validated in the USA, China, the Netherlands, Croatia, Germany, Ireland, Switzerland and Turkey (Berger and D'Ascoli 2012; Eren and Tezel 2010; Fokken-Bruinsma and Canrinus 2012; Jugovic, Marusic, Ivanec and Vidovic 2012; Hennessy and Lynch, 2016; Kılınç, Watt, and Richardson 2012; König and Rothland 2012; Lin, Shi, Wang, Zhang and Hui 2012; Öztürk Akar, 2012; Watt, Richardson, Klusmann, Kunter, Beyer, Trautwein and Baumert 2012). The Fit-Choice Scale met an international need of a multidimensional instrument grounded in expectancy-value theory of achievement motivation (Wigfield and Eccles, 2000). Expectancy-value theory explains that future goals play a motivational role in individuals' present steps as a function of their expectancies and values that are linked to those goals (Wigfield and Eccles, 2000). "*Prior Teaching and Learning Experiences*", "*Social Influences*", "*Social Dissuasion*", "*Task Perceptions*", "*Self Perceptions*", "*Values*" and "*Fallback Career*" are the themes used (Watt and Richardson, 2007). "*Prior Teaching and Learning Experiences*" points to positive influences of prior teaching and learning experiences. "*Social Influences*" emphasizes the influences of significant others. "*Social Dissuasion*" is about the extent to which others have dissuaded individuals from a teaching career. "*Task Perceptions*" explores individuals' perceptions of teaching i.e. a highly demanding career, social status, teacher morale, and salary. Individuals' perceptions of their own teaching abilities is explored with "*Self-perceptions of ability*". "*Values*" consists of "*intrinsic career value*", "*personal utility value*" and "*social utility value*". *Personal utility value* comprises job security, time for family and job transferability. *Social utility value* refers to shaping future of children/adolescents. "*Fallback career*" points to the possibility of reluctantly choosing teaching. Fit-Choice Scale encompasses comprehensive teaching motivations (Richardson and Watt, 2006; 2012), and it consists of twelve motivation and six perception factors. For both types of factors 1 (not at all) to 7 (extremely) Likert type response format is used. An initial open-ended question is also used (Watt and Richardson, 2007).

In Turkey, FIT-Choice Scale was independently implemented by different researchers (Eren and Tezel, 2010; Kılınç, Watts and Richardson, 2012, Öztürk Akar, 2012). In all the studies, Fit-Choice Scale demonstrated acceptable construct validity. FIT-Choice Scale employed in this study was applied in Turkish and contained 63 items (Öztürk Akar, 2012). As seen in Table 2, motivation subscales' internal reliabilities ranged from 0.52 to 0.85. Perception subscales' internal reliabilities ranged from 0.65 to 0.86. Career choice satisfaction subscales' internal reliabilities ranged from 0.40 to 0.81. Limiting the strength of the study, poor subscale reliabilities are acknowledged. Participants' qualitative responses are used to support the inferences made.

### *Data Analysis*

In order to examine ACP students' reasons to want to become teachers, descriptive statistics i.e. means and percentages were used. Inferential statistics i.e. t-test and MANOVA were used to investigate differences regarding ACP students' primary career choices, age and gender on their choices, motivations and perceptions. MANOVAs were used to see the possible effects of ACP students' primary career choices on their responses (Hypothesis 1 and Hypothesis 2). In order to investigate the effects of primary career choices on teaching

motivations and perceptions, univariate analyses (ANOVAs) were conducted after MANOVAs. Partial  $\eta^2 \leq 0.06$  were treated as small and unimportant coefficients to explain such a dependence. Differences by ACP students' gender and age were tested with independent sample T-test (Hypothesis 3 and Hypothesis 4).

Qualitative data from initial open ended question were content analyzed to make additional inferences about participants' reasons to choose teaching. Raw data was coded and thematized, matrices were prepared (Miles and Huberman 1994). After identifying and grouping similarities and responses, invariant themes were developed (Patton 1990). A pattern of responses was drawn, inferences and generalizations were made.

## Results

### Motivations for Teaching

As seen in Table 2, ACP students' highest rated motivation was related to the "Values" construct of the expectancy-value framework (Watt and Richardson, 2007). *Social utility value*, *intrinsic career value* and *personal utility value* were the most rated teaching motivations. *Self-perceptions of ability* was also among the most rated motivations. ACP students also listed their prior teaching and learning experiences, enhancing social equity and working with children/adolescents as other major reasons to choose teaching. Social influences was another highly rated attractor of teaching profession for the ACP students with a mean score of 4.75 within responses from 1 (not at all) to 7 (extremely). The least rated motivation was fallback career.

### Perceptions about the Profession

ACP students' responses revealed how they perceived teaching. For them teaching is a highly skillful high social status profession. It involves high levels of technical and specialized expert knowledge. It also requires hard work and it is emotionally demanding (See Table 2). ACP students' mean score of perceptions about salary around the scale midpoint show that they find salary of teaching profession neither high nor low.

### Career Choice Satisfaction

ACP students' career choice satisfaction mean scores were relatively high ( $M=5.56$ ,  $SD=1.33$ ). However, their responses for the experiences of social dissuasion ( $M=3.91$ ,  $SD=1.55$ ) is also remarkable out of a 7-point scale.

	Mean	SD	N	$\alpha$
<i>Mean scores of motivation factors</i>				
Make social contribution	6.24	0.87	238	0.74
Shape future of children/adolescents	5.87	1.00	242	0.65
Time for family	5.72	1.16	244	0.75
Ability	5.67	1.09	243	0.85
Intrinsic career value	5.60	1.33	246	0.82
Job transferability	5.54	1.22	242	0.61
Job security	5.40	1.20	242	0.56
Prior teaching and learning experiences	5.32	1.20	244	0.73
Enhance social equity	5.20	1.26	238	0.69
Work with children/adolescents	5.10	1.49	237	0.54
Social influence	4.75	1.66	243	0.80



Fallback career	2.77	1.39	236	0.52
<i>Mean scores of perceptions about the profession</i>				
Expertise		5.58	1.19	243 0.85
Social status		4.77	1.25	242 0.86
Difficulty		4.62	1.51	243 0.65
Salary		3.58	1.66	242 0.83
<i>Mean scores of career choice satisfaction</i>				
Satisfaction		5.56	1.33	241 0.81
Social dissuasion		3.91	1.55	243 0.40

**Table 2: Mean scores of motivation factors, perceptions, and career choice satisfaction**

Note: Responses range from 1 (not at all important) to 7 (extremely important) for motivation factors and 1 (not at all) to 7 (extremely) for perceptions and career choice satisfaction factors.

## Differences of Motivations for Teaching Regarding Primary Career Choices, Age and Gender

Hypothesis 1a. In order to test the influence of ACP students' primary career choices on their motivations for teaching, MANOVA was conducted. The Wilks'  $\lambda$  of .54 was significant,  $F(24, 380) = 5.66$ ,  $p < 0.000$ , indicating that ACP students in the Mathematics, the Sports and the Health groups' mean scores on the motivation subscale are different. The multivariate  $\eta^2 = .26$  indicated 26% of multivariate of the motivation factors is associated with the ACP students' primary career choices. Table 3 shows the statistically significant results of the univariate ANOVAs.

	M	SD	
			Intrinsic Career Value $F(2,201) = 3.78$ , $p = 0.024$ , $\eta^2 = 0.04$
Mathematics	5.19	0.17	
Sports	5.84	0.16	*
Health	5.58	0.16	
			Job Security $F(2,201) = 11.16$ , $p = 0.00$ , $\eta^2 = 0.10$
Mathematics	4.98	0.15	
Sports	5.92	0.14	*
Health	5.29	0.13	
			Time for Family $F(2,201) = 18.36$ , $p = 0.00$ , $\eta^2 = 0.15$
Mathematics	5.17	0.14	
Sports	5.58	0.13	
Health	6.27	0.12	*
			Job Transferability $F(2,201) = 7.76$ , $p = 0.001$ , $\eta^2 = 0.07$
Mathematics	5.01	0.16	*
Sports	5.82	0.15	
Health	5.66	0.14	
			Salary $F(2,235) = 25.62$ , $p = 0.00$ , $\eta^2 = 0.08$
Mathematics	2.90	0.19	*
Sports	3.75	0.17	*
Health	4.03	0.17	*
			Social Status $F(2,235) = 25.08$ , $p = 0.00$ , $\eta^2 = 0.18$

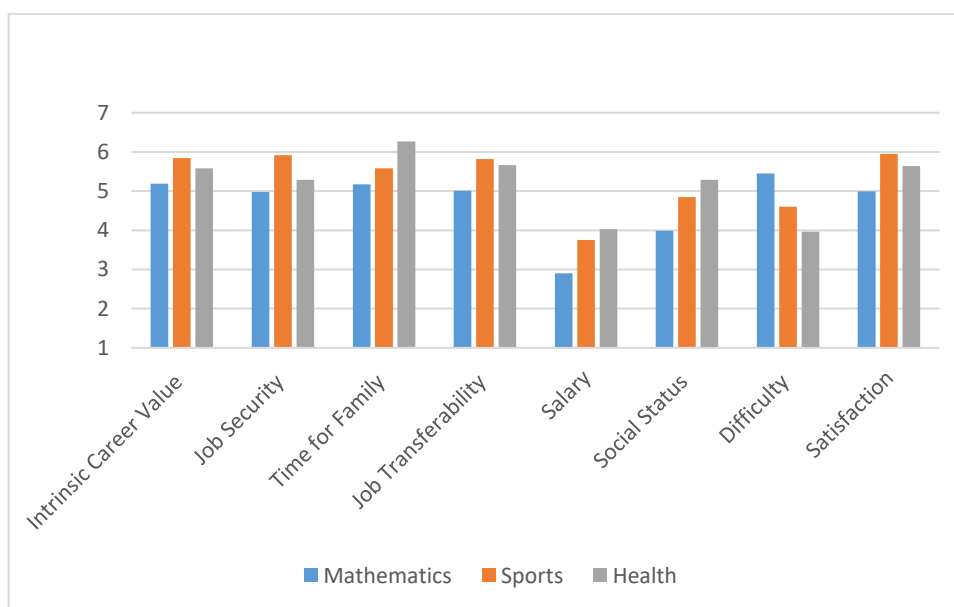
Mathematics	3.99	0.14	*
Sports	4.85	0.13	*
Health	5.29	0.12	*
Difficulty F(2,235)=41.98, p=0.00, $\eta^2=0.15$			
Mathematics	5.45	0.18	*
Sports	4.60	0.17	*
Health	3.96	0.15	*
Satisfaction F(4,472)=6.08, p=0.00, $\eta^2=0.05$			
Mathematics	4.99	0.15	*
Sports	5.95	0.14	
Health	5.64	0.14	

**Table 3: Summary of univariate ANOVA for relationship between ACP students' primary career choices and their motivations, perceptions, and career choice satisfaction**

Note: \*=the mean difference is significant at the .05 level

As seen in Figure 1 and Table 3, the ANOVA was significant for the intrinsic career value and personal utility value i.e. job security, time for family and job transferability,  $p < 0.025$  for all factors. Pairwise differences among the means were evaluated with follow-up tests. Table 3 reports the means and standard deviations for the three major groups and the results of the Dunnett's C test that does not assume equal variances among the groups.

The strength of relationship between ACP students' primary career choices and their motivations of intrinsic career value as assessed by  $\eta^2$  was small. ACP students' majors accounted for 4% of the variance of their intrinsic career value motivation. As seen in Table 3, means of the Sports group ( $M=5.84$ ,  $SD=0.16$ ) and the Mathematics group ( $M=5.19$ ,  $SD=0.17$ ) were significantly different regarding intrinsic career motivations. Sports group had higher scores for intrinsic career motivation in comparison to the other groups.



**Figure 1: Relationship between ACP students' primary career choices and their motivations, perceptions, and career choice satisfaction**

The strength of relationship between ACP students' majors and their motivations of job transferability and job security, as assessed by  $\eta^2$  was moderate, with the ACP students' majors accounting for 7% of the variance of their job transferability and 10% of the variance of their job security motivation for teaching respectfully. Group means was significantly

different for job transferability (See Table 3). The Mathematics group showed lower motivation to job transferability ( $M=5.01$ ) in comparison to the other groups ( $M=5.82$ ,  $SD=0.15$  and  $M=5.66$ ,  $SD=0.14$  for the Sports and the Health groups respectively). Sports group had significantly different mean scores regarding job security. It scored higher for job security motivation ( $M=5.92$ ,  $SD=0.14$ ) in comparison to the other groups ( $M=5.29$  and  $M=4.98$  for the Health and Mathematics groups respectively). In their qualitative responses the Sports group also gave priority to having holidays ( $n=21$ ), good working conditions ( $n=21$ ) and good salary ( $n=14$ ).

The strength of relationship between ACP students' majors and their motivations of time for family, as assessed by  $\eta^2$  was strong. ACP students' majors accounted for 15% of the variance of their motivation of time for family. The Health group showed higher motivation i.e. it had significantly different mean scores ( $M=6.27$ ,  $SD=0.12$ ) than the other groups ( $M=5.58$ ,  $SD=0.13$  and  $M=5.17$ ,  $SD=0.14$  for the Sports and Mathematics groups respectively). In their qualitative responses majority of ACP students in the Health group also emphasized better working conditions ( $n=66$ ) mainly no night shifts ( $n=25$ ), being able to have holidays ( $n=21$ ), and regular working hours ( $n=16$ ).

HEALTH GROUP (n=89)	MATHEMATICS GROUP (n=70)	SPORTS GROUP (n=89)
<b>PERSONAL UTILITY</b>	<b>PERSONAL UTILITY</b>	<b>PERSONAL UTILITY</b>
Better working conditions (66)	Working under state	Good working
No night shifts (25)	security with regular income (10)	conditions, flexible working
Being able to have	Time for family (7)	hours, a good life style (21)
vacations (21)	Ideal profession for women	Having holidays (21)
Regular working hours		Good salary (14)
(16)	Ideal working hours (6)	Want to work in a
Time for family (15)	Holidays (4)	secure work (16)
Regular life (4)		Unemployment (4)
Less workload and stress		
(10)	<b>PERCEPTIONS OF</b>	<b>PERCEPTIONS OF</b>
<b>TEACHING/TEACHING</b>	<b>TEACHING/TEACHING</b>	<b>TEACHING/TEACHING</b>
<b>PROFESSION</b>	<b>PROFESSION</b>	<b>PROFESSION</b>
Teaching is a respected	Love of teaching (15)	Teaching is a respected
profession in the society (26)	Love of teaching profession	profession in the society (20)
Teachers are more	Having role model teachers	Love of teaching
respected than nurses (8)	Meeting bad teachers (6)	profession (18)
Love of teaching (13)	Practicing teaching (5)	Love of teaching (12)
Love of teaching profession (8)	Teaching is a respected	Childhood dream
Childhood dream (5)	profession (4)	(10)
Having role model		Teaching is a
teachers (1)		sacred profession (3)
	<b>FALLBACK CAREER</b>	Meeting bad teachers (3)
	Teaching is a fallback career	Practicing teaching (2)
	(11)	
	Limited choices, obligations	
	(6)	
	University entrance	
	examination score (6)	

**Table 4: ACP students' qualitative responses about motivations for teaching**

Note: Participants (N=248) nominated multiple responses

Hypothesis 1b. In order to test the influence of ACP students' primary career choices on their perception scores of teaching, MANOVA was conducted. The Wilks'  $\lambda$  of .65 was

significant,  $F(8,464) = 13.95$ ,  $p < 0.000$ , indicating that ACP students in Mathematics, Sports and Health groups' mean scores on the perceptions subscale are different. The multivariate  $\eta^2 = .19$  indicated 19% of multivariate of the perception factors is associated with the ACP students' primary career choices. Table 3 shows the results of the univariate ANOVAs.

As seen in Figure 1 and Table 3, the univariate ANOVA for salary, social status and difficulty factors was significant,  $p = 0.000$  for all groups. The strength of relationship between ACP students' primary career choices and their perceptions of the profession, as assessed by  $\eta^2$  was moderate, with the ACP students' primary career choices accounting for 8% of the variance of their perception of salary. The strength of relationship between ACP students' primary career choices and their perceptions of social status and difficulty of teaching profession was strong, as assessed by  $\eta^2$ . ACP students' primary career choices accounted for 18% and 15% of the variance of their perceptions of social status and difficulty of teaching profession respectively.

Pairwise differences among the means were evaluated with follow up tests. Table 3 reports the results of the Dunnett's C test, and means and standard deviations for the three groups. Group means were significantly different regarding their perception scores of salary, social status and difficulty of teaching profession. Mathematics group's perception scores of salary ( $M = 2.90$ ,  $SD = 0.19$ ) and social status ( $M = 3.99$ ,  $SD = 0.14$ ) was lower in comparison to the other groups. Different than the other groups, ACP students in the Mathematics group identified teaching as a fallback career for themselves that they also had different primary career choices such as engineering, medicine, pharmacy, etc. in their qualitative responses (See Table 4). However, their perception scores of difficulty of teaching profession ( $M = 5.45$ ,  $SD = 0.18$ ) was higher than the health and sports groups' scores ( $M = 3.96$ ,  $SD = 0.15$  and  $M = 4.60$ ,  $SD = 0.17$  respectively). The Health and the Sports group's perception scores of salary, social status and difficulty were also significantly different. The Health group's perception scores of salary ( $M = 4.03$ ,  $SD = 0.17$ ) and social status ( $M = 5.29$ ,  $SD = 0.12$ ) were higher than the Sports group's scores ( $M = 3.75$ ,  $SD = 0.17$ , and  $M = 4.85$ ,  $SD = 0.13$  respectively) whereas the Sports group's perception score of difficulty ( $M = 4.60$ ,  $SD = 0.17$ ) was higher than the health group's score ( $M = 3.96$ ,  $SD = 0.15$ ) (see Table 3).

Hypothesis 2. MANOVA was conducted to test the second research hypothesis i.e. there is a relationship between ACP students' primary career choices and their career choice satisfaction. The Wilks'  $\lambda$  of .90 was significant,  $F(4,472) = 6.08$ ,  $p = 0.000$ , indicating that ACP students in the Mathematics, the Sports and the Health groups' mean scores on the career choice subscale are different. The multivariate  $\eta^2 = .05$  indicated 5% of multivariate of the career choice satisfaction factors is associated with the ACP students' primary career choices. Table 3 shows the results of the univariate ANOVAs.

As seen in Figure 1 and Table 3, the univariate ANOVA was significant for satisfaction factor,  $p = 0.00$ . The strength of relationship between ACP students' primary career choices and their career choice satisfaction was moderate, as assessed by  $\eta^2$ . ACP students' majors accounted for 5% of the variance of their career choice satisfaction. The results of the Dunnett's C test revealed that the mean of the Mathematics group was significantly different than the other groups. The Mathematics group's score of career choice satisfaction ( $M = 4.99$ ,  $SD = 0.15$ ) was lower in comparison to the Health and Sports groups ( $M = 5.64$ ,  $SD = 0.14$  and  $M = 5.95$ ,  $SD = 0.14$  respectively).

Hypothesis 3. In order to evaluate the third research hypothesis i.e. ACP students in different age groups (above and below the mean age 26 years) would differ on scores of motivation, an independent t test was conducted. ACP students older than 26 years had higher scores for ability, intrinsic career value, job transferability and work with children factors ( $p < 0.05$  for all factors) confirming the third research hypothesis (See Table 5). However,

younger ACP students (<26 years) had higher scores for fallback career than their older classmates ( $p < 0.05$ ).

Regarding their age groups (above and below the mean age 26 years), ACP students were also expected to have different scores of career choice satisfaction. The t test was significant,  $t(237) = 2.09$ ,  $p = 0.037$ , confirming the hypothesis. ACP students older than mean age of 26 had higher satisfaction scores than those younger students ( $M = 5.37$ ,  $SD = 1.35$  and  $M = 5.73$ ,  $SD = 1.28$  respectively).

Age	<26 years	$\geq 26$ years	t value
Ability	$M = 5.50$ $SD = 1.19$	$M = 5.83$ $SD = 0.98$	$t(238) = 2.38$ , $p = 0.018$
Intrinsic career value	$M = 5.35$ $SD = 1.36$	$M = 5.80$ $SD = 1.27$	$t(240) = 2.63$ , $p = 0.009$
Job transferability	$M = 5.37$ $SD = 1.25$	$M = 5.69$ $SD = 1.18$	$t(238) = 2.00$ , $p = 0.046$
Work with children	$M = 4.76$ $SD = 1.51$	$M = 5.38$ $SD = 1.42$	$t(232) = 3.18$ , $p = 0.002$
Fallback career	$M = 2.97$ $SD = 1.69$	$M = 2.57$ $SD = 1.27$	$t(231) = 2.19$ , $p = 0.029$

**Table 5: t-test results for relationship between ACP students' ages and their motivations for teaching**

Note: Responses range from 1 (not at all important) to 7 (extremely important)

Hypothesis 4. In order to evaluate the fourth research hypothesis i.e. female ACP students would score higher on motivation factors than male ACP students, independent samples t-test was conducted. T-test was significant for time for family factor  $t(240) = 4.23$ ,  $p = 0.00$ , that females had higher scores ( $M = 5.98$ ,  $SD = 1.01$ ) than the males ( $M = 5.36$ ,  $SD = 1.26$ ). Research hypothesis is confirmed for time for family factor.

## Discussion

The purpose of this study was to provide information to help understand the key factors influencing ACP students' career decisions in Turkey. Fit-Choice Scale, an international scale which demonstrated acceptable construct validity and reliability in different Turkish samples (Eren and Tezel, 2010; Kılınç, Watt and Richardson, 2012; Öztürk Akar, 2012) was used. Utilization of an international scale enabled comparison and conjoining of teaching motivations as a primary and/or secondary career choice both at the national and international levels (König and Rothland, 2012).

Although applied in a different cultural context, the highest rated motivations in this study i.e. social utility value followed by intrinsic career and personal utility values, are similar to the ones reported in the international research. Participants had high satisfaction scores for their teaching career choices and experienced social dissuasion as well (Fokken-Bruinsma and Canrinus 2012; Watt and Richardson, 2007). The findings are also similar to the previous studies with Turkish preservice teachers (Eren and Tezel, 2012; Kılınç et al., 2012; Öztürk Akar, 2012). With this regard, Turkish ACP students' responses support international teaching motivation stereotypes such as highly altruistic motivations and family-flexible career (Watt and Richardson, 2012).

Despite particular similarities with the international research, contrasting findings with the previous Turkish studies are also observed. For instance, consistent with findings from the Australian, the Dutch and the Irish contexts (Fokken-Bruinsma and Canrinus 2012, Hennessy and Lynch, 2016; Watt and Richardson 2007), Turkish ACP students' self-perceptions of ability was among the most rated motivations. However, Turkish preservice teachers were previously reported to be in the need to deliberately pursue job security first due to socio-economic well-being of the Turkish society (Kılınç et al., 2012). Such a difference is used to deduce that the Turkish ACP students and preservice teachers might have different patterns of motivations originating from their different characteristics i.e. work experience, age and gender.

The Health group's higher motivation for time for family, and the Sports group's higher motivation for ability and job security were interpreted as the outcomes of their motivation patterns that pushed them out of their primary professions and pulled them into teaching career (Berger and D'Ascoli, 2012). The Health group's incompatibility of the working time with family in particular, have pushed them out of their first career choice whereas more agreeable working conditions have pulled them into teaching profession. Job security was a pulling factor for the Sports group because it was not fulfilled in their primary profession. The Sports group's higher ability and intrinsic career motivations are again pulling factors that they prioritized as optimally fitting in their secondary career choices. It is important to remember that the Sports group, which mainly consisted of personal trainers, trainers working in private gyms and old athletes, had access to their first career choices through a physical ability exam and they highlighted how their experiences, skills and knowledge as physical education and sports teachers could contribute to the Turkish sports and physical education in Turkey. This finding is similar to Williams and Forgasz (2009)'s finding that life and work experiences, skills and personal qualities are the most important attributes career change entrants bring to teaching.

Related with work experience, age was identified to have a possible influence on ACP students' motivation patterns, too. Comparisons showed that ACP students older than the mean age of 26 had higher scores of self-perceptions of ability, intrinsic career value, job transferability and work with children factors than their young classmates. As the participants get older and are more involved in professional life, such motivations might become more relevant and meaningful. Considering the fact that ACP students who were older and more involved in the professional life were mainly from the Health and the Sports groups, it is also important to notice their perception of teaching profession. Analysis of their quantitative and qualitative responses revealed that they perceive teaching as a high status profession. For them, teachers are more respected than nurses and/or sportsmen in the Turkish society. Together with their demographic characteristics i.e. age and work experience, such a perception might have pushed them out of their low status primary professions and pulled them into teaching. Not surprisingly, their career choice satisfaction scores for teaching were also significantly higher.

ACP students who were younger than the mean age were mainly from the Mathematics group, and they had higher scores for teaching as a fallback career. Mathematics group's perception scores of salary and social status of teaching profession were lower than the other groups, too. Adding to their contrasting perception scores with the other groups, the Mathematics group's career choice satisfaction scores was also lower. Nonetheless, their job transferability motivations was lower as well. Yet, they had higher perception scores of difficulty than the Health and Sports groups. Although such a contrast between workload and salary was a factor pushing some ACP students in the Health group out of their primary profession and pulled them into teaching profession, it is not possible to say the same for the Mathematics group. Majority of them were either the last year undergraduate students and/or

young graduates with none/less experience in professional life. Their responses highlighted the fact that their secondary career choice i.e. teaching profession, is not rewarding for them as it is for the Sports and Health groups. Although they seem to be determined to become teachers as they continued in the ACP program, their responses pointed to a low motivational profile that they lack enthusiasm and are thus uncommitted to teaching.

This study also used gender differences obtained in responses to support the worldwide consideration of teaching as a feminine profession (Bruinsma and Jansen, 2010; Feng, 2011; Kılınç et al., 2012; Öztürk Akar, 2012; Richardson and Watt, 2006; Sinclair, 2008), as a secondary career choice as well. However, different than the previous research which related female dominance in teacher education programs with the way significant others encouraged them to choose teaching (Öztürk Akar, 2012), this study related observed gender differences with the motivation of having time for family. Although, having time for family has already been identified as a major reason for females more likely attraction to teaching, participants' primary career choice has been thought to have an intervening role in their secondary career choice at this point. It requires further explanation that majority of female participants' primary career choice was also a profession dominated with females in Turkey, and significant others might have already encouraged them to choose nursing at first hand. Yet, through time female participants might have needed regular working hours and holidays that's why they were pulled into teaching.

## Conclusions

Considering teaching motivations, particular similarities with the international research and previous Turkish studies were identified in this study. However, findings pointed that ACP students cannot be treated as a homogenous group having similar motivation patterns. Adding to that, their motivations cannot be treated in a similar vein to preservice teachers' motivations. This conclusion contrasts Richardson and Watt's inference that motivations for choosing teaching as a career tend to be unrelated to whether participants choose teaching as their initial career or not (Richardson and Watt, 2006). Through Fit-Choice framework (Watt and Richardson, 2007), such a contrast was associated with sample characteristics and Turkey's contextual features. It is well known that majority of Fit-Choice research utilized samples of preservice teachers (Berger and D'Ascoli 2012; Eren and Tezel 2010; Fokken-Bruinsma and Canrinus 2012; Jugovic, Marusic, Ivanec and Vidovic 2012; Hennessy and Lynch, 2016; Kılınç, Watt, and Richardson 2012; Lin, Shi, Wang, Zhang and Hui 2012; Öztrk Akar, 2012; Watt, Richardson, Klusmann, Kunter, Beyer, Trautwein and Baumert 2012), and a few used homogenous graduate groups to draw motivation patterns of career changers (Watt and Richardson, 2008). Yet, none has reported comparative findings for career-changers as this study did.

Groups identified tended to demonstrate high and low motivational profiles for teaching profession was one of the most significant findings of this study. For participants in the Sports and the Health groups, teaching was a high status career and they were pulled into teaching profession. Since Turkey has been going through a comprehensive change in teacher education system (Eşme, 2009; Grossman, Onkol and Sands, 2007; as cited in Öztürk Akar, 2012) which involved attempts to make it a more prestigious career choice, this finding is significant. Yet, low motivational profile of Mathematics group call attention of policy makers and teacher educators. Considering the fact that Turkey is still in the need of qualified teachers, and there are still unfilled full-time teaching positions in the east and southeast regions of the country, ACPs can assist in addressing teacher shortage. However, as

important as opening ACPs to meet this need, teacher educators and policy makers should take into account why career changers are pulled into teaching.

Results of this study revealed that participants who were older, more experienced in professional life, and clear about their self-perceptions and what they expect from teaching profession had higher motivational profiles. Such motivational profiles promise more committed and engaged teaching careers (Watt and Richardson, 2007). But what about low motivational profiles? Due to the above mentioned conclusions, it is suggested that the application criteria of ACPs in Turkey should be revised. Candidates' demographics and career patterns should be taken into account when students are accepted in ACPs. These programs should not be treated as a promising alternative for low motivational profile students and/or young graduates. Otherwise, supporting sedentary societal tendency, teaching can be seen as a profession which has open access to anyone. Besides ACPs can be treated as nonfunctional programs.

### Limitations

This study is one of the few studies on ACPs in Turkey, and it provides new insights for future research. Further research including more diverse settings and samples is also needed to be able to test the generalizability of the findings and to better identify the influence of Turkey's contextual features on ACP students' motivation to become teachers. Poor subscale reliabilities are also acknowledged. Instead of assumptions and personal explanations about ACPs, research validated education policies should be formulated, and unique issues in the Turkish context should be correctly addressed.

### References

- Adelman, N. E. (1986) *An Exploratory Study of Teacher Alternative Certification and Retraining Programs*. Washington, DC: Policy Studies Associates.
- Aksu, M., Engin-Demir, C., Daloğlu, A., Yıldırım, S., and Kiraz, E. (2010). Who are the future teachers in Turkey? Characteristics of entering student teachers. *International Journal of Educational Development*, 30(1), 91-101.  
<https://doi.org/10.1016/j.jedudev.2009.06.005>
- Anthony, G. and Ord, K. (2008). Change of career secondary teachers: motivations, expectations and intentions. *Asia-Pacific Journal of Teacher Education*, 36(4), 359-376. <https://doi.org/10.1080/13598660802395865>
- Aydın, A. and Baskan, G. A. (2005). The problem of teacher training in Turkey. *Biotechnology and Biotechnological Equipment*, 19(2), 191-198.  
<https://doi.org/10.1080/13102818.2005.10817215>
- Berger, J-L. and D'Ascoli, Y. (2012). Becoming a VET teacher as a second career: investigating the determinants of career choice and their relation to perceptions about prior occupation. *Asia Pacific Journal of Teacher Education*, 40(3), 317-341.  
<https://doi.org/10.1080/1359866X.2012.700046>
- Boz, Y. and Boz, N. (2008). Chemistry and mathematics pre-service teachers' reasons to choose teaching. *Kastamonu Education Journal*, 16(1) 137-144.
- Brouwer, N. (2007). Alternative teacher education in the Netherlands 2000-2005. A standards-based synthesis. *European Journal of Teacher Education*, 30(1), 21-40.  
<https://doi.org/10.1080/02619760601119934>



- Bruinsma, M. and Jansen, E. P. W. A. (2010). Is the motivation to become a teacher related to pre-service teachers' intentions to remain in the profession? *European Journal of Teacher Education*, 33(2), 185-200. <https://doi.org/10.1080/02619760903512927>
- Carrington, B. (2002). A quintessentially feminine domain? Student teachers' constructions of primary teaching as a career. *Educational Studies*, 28(3), 287-303. <https://doi.org/10.1080/0305569022000003735>
- Carless, S. A. and Arnup, J. L. (2011). A longitudinal study of the determinants and outcomes of career change. *Journal of Vocational Behavior*, 78, 80-91. <https://doi.org/10.1016/j.jvb.2010.09.002>
- Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching and America's Future.
- Donohue, R. (2006). Person-environment congruence in relation to career change and career persistence. *Journal of Vocational Behavior*, 68(3), 504-515. <https://doi.org/10.1016/j.jvb.2005.11.002>
- Eren, A. and Tezel, K. V. (2010). Factors influencing teaching choice, professional plans about teaching, and future time perspective: A mediational analysis. *Teaching and Teacher Education*, 26, 1416-1428.
- Feng, Y. (2011). Teacher career motivation and professional development in special and inclusive education: perspectives from Chinese teachers. *International Journal of Inclusive Education*, 1-21. <https://doi.org/10.1163/9789460912757>
- Fokkens-Bruinsma, M., and Canrinus, E. T. (2012). The factors influencing teaching (FIT)-choice scale in a Dutch teacher education program. *Asia-Pacific Journal of Teacher Education*, 40(3), 249-269. <https://doi.org/10.1080/1359866X.2012.700043>
- Fraenkel, J. R. and Wallen, N. E. (1996). *How to design and evaluate research in education*. McGraw-Hill, Inc.
- Gürbüztürk, O. and Genç, S. Z. (2004). Teacher candidates' opinions about the teaching profession. *Inönü University Journal of Education Faculty*, 5(7), 47-62.
- Harker, K., and Chapman, J. (2006). Teacher numbers in New Zealand: Attrition and replacement. *New Zealand Journal of Teachers' Work*, 3(1), 42-55.
- HEC Rules and Regulations of Pedagogical Formation Certification Program. (2014). Retrieved from <https://yok.gov.tr> in June 28, 2016.
- Hennessy, J. and Lynch, R. (2016). "I chose to become a teacher because". Exploring the factors influencing teaching choice amongst pre-service teachers in Ireland, *Asia-Pacific Journal of Teacher Education*, <https://doi.org/10.1080/1359866X.2016.1183188>
- Joseph, P. B. and Green, N. (1986). Perspectives on reasons for becoming teachers. *Journal of Teacher Education*, 37(6), 28-33. <https://doi.org/10.1177/002248718603700605>
- Johnson, S. P. (2008). The status of male teachers in public education today. *Education Policy Brief*, 6(4), 1-12.
- Jugovic, I., Marusic, I., Ivanec, T. P. and Vidovic, V. V. (2012). Motivation and personality of preservice teachers in Croatia. *Asia Pacific Journal of Teacher Education*, 40(3), 271-287. <https://doi.org/10.1080/1359866X.2012.700044>
- Kılınç, A., and Mahiroğlu, A. (2009). The attractors of teaching biology: A perspective from a Turkish context. *Australian Journal of Teacher Education*, 34(5), 15-39. <https://doi.org/10.14221/ajte.2009v34n5.2>
- Kılınç, A., Watts, H. M. G. and Richardson, P. W. (2012). Factors influencing teaching choice in Turkey. *Asia Pacific Journal of Teacher Education*, 40(3), 199-226. <https://doi.org/10.1080/1359866X.2012.700048>

- König, J. and Rothland, M. (2012). Motivations for choosing teaching as a career: effects on general pedagogical knowledge during initial teacher education. *Asia Pacific Journal of Teacher Education*, 40(3), 289-315.  
<https://doi.org/10.1080/1359866X.2012.700045>
- Lin, E., Shi, Q., Wang, J., Zhang, S. and Hui, L. (2012). Initial motivations for teaching: comparison between preservice teachers in the United States and China. *Asia Pacific Journal of Teacher Education*, 40(3), 227-248.  
<https://doi.org/10.1080/1359866X.2012.700047>
- Lutz, F. W. and Hutton, J. B. (1989). Alternative teacher certification: its policy implications for classroom and personnel practice. *Educational Evaluation and Policy Analysis*, 11(3), 237-254. <https://doi.org/10.3102/01623737011003237>
- Manuel, J. and Hughes, J. (2006). 'It has always been my dream': exploring pre-service teachers' motivations for choosing to teach. *Teacher Development*, 10(1), 5-24.  
<https://doi.org/10.1080/13664530600587311>
- Miles, M. B., and Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Mitchell, D. E. and Romero, L. S. (2010). The politics and practice of alternative teacher certification. *Educational Administration Quarterly*, 46(3), 363-394.  
<https://doi.org/10.1177/0013161X10375272>
- Sezgin Nartgün, Ş. (2016). Pedagogical formation students' perception about employment and teaching profession. *Universal Journal of Educational Research*, 4(12A), 22-30.  
<https://doi.org/10.13189/ujer.2016.041304>
- Nooney, J. G., Unruh, L. and Yore, M. M. (2010). Should I stay or should I go? Career change and labor force separation among registered nurses in the U.S. *Social Science and Medicine*, 70, 1874-1881. <https://doi.org/10.1016/j.socscimed.2010.02.037>
- Nuttall, J., Murray, S., Seddon, T. and Mitchell, J. (2006). Changing research context in teacher education in Australia: charting new directions. *Asia-Pacific Journal of Teacher Education*, 34(3), 321-332. <https://doi.org/10.1080/13598660600927224>
- Ok, A. and Önkol, P. (2007). The profile of prospective teachers in teacher education programs. *Education and Science*, 32(143), 13-26.
- Önder, E. and Tagay, Ö. (2015). Opinions of students participating in the pedagogical formation certificate program with regard to the profession and the program. *International Journal of Human Sciences*, 12(1), 293-314.
- Özbek, R., (2007). Teacher candidates' perceptions of personal, economical and social factors influencing their decisions to become teachers. *Firat University Journal of Social Sciences*, 9(2), 221-233. <https://doi.org/10.14687/v12i2.3335>
- Öztürk Akar, E. (2012). Motivations of Turkish pre-service teachers to choose teaching as a career. *Australian Journal of Teacher Education*, 37(10), 67-84.  
<https://doi.org/10.14221/ajte.2012v37n10.7>
- Öztürk Akar, E. (2014). Why do Arts and Sciences Faculty-Department of Biology graduates want to become teachers? *Kastamonu Education Journal*, 22(1), 259-272.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Polat, S. (2014). Pedagogical certification program students reasons to choose teaching. *International Journal of Human Sciences*, 11(1), 128-145.  
<https://doi.org/10.14687/ijhs.v11i1.2740>
- Priyadharshini, E., and Robinson-Pant, A. (2003). The attraction of teaching: An investigation into why people change careers to teach. *Journal of Education for Teaching*, 29, 95-112. <https://doi.org/10.1080/0260747032000092639>

- Richardson, P. W. and Watt, H. M. G. (2005). 'I've decided to become a teacher': influences on career change. *Teaching and Teacher Education*, 21, 475-489. .  
<https://doi.org/10.1016/j.tate.2005.03.007>
- Richardson, P. W., and Watt, H. M. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education*, 34 (1), 27–56 .  
<https://doi.org/10.1080/13598660500480290>
- Semerçi, Ç. and Taşpınar, M. (2003). Restructuring of the teacher training system in Turkey. *Kyrgyzstan-Turkish Manas University Social Sciences Journal*, 37(6), 137-146.
- Serow, R. C. and Forest, K. D. (1994). Motives and circumstances: occupational-change experiences of prospective late-entry teachers. *Teaching and Teacher Education*, 19(5), 555-563. [https://doi.org/10.1016/0742-051X\(94\)90006-X](https://doi.org/10.1016/0742-051X(94)90006-X)
- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36(2), 79-104.  
<https://doi.org/10.1080/13598660801971658>
- Sinclair, C., Dowson, M., and McInerney, D. M. (2006). Motivations to teach: Psychometric perspectives across the first semester of teacher education. *Teachers College Record*, 108, 1132-1154. <https://doi.org/10.1111/j.1467-9620.2006.00688.x>
- Şimşek, H. and Yıldırım, A. (2001). The reform of pre-service teacher education in Turkey, in: R. G. Sultana (Ed.) *Challenge and change in the euro-mediterranean region: case studies in educational innovation*. New York: Peter Lang.
- Tsabari, O., Tziner, A. and Meir, E. I. (2005). Updated meta-analysis on the relationship between congruence and satisfaction. *Journal of Career Assessment*, 13(2), 216-232.  
<https://doi.org/10.1177/1069072704273165>
- Wang, H-H. and Fwu, B-J. (2001). Why teach? The motivation and commitment of graduate students of a teacher education program in a research university. *Proceedings of the National Science Council, Part C: Humanities and Social Sciences*, 11(4), 390-400.
- Wang, A.H., Coleman, A.B., Coley, R.J. and Phelps, R.P. (2003). *Policy information report: preparing teachers around the world. educational testing service (ets)*. Retrieved from [www.ets.org/research/pic](http://www.ets.org/research/pic) 01.03.2012.
- Watt, H.M.G. and Richardson, P.W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice Scale. *Journal of Experimental Education*, 75(3), 167-202. <https://doi.org/10.3200/JEXE.75.3.167-202>
- Watt, H. M. G., Richardson, P. W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U. and Baumert, J. (2012). Motivations for choosing teaching as a career: An international comparison using the FIT-Choice scale. *Teaching and Teacher Education*, 28, 791-805. <https://doi.org/10.1016/j.tate.2012.03.003>
- Watt, H. M., and Richardson, P. W. (2012). An introduction to teaching motivations in different countries: Comparisons using the FIT-choice scale. *Asia-Pacific Journal of Teacher Education*, 40 (3), 185–197. <https://doi.org/10.1080/1359866X.2012.700049>
- Watt, H. M., Richardson, P. W. and Devos, C. (2012). (How) does gender matter in the choice of a STEM teaching career and later teaching behaviors? *International Journal of Gender, Science and Technology*, 5(3), 187-207.
- Williams, J. (2010). Constructing a new professional identity: career change into teaching. *Teaching and Teacher Education*, 26, 639-647.  
<https://doi.org/10.1016/j.tate.2009.09.016>
- Williams, J. and Forgasz, H. (2009). The motivations of career change students in teacher education. *Asia-Pacific Journal of Teacher Education*, 37(1), 95-108.  
<https://doi.org/10.1080/13598660802607673>

- Yıldırım, A. and Ok, A. (2002). Alternative teacher certification in Turkey: Problems and issues. *Teacher education in the mediterranean region: Responding to the challenges of society in transition* (pp.259-275). New York: Peter Lang.
- Yüce, K., Şahin, E. Y., Koçer, Ö. and Kana, F. (2013). Motivations for choosing teaching as a career: a perspective of pre-service teachers from a Turkish context. *Asia Pacific Education Review*, 14, 295-306. <https://doi.org/10.1007/s12564-013-9258-9>
- Zeichner, K. M. and Schulte, A. K. (2001). What we know and don't know from peer-reviewed research about alternative teacher certification programs. *Journal of Teacher Education*, 52(4), 266-282. <https://doi.org/10.1177/0022487101052004002>