Reasons men in Kazakhstan choose a teaching career: A replication study using the FIT choice scale

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Submitted in partial fulfilment of the requirements for the degree of

Master of Science

in

Educational leadership

Nazarbayev University Graduate School of Education

April, 2022

Word count: 16496

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20th October 2021

Dear Duman Bakayev,

This letter now confirms that your research project entitled: *Reasons men in Kazakhstan choose a teaching career: A replication study using the FIT choice scale*, has been approved by the Graduate School of Education Ethics Committee of Nazarbayev University. You may proceed with contacting your preferred research site and commencing your participant recruitment strategy.

Yours sincerely

Anna CohenMiller, PhD

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Abstract

The purpose of this study was to understand student teachers' motivation to enter the teaching career as Kazakhstani men. This study was guided by two research questions: Why do men choose to become teachers? and what beliefs do men have about teaching? This research replicated the Factors Influencing Teaching (FIT) choice scale, a quantitative approach designed by Watt and Richardson (2007). The survey included a scale from one to seven to express the spectrum of opinions. The survey was distributed to 14 regions and the three national status cities of Kazakhstan. A total of 562 men from across the country filled out the survey about their teaching career motivation and beliefs. The quantitative data was analysed using R studio. Multiple MANOVAs were applied to the motivation factors and beliefs items. Chi-square tests were used to find associations among the motivation and demographics items. The findings of this study showed correlations with international findings, along with unique data. Student teachers in Kazakhstan were motivated intrinsically and altruistically, but they also were motivated by job security and identified that their teachers have had a positive impact on career choices. Findings demonstrated that men in Kazakhstan think teaching is demanding and are satisfied with their career choice. In contrast to international findings Kazakhstani student teachers believe that teaching is a high-status profession. Student teachers suggested a higher salary and better-quality career counselling at the school level to attract more men into teaching. Further studies are recommended to get a deeper and richer image of motivation. Practical implications for schools and school leaders, policymakers, and men in teaching and those planning to enter the teaching field are discussed.

Keywords: motivation, teaching, beliefs, career choice, FIT choice scale, male teachers

Аңдатпа

Бұл зерттеудің мақсаты Қазақстандағы ер мұғалім студенттердің мұғалім мамандығын таңдау уәждемесін түсіну. Бұл зерттеудің екі зерттеу сұрағы болды: Неліктен ер азаматтар мұғалім болуды таңдайды? Мұғалімдік туралы ерлердің қандай сенім пікірлері бар? Бұл зерттеу Ватт және Ричардсон (2007) зерттеп дайындаған Мұғалімдікке әсер ететін факторлар таңдау шкала сандық әдісін қайталап қолданды. Сауалнама пікірлер спектрін білдіру үшін бірден жетіге дейін шкаланы қолданды. Сауалнама Қазақстанның 14 облысына және үш Республикалық маңызы бар қалалар арасында таратылды. Жалпы, елдің кейбір аймақтарынан 562 ер адам мұғалімдік мамандық уәждемелер және пікірлер сауалнамасын толтырды. Сандық ақпарат R studio бағдарламасы арқылы талданған. Уәждемелер және пікірлер сұрақтарына бірнеше MANOVA қолданылды. Уәждеме және демография сұрақтары арасында байланысты табу үшін Хи квадрат әдісі қолданылды. Бұл зерттеу нәтижелері халықаралық нәтижелерімен сәйкес, бірақ та кейбір ерекшеліктері бар. Қазақстандағы мұғалім студенттер іштен және альтруисттік жағынан уәжделенген, сонымен бірге олар жұмыс сенімділігімен, тұрақтылығымен уәжделенген және олардың мұғалімдері мамандық таңдауына жағымды әсер тигізген. Қазақстандағы ер адамдар мұғалімдік қатал әрі қиын жұмыс екендігін деп ойлайды және олар өз таңдауымен қанағаттанған. Халықаралық нәтижелерге қарсы Қазақстандық мұғалім студенттер пікірі бойынша мұғалімдік жоғары мәртебелі мамандық. Мұғалім студенттер ер адамдарды мұғалімдікте қызықтыру үшін жоғары жалақы және мектеп деңгейінде сапалық мамандық кеңес жасау керектігін ұсынды. Уәждеменің тереңірек әрі мол түсіну үшін әрі қарай зерттеулер ұсынылды. Мектептерге, мектеп жетекшілеріне, саясат жасаушыларға, ер

мұғалімдерге және мұғалім болатын ойы бар ер адамдарға практикалық маңызы сипатталған.

Кілтті сөздер: уәждеме, мұғалімдік, сенімдер, мамандықты таңдау, мұғалімдікке әсер ететін факторлар таңдау шкаласы, ер мұғалімдер

Аннотация

Цель этого исследования понять мотивацию мужчин среди студентов учителей Казахстана выбора профессии учителя. Это исследование имело два исследовательских вопроса: Почему мужчины выбирают стать учителем? Какие убеждения у мужчин о учительстве? Это исследование повторно использует количественный метод исследования разработанный Ватт и Ричардсоном (2007) шкала выбора Факторов Влияющих на Преподавание. Опрос представляет шкалу от одного до семи выражающую спектр мнений. Опрос был распространен в 14 регионов Казахстана и три города Республиканского значения. 562 мужчин из некоторых регионов Казахстана заполнили опрос о мотивации карьеры учителя и убеждениях об этой профессии. Количественные данные были анализированы используя R studio. Множество методов MANOVA были применены на вопросы о мотивационных факторах и убеждениях. Метод Хи квадрат был использован для нахождения ассоциаций между мотивацией и демографикой. Результаты этого исследования показали корреляцию с международными данными, с некоторыми особенностями. Студенты учителя Казахстана в значительной степени мотивированы внутренне и альтруистически, но они так же мотивированы надежностью и стабильностью профессии учителя, в свою очередь учителя которые учили их оказали положительное влияние на их выбор профессии. Мужчины в Казахстане считают что учительство это требовательная профессия и они удовлетворены своим выбором. В противоположность результатам международных исследований, студенты учителя Казахстана верят что профессия учителя имеет высокий статус. Студенты учителя для привлечения большего числа мужчин в учительство предлагают повышение зароботных плат и улучшение качество профессиональной ориентации в школе. Для получения более глубокого и насыщенного

понимания мотивации рекомендованы дальнейшие исследования. Практическая значимость описана для школ, руководителей школ, должностных лиц в сфере образования и труда, мужчин учителей и тех кто планирует стать учителем.

Ключевые слова: мотивация, преподавание, убеждения, выбор профессии, шкала выбора факторов влияющих на преподавание, учителя мужчины

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Chapter 1: Introduction

Teaching as a profession has gone through many transformations. In my short career, I have faced tremendous changes in Kazakhstani education. But one thing has been stable for the last few decades is the gender distribution among teachers. Today's average teacher in OECD countries is a 44-year-old woman (OECD, 2019b), with a similar situation in Kazakhstan, a 41-year-old woman (Information-Analytical Center [IAC], 2019). In western countries, as well as in Kazakhstan, women seem to choose this profession more often than men, with a 4 to 1 ratio accordingly (IAC, 2019). Kazakhstani school education has about 80% of women teachers similar to lower secondary schools, age 13 to 16, in Bulgaria, Georgia, Estonia (OECD, 2019b). The general trend is that primary school has the most women 82% OECD average, lower secondary is less than primary 68% OECD average, and the least of women is in higher secondary 60% OECD average (OECD, 2021). This phenomenon, when women overpopulate a profession, is called the "feminisation" of teaching (Skelton, 2009) and relates to lower-paid professions. In contrast, engineering and science are overpopulated by men. In this case, girls and women experience social prejudice and gender role stereotypes (Mau, 2003), thus it may affect self-affiliation towards a particular profession (Matusovich et al., 2010). Women may feel affiliation towards teaching.

Apart from the affiliation, feminization can be explained by two other factors. Teaching has a low status in Kazakhstan and low-status professions tend to be overpopulated by women (Dickson & Le Roux, 2012; Martino & Kehler, 2007). In the 1990s, Kazakhstan experienced an economic recession and all state-funded professions were affected by that (OECD, 2017). Students and parents see schools and teachers as obliged to educate and dependent. In addition, seeing the low numbers of teachers the government decreased the passing grade for educational programs. These resulted in a significant decrease in the teacher

status. Another factor is the social pressure, considering men in teaching being “abnormal” or “gay” (Mills et al., 2004; Pruit, 2014). Teaching is seen as a feminine profession, whereas engineering is seen as a masculine profession. A similar phenomenon to feminisation occurs in engineering. Stereotypical role-model that people have about teachers may cause pressure on men. In some cases, families have a strong influence, they may react negatively or even openly disapprove of the decision to become a teacher (Dickson & Le Roux, 2012). These factors are closely related, as a low status profession attracts more women and more women in teaching result in stereotypes about the feminine nature of teaching. Nonetheless, there are men in the teaching profession, especially in some eastern countries. In Japan men teachers are majority (OECD, 2019b), at around 60%, can be explained by the high status of the profession (Kimura, 2007). Teaching also has a lower status and lower salaries in some of western countries, explaining the low ratio of men. However, men still choose teaching and the reasoning for that can vary.

Purpose of the Study

The purpose of this quantitative study is to understand why men in Kazakhstan choose to become a teacher. Understanding men’s teaching career can broaden and deepen the current understanding of gender and teaching career choice relationships. Analysis of Kazakhstani men student teachers’ choices can help bring more men into teaching providing more role models for students. This study replicates the Factors Influencing Teaching as a career choice (FIT) scale (Watt & Richardson, 2007) with some questions added to collect opinions on how to attract more men into teaching. The study examines the experiences of young student teachers from all 14 oblasts (administrative division used in Kazakhstan, similar to province) and three major cities in the country. It will highlight the most influential reasons and suggest possible ways to attract more men to education.

Research Questions

1. Why do men choose to become teachers?
2. What beliefs do men have about teaching?

Significance of the Study

This study contributes to gender and teaching career choice relationship understanding in Kazakhstan. Apart from a few studies in the same field, such as Iztayeva's (2014) research on feminization of teaching and gender inequality, Almukhambetova and Kuzhabekova's (2020) qualitative study on students who are women enrolling STEM majors, Almukhambetova et al. (2022) on bias and stereotypes towards female math students, and Irsaiyev et al.'s (2019) study on why people choose the teaching profession, there appears to be no such study about men entering teaching career conducted in Kazakhstan. On a school level, both students and teachers may benefit from the study, as an understanding of the men in teaching may support creating balance in role models. Schools also may update their hiring practices to make vacancies equally attractive both for women and men.

The study will propose further research questions based on limitations and prospective findings. Researchers and scholars may see the findings and suggested further research questions useful. The growing number of gender studies in the educational space of Kazakhstan still has plenty of room for research, not only for men and women in teaching but the existing academic gap between boys and girls. The study can inform future recruitment policies, as it will show positive factors for attracting men into teaching. It also emphasises the existing gender distribution problem amongst teachers in Kazakhstan. On a broader scale, this research will contribute to understanding other factors influencing men's career choices and reinforce existing studies.

Outline of the Thesis

This thesis has six chapters. Introduction, Literature review, Methodology, Findings, Discussion, and Conclusion. Each chapter elucidates a particular aspect of the research and has a chapter summary at the end. The introduction described the current situation in gender distribution and the main reasons affecting choosing teaching as a career. Following with purpose of the study, research questions, and significance of the study.

The literature review shows present studies in this field. This chapter examines general teaching career choice, gender-based choice, benefits and drawbacks of men already in the profession, teacher identity, gender, the reasons to attract more men into teaching, and experiences from different countries and Kazakhstan in trying to get more men into teaching. The methodology chapter provides reasoning for the quantitative research design. Sampling and sample size described data collection and analysis instruments are referenced and explained. Ethical considerations are listed and discussed.

The findings chapter demonstrates all the numerical data derived from the study. Several paragraphs described the major findings from the quantitative method. The data is appropriately labelled, categorised and the mathematical tools explained. The answers to the research questions are given. The discussion chapter draws on the findings of the study to elaborate on significant differences. Implications from the quantitative method are suggested, connections are drawn and a comparison to the existing literature is provided. The conclusion chapter summarizes ideas from the discussion chapter to answer the research questions. Recommendations for recruitment policies and attracting more men based on the findings are provided. Limitations and recommendations for further research are discussed.

Chapter 2: Literature Review

Men in education themes have been of interest for many decades (Brown & Butty, 1999; Davidson & Nelson, 2011; Gold & Reis, 1982; Mills et. al, 2004). However, the cultural aspect and time frame of a particular study introduce a strong impact on its results. In this chapter I will describe a general understanding of teaching career choice motivation, differences between men and women in choosing the career, challenges and benefits those men face, teacher identity and gender mutual influences, reasons to attract more men to education, and experiences from men focused policies.

Teaching Career Choice Motivation

A study conducted with 298 English undergraduates shows that students when choosing a career consider the enjoyment of the work first, then physical and social milieu, and then job security (Kyriacou & Coulthard, 2000). Meanwhile, those who are considering the teaching career have more altruistic factors, such as contributing to society and additional responsibility. There is no single factor that explains all career choices, it is a combination of different factors, and it differs from person to person. The most important factor is the personal factor (Borchert, 2002). Enjoyment of the work is one of the personal factors, some people may enjoy teaching, some enjoy crafting, medicine, baking, or any other profession. Job security also differs from country to country, but public jobs are usually considered secure (Clark & Postel-Vinay, 2008). Physical and social milieu differs in different organizations, even two schools in the same city may have different milieu because of the funding, leadership, and socio-economic status of the community. In the Kazakhstani context, undergraduate students choose education 20% followed by technical sciences and technology 16%, and social sciences 10% (BoNS, 2019). Compared to OECD countries with 29% in business and law, 15% in health, 13% in engineering, and 12% in education (OECD, 2021).

High number of students enrolled in education and teaching major in Kazakhstan is explained by the low passing grade and a large number of state-funded grants for educational programs. Student teachers often after completing their degree often do not go to work to schools, but rather opt for a different profession and continue their studies (Irsaliyev et al., 2019). Also, for some students in Kazakhstan, getting a degree is related to their social interactions rather than future employment (Jonbekova, 2019). Considering the statistics of the workforce 16% of the Kazakhstani people are in trade and commerce, 13.5% in agriculture, forestry, and fishery, 13% in Education (Bureau of National Statistics Kazakhstan [BoNS], 2020a). This 13% combines all people engaged in education, teachers in primary, secondary, higher education, managerial and leadership positions at all levels up to ministerial level.

Most teachers and student teachers choose this profession for altruistic reasons (Alexander et al., 1994; Azman, 2012; Watt et al., 2012). These reasons include contributing to society, educating children, feeling good for doing good. This explains the presence of most people in teaching. People who opt for teaching have a more significant altruistic sense and contribution to society (Kyriacou & Coulthard, 2000). Interestingly, in the same study people who do not choose to teach acknowledge the altruistic nature of the profession. When considering reasons and motivation to become a teacher one reason is never a decider. Altruistic reasons are dominant, but other reasons are also contributing to this career choice. Teaching is also attractive with its long vacation, shorter day, and secure status (Moran et al., 2001; Azman, 2012). Indeed, it is one of the few professions with a long vacation break in European countries, the UK, Russia, Kazakhstan (Department for Education, 2020; European Comission, 2020; Government of the Russian Federation, 2002; MoES, 2019). Often teaching is related to state-funded schools, meaning it is a secure and stable job. Another interesting factor for this career choice is the socio-economic situation in the teacher's country (Bastick,

2000). When considering the economic situation, in places with a high average income and high quality of life, such as Canada, the US, UK, Australia, teaching has prevailing intrinsic and altruistic motivation (Kyriacou & Coulthard, 2000; Moran et al., 2001; Watt et al., 2012). On the contrary, in countries with less economic wealth, such as Pakistan, Ghana, and South Africa, teaching is extrinsically motivated, such as a good and stable salary (Barrs, 2005; Hedges, 2002; Mwamwenda, 2010). Among Kazakhstani undergraduate and masters' students, intrinsic and altruistic reasons also prevail (Irsaliyev et al., 2019). Interestingly, an inspiring teacher was also high among the motivational factors. Thus, the Kazakhstani context shows its difference from the US, UK, Pakistan, and other countries listed above.

Teaching is sometimes considered a fallback option (Watt et al., 2017). When students consider career choice, their first option is what they want to do while teaching comes if they fail to get into the first option program. This leads to an issue with retention and indirectly affects the quality of teaching and teacher status. Irsaliyev et al. (2019) conducted a questionnaire among more than 700 fourth-year undergraduates and masters' students in Kazakhstan with a follow-up focus group and individual interviews. According to their findings among Kazakhstani undergraduate students, more than 20% considered teaching as a fallback study program. In a much earlier quantitative study, Watt & Richardson (2007) found that in the countries with more economic wealth, teaching as a fallback option has a little effect on career choice. This can be related to the still-developing status of the country. A qualitative study conducted by Thornton & Reid (2001) with 1611 English student teachers found that twice more men opt for teaching after having a negative experience in a different profession. There are various reasons, such as career fit, boredom, and absence of growth. Similar reasons were stated by teachers in Australia (Richardson & Watt, 2005). In addition to the previous reasons for opting for teaching, more time for their families and reconsidering

their identity was mentioned. There are retraining courses available in the UK and Australia (La Trobe University, 2021; Now Teach, 2021) that allow people with a non-teaching background to enter the profession. Recently a similar program was introduced in Kazakhstan (Minister of Education and Science of the Republic of Kazakhstan [MoES], 2020). The governments try to use all possible resources to get more teachers. There are more differences when considering teacher gender.

Gender Differences in Choosing a Teaching Career

There are different perceptions of men and women, however, some stereotypes are common. Men in Kazakhstan are considered to pursue career advancement and higher salaries (Iztayeva, 2014). Men in the US tend to have higher expectations in salary while having the same input levels as women (Heckert et al., 2002). These explain some men choose to teach for external motivation (Drudy et al., 2005). Teaching is not always a well-paid job. In some countries, the US, China, Russia, it is a lower-paid job (Gonzalez et al., 2015; Liu & Onwuegbuzie, 2012; Ziyatdinova, 2010). When considering a school, it lacks promotion opportunities. Teachers may opt for a head of a department (HoD), vice-principal, or principal only, some schools in Kazakhstan offer program coordinator or methodologist positions (Decree of the Government of the Republic of Kazakhstan No. 77, 2008). Often teachers have to stay in the same position for decades because a school has two or three vice principals, one principal, and a few HoDs. The lack of career advancement opportunities can discourage men from entering teaching (Drudy et al., 2005; Dickson & Le Roux, 2012). Among Kazakhstani teachers, more men considered teaching as a secondary or fallback option compared to women (Irsaliyev et al., 2019).

Women, in contrast to men, when pursuing teaching, often choose it because of intrinsic motivation (Azman, 2012; Heckert et al., 2002; Topkaya & Uztosun, 2012). Intrinsic

factor relates to a person's internal affiliation to the job or enjoyment of doing it. Besides, more women than men decide to become a teacher earlier in primary and secondary schools (Rojewski, 1996). This can be related to more women teacher role models and their influence on this career choice (Riccio, 1961). Although men and women both are affected by altruistic factors to opt for a teaching career, women are more affected by them (Drudy et al., 2005; Moran et al., 2001). More women teachers care about educating children, investing in them, and contributing to society (Glutsch & König, 2019; Moran et al., 2001). Women when considering career choices they look for compatibility with being a mother and parenthood (Azman, 2012; Heckert et al., 2002).

Benefits and challenges of Men in Teaching

Men in any field, as well as in education, get promoted faster and easier than women or what is called the "glass elevator" (Casini, 2016; Moreau et al., 2007; Turkmen & Eskin Bacaksiz, 2021). Men, as compared to women, usually do not take parental leave. Therefore, they can work longer and without breaks. While women can experience what is called a "glass ceiling" when they cannot get a promotion just because of their gender (Addi-Raccah & Ayalon, 2002). A good representation of these two experiences is the leadership positions' distribution. According to the Bureau of National Statistics Kazakhstan (BoNS, 2020c), only 40.4% of leadership positions in primary and secondary schools are occupied by women. This shows that the men, 20% of the total number, occupy 59.6% of the leadership positions. Women often care less about themselves and choose family-friendly positions while supporting men's promotion (Moreau et al., 2007; Adams & Funk, 2012). This emphasizes that gender role stereotypes are still present to some degree in the Kazakhstani community as well as in all other countries (Albrecht et al., 2003; Booysen & Nkomo, 2010; Kollmayer et al., 2016; Matthes et al., 2016).

Men also face different challenges when entering teaching. One of the challenges, found by interviewing 20 primary teachers in the UK, is the social prejudice that teaching is a feminine profession (Skelton, 2009). For that reason, men in teaching are also seen as less masculine, which is more pronounced among primary teachers (Cushman, 2005; Moreau et al., 2007; Skelton, 2012). Social influence is stronger when comes from friends and family in a more patriarchal community, such as UAE, although maybe non-influential at all in a more egalitarian community, as the US (Borchert, 2002; Dickson & Le Roux, 2012).

Another challenge is also a social prejudice about adult men and interaction with children (Thornton & Bricheno, 2006). Often, because of shocking abuse stories and incidents involving men and children, men teachers may experience social pressure. Some men are scared and apprehensive about teaching because of accusations from parents and society (Heikkilä & Hellman, 2016; King, 2004; Parr & Gosse, 2011).

Teacher Identity and Gender

Teacher gender is an important part of teacher identity. People identify themselves to a certain gender according to their biological sex (Drudy et al., 2005). That is especially pronounced in the Kazakhstani setup, where children reading textbooks learn that a man should be masculine, and a woman should be feminine (Durrani et al., 2022). This identity, masculine or feminine, affects the way people behave. Day et al. (2007) argue that identity consists of three dimensions: personal, professional, and situated. Gender plays a role in all three and while personal dimension is shaped at home it can indirectly influence career choice (Olsen, 2008). Although teachers try not to have gender-based classroom interactions, which is the situated dimension, they are gender influenced (Duffy et al., 2001). Gender starts affecting early in childhood (Vavrus, 2009), children adopt stereotypical opinions about gender (Taylor, 1996) and then it shapes adults. Some men may behave too masculinely, as is expected by the

environment. Extra masculinity can negatively affect the classroom, instilling this behaviour into boys (Roulston & Millis, 2000). Teacher gender also can influence leadership interactions via such phenomena as “glass ceiling” and “glass elevator”.

Teacher identity, as identity in general, is complex and multifaceted. Identity includes professional life, social interactions, and personal life, it can be stable or change or be in conflict (Varghese et al., 2005). This study is not going to research the relationship between identity and gender. Nonetheless, the complex intertwined context of it should be acknowledged and studied in the future.

Why Attract More Men in Teaching?

One of the strong reasons for calling more men into teaching is the performance gap between boys and girls. Boys’ underperformance or “boy problem” may seem to have a clear connection with the low number of men amongst teachers. Girls worldwide significantly outperform boys (Helbig, 2012), in Kazakhstan the situation is similar. According to PISA 2018, TIMSS 2015 and PIRLS 2016 girls outperform boys in all categories, reading literacy, science, mathematics (Irsaliyev et al., 2017; Mullis et al., 2017; OECD, 2019a). Yet the studies show that there is no relationship between teacher gender, student gender, and academic performance (Antecol et al., 2015; Burusic et al., 2011; Chudgar & Sankar, 2008; Holmlund & Sund, 2008). Meaning boys or girls’ performance are at the same level irrespectively of their teacher’s gender. There are also findings, from western, eastern and African contexts, that having a woman as a teacher benefits girls with no difference for boys (Dee, 2005; Gong et al., 2018; Lee et al., 2019; Warwick & Jatoi, 1994; Xu & Li, 2018).

Another reason is the motivational and role model feature of teacher gender. Despite teacher gender has no effect on boys’ performance, motivation can show a difference. However, boys show the same motivation in the classroom with men and women teachers

while girls had generally higher motivation in both cases (Marsh et al., 2008; Martin & Marsh, 2005). This shows that girls have benefited from having more women teachers, while boys are not benefiting from either case. Dee (2005) found that interactions between teachers and students are gender-based, especially it affects attitude. Gender-based interactions in the classroom may indirectly affect motivation and performance (Gong et al., 2018). A meta-analysis that was conducted by Jones and Dindia (2004) on 32 relevant studies also shows differences in interactions, emphasizing that boys have more negative interactions with teachers. Boys are often reported for misbehaving while girls tend to be more obedient (Howe, 1997). An experiment conducted in an Australian school with a single-sex classroom in years 6 and 7 (Martino et al., 2005) revealed that men teachers can help to decrease boys' misbehaviour and negative interactions. However, this study also raised questions about the quality of men teachers. Women teachers also may have gender-based interactions and influence on their students. A study from the US revealed that anxiety about exams that women teachers experienced transmitted to girls and affected their beliefs (Beilock et al., 2010).

Issues such as sexuality, masculinity, how to be a man, homophobic behaviour are all tangled if look deeper into the problem (Martino & Kehler, 2007). Although there seems to be no immediate effect on boys' academic performance and the academic gap, gender interactions and role models are still important features of education. More quality men in teaching may help to fight stereotypes of the feminine nature of the profession (Piburn et al., 2011). Kiselica et al. (2016) argue for a positive masculinity paradigm and provide many positive influence examples. The positive masculinity that these quality men teachers bear may help upbringing good men (Kiselica et al., 2016). McGrath and Sinclair (2013) surveyed 184 Australian year six students and 90 parents and found that school is the place where men

can support boys via being role models and helping them with social development. These students and parents saw men as a much-needed addition to their schools. Men can find ways to connect with boys, especially in secondary school, via similar hobbies or masculine team-building activities (Martino et al., 2005). A quantitative study from a similar educational context in Russia found that both students and teachers call for more men teachers, which is explained by positive masculine role models and fathering (Ryazantsev, 2018).

Dos and Donts in Policies

Concerns about the number of men in teaching are not new (Roulston & Millis, 2000). Western countries, North America, Australia, New Zealand, and the UK, tried to attract more men to primary and secondary education (Martino & Kehler, 2007). Strategies used included advertising, targeted pre-service training and setting a certain quota for male teachers (Carrington & Skelton, 2003; Cushman, 2005). However, as time shows, the numbers are still quite low (OECD, 2019b). In addition to low numbers of men teachers, men students tend to drop out more often than women (Moyles & Cavendish, 2001; Paura & Arhipova, 2014; Xenos et al., 2002). In Germany among STEM students the dropout rate is higher for women (Isphording & Qendrai, 2019). In the Kazakhstani context, the dropout issue is also present, less women dropout compared to men students (BoNS, 2019). These show that reactive strategies trying to get more men do not work, they may, in case of quotas, create a privilege.

Considering initiatives in Kazakhstan, the last few years' policies (MoES, 2019; MoES, 2008) aimed to increase teachers' salaries and the status have significantly improved the situation. The salary of teachers in Kazakhstan always considered being low, hence less attractive for men. Despite the low salaries, more men teachers are satisfied with their salary in Kazakhstan than women (Syzdykbayeva, 2019). The initiatives were executed to increase the total number of teachers, not aiming at a specific gender. The results of these initiatives are

still to be observed from a long-term perspective. A new initiative has increased the passing grade for state educational undergraduate programs and the state stipend for the students in these programs (Decree of the Government of the Republic of Kazakhstan. No. 58, No. 116, 2008). This way the government wants to increase the competition among school graduates, increase the quality of student teachers and the status of the profession. Which, in a long-term perspective can attract more men in teaching, unfortunately, the statistics are not available.

Chapter Summary

This chapter presents general career choice factors, specific to teaching factors and gender-based factors. When students choose a career, they look for personal affiliation and enjoyment, but in Kazakhstan, the passing grade and state funding are also important. There are differences when choosing teaching as a career among men and women. Women are more affected by intrinsic and altruistic factors, while men are affected by altruistic reasons but extrinsic reasons are also significant.

The chapter also elaborates on the men already in teaching, reasons to attract more men and experiences in such policies. Men have benefits and drawbacks in choosing a teaching career. Men are needed in teaching to provide role models for students. However, there is a challenge of providing high quality teaching and positive role models. Some policies and strategies do not work concerning attracting men into education, aggressive and situational strategies usually fail. Long term policies may positively affect the number of men. This study will provide necessary data collected from men who are student teachers to fill the gap in understanding their career choice in Kazakhstan. In the next chapter, I will describe the methodology used for this research.

Chapter 3: Methodology

This study explored why men choose to be a teacher using a quantitative approach to get a broad image of the problem. The research questions have exploratory nature, therefore, required extensive data gathering. This chapter provides reasoning for the quantitative method approach. Further in this chapter, the study sample selection is explained. Data collection and analysis instruments and steps are described. Ethical considerations are discussed at the end of this chapter.

Research Design

Most of the studies conducted in the career choice and related gender studies are based on surveys and questionnaires. Thus, the same approach will benefit from the credibility of the tested methods used in the literature. The survey addressed two research questions. It is based on the Watt and Richardson (2007) Factors Influencing Teaching (FIT) choice scale (see www.fitchoice.org). The FIT choice scale has been used in other studies as well to study pre-service teachers in China, Turkey and the Netherlands (Fokkens-Bruinsma & Canrinus, 2012; Lin et al., 2012; Topkaya & Uztosun, 2012). Professor Helen Watt and Professor Paul Richardson permitted me to replicate the FIT choice scale and provided supporting documents, such as the question items and research papers conducted using the FIT choice scale. This instrument has been tested multiple times and developed to cover the multifaceted concept of career choice.

Participants Sample

The survey collected data from student teachers. Considering the size of the men student teachers in Kazakhstan, 34 225 teachers (BoNS, 2019), and a 95% confidence level in the data collected, the sample size of 562 participants was copious. The survey was open from November 3, 2021 until the deadline stated in the recruitment letter, December 15, 2021. The

main reason for choosing student teachers is that the survey used is based on the FIT choice scale which was developed for undergraduate and graduate student teachers. The choice scale pursues understanding motivation for teaching career choice and beliefs about teaching. It does not put teaching itself in the centre, rather the career choice. Hence, student teachers are the best candidates to explain their career choice, satisfaction with their choice and beliefs about teaching that they have.

Table 1

The list of the Pedagogical Universities

#	University	Oblast/city
1	Abai Kazakh National Pedagogical University	Almaty
2	South Kazakhstan State Pedagogical University	Shymkent
3	Eurasian National University	Nur-Sultan
4	K. Zhubanov Aktobe Regional University	Aktobe Oblast
5	Atyrau University	Atyrau Oblast
6	Amanzholov University	East Kazakhstan Oblast
7	Zhetysu University	Almaty Oblast
8	Makhambet Utemisov West Kazakhstan University	West Kazakhstan Oblast
9	Kozybayev University	North Kazakhstan Oblast
10	Pavlodar Pedagogical University	Pavlodar Oblast
11	A. Baitursynov Kostanay Regional University	Kostanay Oblast
12	Sh. Ualikhanov Kokshetau University	Akmola Oblast
13	Karaganda Buketov University	Karaganda Oblast
14	Dulaty University	Zhambyl Oblast
15	Akhmet Yassawi University	Turkistan Oblast
16	Yessenov University	Mangystau Oblast
17	Qorqyt Ata University	Kyzylorda Oblast

To reach student teachers a recruitment letter (see Appendix A) was sent to gatekeepers, 17 universities that offer educational courses. One university in each of the 14 oblasts (state) and three major cities, namely Almaty, Shymkent and Nur-Sultan. The names of the universities and regions are given in Table 1. Abai Kazakh National Pedagogical University refused to support and distribute the letter; therefore, it was replaced by Al-Farabi

Kazakh National University. Recruitment letters sent by email were accompanied by official letters. A formal request letter (see Appendix B) was addressing a university's president and asked for permission and support to conduct this study. Two phone calls, one week apart, were conducted to confirm that the universities received the letters and distributed the survey link.

Data Collection

The FIT choice scale is a set of questions that focuses on motivation and beliefs. It was modified by adding demographics questions at the beginning and eight questions on how to attract more men into teaching at the end of the survey. Although the demographics part contained questions requiring identifiable pieces of information it was necessary for the analysis that was conducted after. The last part was added not only to consider the students' opinions but also to analyse their alignment with the findings.

The survey was conducted using purposeful sampling via the Qualtrics website. The survey was anonymous and did not record IP addresses, names, locations and any contact information. Informed consent was required as it was collecting identifiable information and presented before the participants were able to start the survey. The survey was provided in two languages Kazakh and Russian and had two parts. The structure and questions of the survey are given in Appendix C.

Before starting the survey, participants were required to choose the language of the survey and agree or disagree with the informed consent form to proceed further. The participants who disagreed with the informed consent form ended the survey immediately, while those who agreed proceeded to part 1.

Part 1 included demographics. Demographics include age, rural or urban school, medium language, university and study year. In addition, three questions related to the career choice were included. The questions are whether teaching was their 1st career choice, the time

when they decided to become teachers, whether they will stay in the profession after graduation. The demographics

Part 2 covered both research questions. The data needed to answer "Why do men choose to become teachers?" and "what beliefs do men have about teaching?" was collected a broad spectrum using the FIT choice scale. Participants were asked to label to what degree a certain factor influenced their career choice. This part also included seven questions on the participants' opinions about getting more men in education and one open-ended question to express other factors the survey did not consider. All the questions in this part are scale-type questions, except the open-ended one.

Data Analysis

Quantitative data collected from the Qualtrics website was analysed via R studio. The mean and standard deviation was calculated for all numeric responses. A Chi-square test was used to identify whether the living area, medium language, and major are associated with teaching being the first career choice, staying in the profession after graduation and the time of the decision to become a teacher are associated (Franke et al., 2011). A follow-up correlation matrix was plotted to show the association between the factors. The effect size for the chi-square tests was calculated using Cramer's V. Multiple separate MANOVAs were conducted to compare majors, living areas, and medium languages' effects on motivation and perception about teaching. The Bonferroni correction was used as a post-hoc test for the MANOVAs. The effect size was calculated using eta squared, η^2. Reliability was tested by calculating Cronbach's α, to ensure correct assumptions (Frey & Moshen, 2018).

Ethical Issues

The survey was conducted online and there is no need to get permission to a particular research site. However, good communication with the Universities' administration offices had

to be established to grant their support in sharing the survey link. The survey did require identifiable pieces of information therefore the first page of the survey provided information about the study, purpose, and how the data collected will be used. Participants were presented the informed consent form and opted to agree with the statement and tick “agree to provide information” or disagree and not participate. The survey followed the NUGSE IRB guidelines. The informed consent provided a full description of the research purpose, all the collected data will be kept for two years after the thesis submission.

Chapter Summary

This chapter gave a comprehensive description of the research design, data collecting, and analysis tools. It elaborated on the sample of the study, men who are taking teaching courses, and sampling techniques used in the survey. Statistical analysis techniques are listed, and the purpose is explained. The main analysis was MANOVA for the FIT choice scale with supporting chi-square tests for the demographics and career choice items part. Ethical issues are considered, and corresponding measures are conducted. The next chapter will present some of the raw data collected from the survey and the results of the statistical analysis techniques.

Chapter 4. Analysis and Findings

This chapter will present some of the raw data from the survey and the results of the statistical analysis. The survey comprised two parts: demographics and the FIT choice scale. The statistical analysis of the FIT choice scale includes Chi-square tests and MANOVAs. They were conducted to answer the two research questions: Why do men choose to become teachers? What beliefs do men have about teaching?

To understand men's motivation to enter a teaching career 17 universities across Kazakhstan were contacted. The modified FIT choice scale survey was distributed among men enrolled in teaching programs. The survey included a total of 733 participants. However, this number includes everyone who used the survey link. Table 2 represents the distribution of the participants, revealing that there were 562 participants who agreed and partially or fully completed the form.

Table 2

Survey distribution

Survey language	Kazakh language	Russian language
Agreed to the consent form	365	197
Disagreed to the consent form	8	6
Neither agreed nor disagreed	97	60
Fully answered	43	18
Partially answered	322	179
Total responses	470	265

Note. Neither agreed nor disagreed means that participants opened the link and did nothing.

Cronbach's alpha for the whole survey showed a high reliability at 0.991. Each of the motivational factors and beliefs were also tested. Most of these Cronbach's alphas are acceptable or good with ability at 0.803, intrinsic at 0.795, job security at 0.75, family at 0.746, shape future at 0.821, equity at 0.810, contribution at 0.743, work with children at 0.864, and prior teaching and learning at 0.787. The fallback, social influence and job transfer

items showed questionable alphas at 0.663, 0.695 and 0.591 correspondingly. Beliefs also showed a high consistency with expertise at 0.748, difficulty at 0.735, status at 0.856, salary at 0.877 and satisfaction at 0.86. A low reliability was observed in social dissuasion at 0.578. The only item that had poor consistency is social dissuasion at 0.578. The last part of the survey asking for ideas on how to attract more men into teaching had an acceptable alpha coefficient of 0.793.

Demographics of the student teachers show that the mean age was 20.5 (SD 4.9). Rural and urban representation was approximately equal, with a mean of 1.39 (SD 0.49). Student teachers were from different study years (mean 2.3, SD 1.15). However, the universities' distribution showed that some universities had more students participating than others. When I contacted the universities via phone call regarding the participation of their students some of them [universities] proposed that low participation from their students was a result of the voluntary nature of the study. Another possible reason is the low number of men among student teachers in general.

Table 3 shows the student teachers' demographics by university, medium language and living area. Some of the universities offer courses in English; therefore, some students may have English as their medium language. A significant number of the student teachers was from K. Zhubanov Aktobe Regional University. Some universities showed a zero-participation rate. The survey had a voluntary nature; hence some students did not specify their universities, medium languages and living areas.

Question item 3 asked students to label their study major. There is a Bachelor of education degree in Kazakhstan, and students must choose a certain qualification when applying for an undergraduate program.

Table 3

Demographics of the survey

#	University	Medium language distribution			Living area distribution		Total
		Kaz	Rus	Eng	Rural	Urban	
1	Abai Kazakh National Pedagogical University	0	0	0	0	0	0
2	South Kazakhstan State Pedagogical University	0	2	0	2	0	2
3	Eurasian National University	14	6	2	6	16	22
4	K. Zhubanov Aktobe Regional University	271	15	5	168	123	291
5	Atyrau University	14	1	0	10	5	15
6	Amanzholov University	0	1	0	0	1	1
7	Zhetysu University	0	0	1	0	1	1
8	Makhambet Utemisov West Kazakhstan University	0	0	0	0	0	0
9	Kozybayev University	23	50	0	58	15	73
10	Pavlodar Pedagogical University	0	0	1	1	0	1
11	A. Baitursynov Kostanay Regional University	0	0	0	0	0	0
12	Sh. Ualikhanov Kokshetau University	38	10	3	35	16	51
13	Karaganda Buketov University	18	3	0	15	6	21
14	Dulaty University	17	5	0	11	11	22
15	Akhmet Yassawi University	0	0	0	0	0	0
16	Yessenov University	0	0	0	0	0	0
17	Qorqyt Ata University	0	0	0	0	0	0
18	Al Farabi Kazakh National University	0	0	0	0	0	0
19	Not stated	Not specified					62

Table 4 shows the distribution of the student teachers by major. Initial major options were primary, science, math, languages, humanities or PE teacher, with an option “other”. After extracting the results of the survey, two further majors were deducted “non-subject” and “non-teaching”. The “non-subject” category includes SEN teachers, *vospitatels* (educators), educational psychologists and speech therapists. *Vospitatel* and kindergarten educators are the

same, however, in Kazakhstan a *vospitatel* can be a person that looks after pupils in a dormitory or generally at school. The "non-teaching" category was included because some of the respondents studied in a non-teaching program with a non-teaching major. Language teachers included Kazakh, Russian and English language teachers.

Table 4

Student teachers distribution by major

Major	Primary	Science	Math	Languages	Humanities	PE	Non subject
Number of student teachers	58	162	51	88	45	25	22

Analysis of Demographics and Career Choice Items

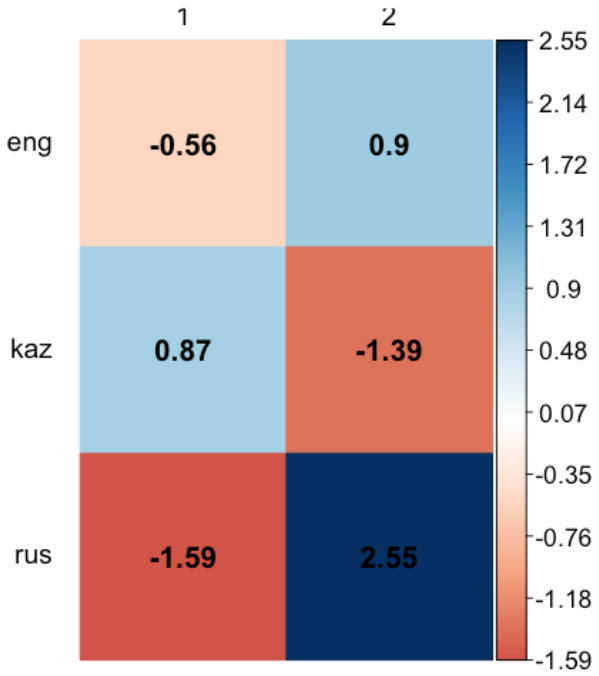
The first part of the survey included demographic questions, such as living area, instruction language, and study major. This part also included questions regarding career choice, such as was teaching their first-choice career, will they stay in education after graduation. Analysis of the first part of the survey, demographics and career choice items, showed that for many (361) of the student teachers teaching was their first career choice. The mean is 1.28 (N=502, SD 0.45), where 1 is "yes, it was my first career choice" and 2 is "no, it was not". Almost all the respondents (466) said that they will stay in the profession after graduation, with a mean of 1.07 (N=503, SD 0.26). 1 is "yes, I will work as a teacher" and 2 is "no, I will not work as a teacher".

Chi-square tests were used to identify associations between two variables, with a follow-up Cramer's V to calculate the effect size. Association between instruction medium and whether the student teachers chose to teach as their first-choice career showed statistical significance. The correlation plot for the residuals is shown in Figure 1. Although this

association has a weak effect size, a slight positive association can be seen between Kazakh medium language and choosing teaching as the priority career. While Russian medium language has a strong positive association with not choosing teaching as their priority career. Students receiving English language instructions have similar, but weaker associations to the Russian medium students.

Figure 1

Instruction medium and teaching as student teachers' first choice career correlation



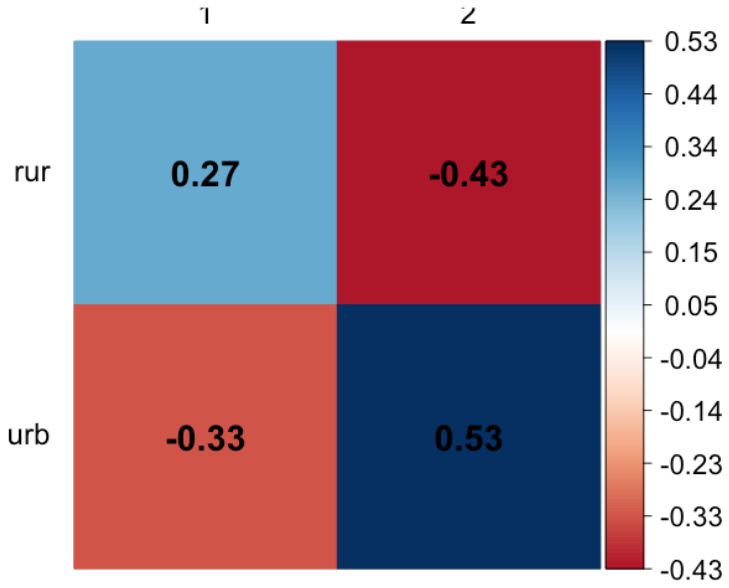
Note. $X^2(2) = 12.859$, $p = 0.001614$, effect size = 0.1602062

The association between living area and teaching as the first-choice career did not show a statistical significance; hence, the effect size is also negligible. However, an interesting association is seen via the correlation plot. The correlation plot of the residuals for these two variables is shown in Figure 2. Rural student teachers had a positive association with choosing teaching as their first-choice career, while urban respondents had a strong association with not choosing teaching as their priority career.

The association between study major and teaching as the 1st choice career showed a statistical significance with a large effect size. The correlation plot of the residuals is shown in Figure 3. In this test, student teachers in humanities and languages majors have a strong positive association with not choosing teaching as the first-choice career.

Figure 2

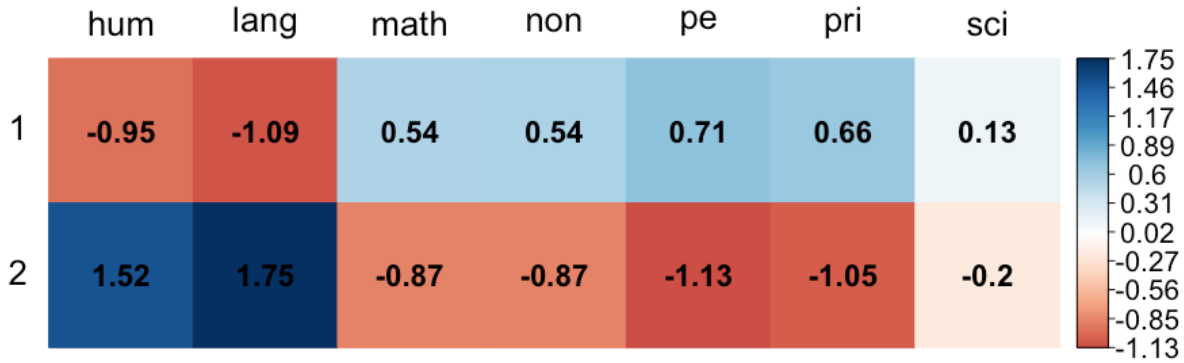
The living area and teaching as student teachers' first choice career correlation



Note. $X^2(1) = 0.49271$, $p = 0.4827$, effect size 0.0313289

Figure 3

Study major and teaching as student teachers' first-choice career correlation



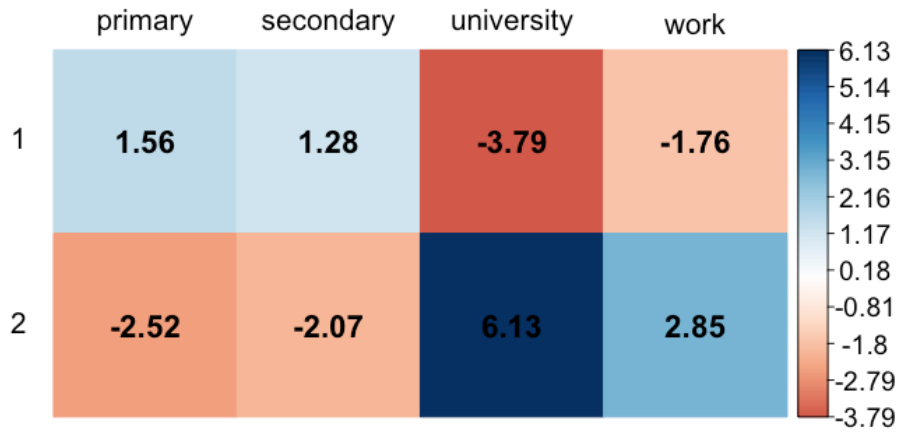
Note. $X^2(7) = 14.713$, $p = 0.03985$, effect size 0.1792352

Physical education, primary teaching, math, and non-subject majors have a positive association with teaching as the first-choice career. As expected, non-teaching major respondents are not associated with choosing teaching as their first-choice career. Science student teachers showed a weak association.

Another question of the demographics and career choice items was “When did you decide to become a teacher?”, with four options, namely “in primary”, “in secondary”, “at university”, “at work”. Most of the respondents (354) from this study decided to become teachers in secondary school, which was a mean of 2.06 (N=479, SD 0.57).

Figure 4

When decided to become a teacher and teaching as student teachers’ first-choice career correlation



Note. $X^2(3) = 77.803$, $p << 0.001$, effect size = 0.40

Associations between when student teachers decided to become teachers and both instruction language and living area showed no statistical significance and weak effect sizes. When student teachers decided to become teachers and instruction medium showed the following results: $X^2(6) = 9.6528$; $p = 0.1401$; effect size = 0.1004843. When student teachers

decided to become teachers and the living area chi-square test showed the following results: $X^2(3) = 5.1749$; $p = 0.1594$; effect size 0.1039406.

The chi-square test for the time when student teachers decided to become teachers and teaching as their first career choice showed a statistically significant association with a large effect size. A positive association was found between deciding to become a teacher in primary and secondary and teaching as 1st choice career. The decision to become a teacher while at university and work were positively associated with not choosing teaching as first-choice career.

First Research Question: Why Do Men Choose to Become Teachers?

A MANOVA was conducted to find statistically significant effects of the study majors on the motivational factors to choose a teaching career. The question items were grouped into 11 motivational factors according to Richardson and Watt's (2006) framework (see appendix D for the full factor and question items distribution). The data in this chapter and p-values are given after the Bonferroni correction (see appendix E for the raw p values and p values after the correction).

Table 5 shows mean values for motivational factors calculated for the study majors. Each motivational factor was shortened for the sake of convenience. High value in the factor of ability means that student teachers were motivated by their abilities to be a teacher. Factor intrinsic refers to internal motivation or intrinsic factors to be a teacher. The fallback factor shows whether the student teachers were motivated to choose teaching as a fallback option. The security factor is linked to job security if the student teachers were motivated by the stability and security of the profession. The family factor shows the motivation by the amount of free time that the teaching career can offer to spend with families and generally free time. The job transferability factor means that student teachers were motivated by the ability to

relocate because of their teaching careers. The shape the future shows whether student teachers were motivated by the prospect of being able to influence the next generation. The social equity factor refers to being motivated by the ability to enhance social equity. The social contribution is generally about being motivated by giving back to society. The working with children/adolescents factor is linked to being motivated by work with pupils. Prior teaching and learning (T&L) show motivation by a positive prior learning experience, exemplar teachers, and role models. The social influences factor is about how student teachers were motivated by parents and friends to become teachers.

Choosing teaching as a fallback career scored the lowest mean. Among the higher contributing motivational factors are ability, intrinsic, social contribution, shaping future, working with children and adolescents, and prior teaching and learning experience. Student teachers with primary and non-subject education majors rated higher on these factors than students of other majors. Students majoring in physical education showed a lower mean in all factors. Factors that show a statistically significant difference between the majors effect sizes between small and medium with the prior teaching and learning factor of $F(7,334)=2.9641$, $p < 0.001$, $\eta_p^2=0.06$ and a medium effect size. Although shaping the future was a high-rated motivational factor majors did not show any statistically significant effect on its variance. Ability to teach was a statistically significant factor of $F(7,333)=2.1044$, $p= 0.046674$, $\eta_p^2=0.04$, along with intrinsic motivation of $F(7,380)= 2.5096$, $p= 0.0034974$, $\eta_p^2=0.04$, social contribution of $F(7,334)=2.0896$, $p= 0.050994$, $\eta_p^2=0.04$, and work with children/adolescents of $F(7,336)=2.128$, $p= 0.04041$, $\eta_p^2=0.04$. These are factors with high means among all majors. Job security was another high rated motivational factor but did not show a statistically significant variance.

Table 5

Motivation factors for choosing a teaching career for different majors

Motivation factor	Primary student teachers	Science student teachers	Math student teachers	Languages student teachers	Humanities student teachers	PE student teachers	Non subject student teachers
Ability to teach*	5,91	5,33	5,25	5,23	5,09	4,87	5,92
Intrinsic**	5,90	5,34	5,34	4,95	4,92	4,55	6,14
Fallback	3,57	3,61	2,78	3,12	3,42	3,69	3,87
Job security	6,04	5,40	5,25	5,21	5,15	4,63	5,87
Time for family**	4,50	4,28	3,78	4,09	4,10	3,86	5,08
Job transferability	5,15	4,90	4,49	4,82	4,69	4,21	5,03
Shape future	6,09	5,63	5,52	5,59	5,41	4,94	6,29
Social equity	5,15	4,87	4,70	4,50	4,13	4,69	5,37
Social contribution*	5,97	5,49	5,48	5,22	5,21	4,75	6,12
Work with children/adolescents*	5,84	5,14	5,03	4,69	4,65	4,65	5,97
Prior T&L***	5,82	5,49	5,70	4,96	5,04	4,93	5,78
Social influence	4,72	4,34	4,04	3,60	4,25	3,28	4,86

Note. * denotes significant difference ($p<0.05$), ** $p<0.01$, *** $p<0.001$.

Social equity and job transferability had moderate means and their variance among majors was not statistically significant. Time for family, F(7,332)=2.0133, p= 0.00480, η_p^2=0.04, social influence, and fallback showed a lower end means among all majors. Specifically, math teachers had lower means in time for family and fallback, while language teachers had lower means in social influence.

Another MANOVA was conducted for the three instruction languages, Kazakh, Russian and English languages to identify statistically significant variations in the motivational factors. That is, whether the language that student teachers were studying influenced their motivation and motivational factors. Table 6 shows mean values for motivational factors calculated for these three languages.

Table 6

Motivation factors for choosing a teaching career for different instruction mediums

Motivation factor	Kazakh	Russian	English
Ability to teacher	5,43	5,02	5,53
Intrinsic	5,40	4,80	5,08
Fallback**	3,55	3,04	2,56
Job security	5,50	4,98	5,28
Time for family**	4,29	4,06	3,68
Job transferability	4,90	4,57	4,67
Shape future*	5,79	5,04	5,54
Social equity	4,89	4,17	4,92
Social contribution***	5,62	4,93	5,47
Work with children/adolescents*	5,23	4,54	4,94
Prior T&L**	5,52	4,76	5,69
Social influence***	4,38	3,26	4,22

Note. * denotes significant difference (p<0.05), ** p<0.01, *** p<0.001.

All the factors show difference in all three languages to some degree. The majors analysis fallback, F(2,371)= 4.5649, p = 0.0026928, η_p^2=0.04, and social influence, F(2,373)=

6.4578, p << 0.001, η_p^2=0.05, showed low means among all three languages. Shaping future, F(2,370)= 3.8283, p = 0.016389, η_p^2=0.03, and social contribution, F(2,370)= 6.5025, p << 0.001, η_p^2=0.05, still scored the highest mean.

The student teachers studying in Russian generally responded lower for all motivational factors. For student teachers with the Kazakh as the language of instructions, social contribution and shaping future were the highest means, while student teachers with the Russian instruction medium had ability and shaping future as the highest means. The English medium students had the highest mean in the prior teaching and learning factor.

Time for family was also among the low mean factors, F(2,370)= 3.6444, p = 0.00166554, η_p^2=0.05, with a small difference between the Kazakh and Russian language medium. Students with Kazakh as the language of instructions rated prior teaching and learning higher than the Russian medium students, F(2,371)= 4.1607, p = 0.0072306, η_p^2=0.03. Work with children/adolescents showed a statistical significance F(2,371)= 3.6952, p = 0.02268, η_p^2=0.03.

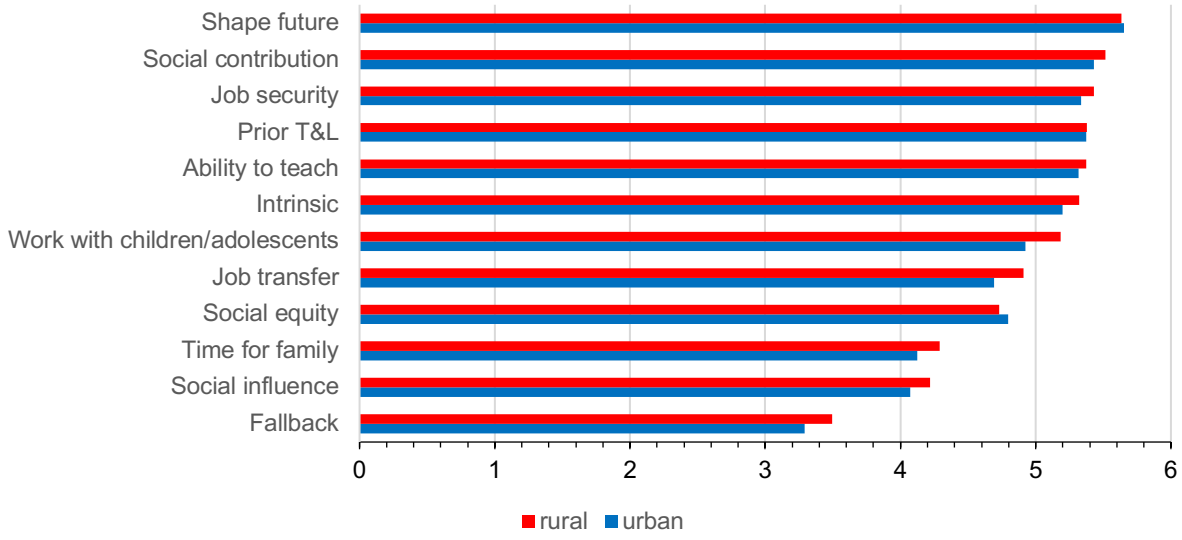
A MANOVA for living area and motivation relationship revealed no statistical significance in any of the factors. This test was conducted to identify the effect of living area (rural or urban) on the motivational factors. A histogram was used to represent this data with a colour blind friendly palette. The histogram is a more comprehendible way to understand the means and data. In the histogram shown in Figure 4, there are almost no differences between rural and urban student teachers' motivations.

As in the two previous MANOVAs fallback was the lowest mean factor, with time for family and social influence also having low means. The shape future and social contribution

factors showed the higher means, with other motivational factors scoring similarly. The lowest means were slightly lower for the urban student teachers.

Figure 4

Motivation factors for rural and urban student teachers



Second Research Question: What Beliefs Do Men Have About Teaching?

A similar set of MANOVAs was conducted for beliefs about a teaching career. These question items were also grouped to represent six beliefs according to Watt and Richardson's (2006) framework (see appendix D for the full beliefs and question items distribution).

Expertise is a belief in the high levels of expert knowledge and skills that are required for this career path. Difficulty generally answers the question "is teaching hard or demanding work?" Social status expresses beliefs about the high status of the teaching profession. Salary is a belief about high salaries. Social dissuasion shows whether there was a negative social impact or experience regarding teaching career choice. Satisfaction with choice is about how satisfied student teachers are with their teaching career choice.

Table 7

Beliefs about teaching careers for different majors

Beliefs	Primary student teachers	Science student teachers	Math student teachers	Languages student teachers	Humanities student teachers	PE student teachers	Non subject student teachers
Expertise	5,96	5,69	5,50	5,61	5,45	4,91	5,87
Difficulty **	5,79	5,51	5,49	6,07	5,52	4,52	5,89
Social status *	5,56	5,38	4,99	5,21	5,17	5,01	5,98
Salary	5,27	5,25	4,62	4,56	4,73	4,78	5,50
Social dissuasion	3,74	4,39	3,90	3,77	3,91	3,80	3,59
Satisfaction with choice	5,64	5,52	5,59	5,17	5,17	5,39	5,79

Note. * denotes significant difference ($p<0.05$), ** $p<0.01$, *** $p<0.00$

Table 8

Beliefs about teaching careers for different majors

Beliefs	Kazakh	Russian	English
Expertise ***	5,69	5,56	4,91
Difficulty	5,62	5,78	5,12
Social status	5,46	4,94	5,03
Salary	5,04	4,68	5,00
Social dissuasion	4,10	3,78	4,09
Satisfaction with choice	5,54	5,00	5,27

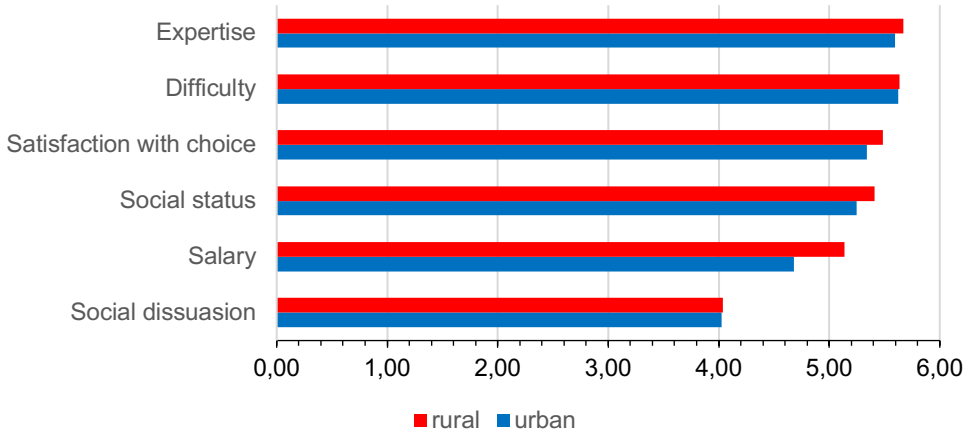
Note. * denotes significant difference ($p<0.05$), ** $p<0.01$, *** $p<0.001$

Table 7 shows the mean values of the responses in the beliefs section by major. The MANOVA was conducted to identify the effects of study major on the six beliefs about teaching. Most of the beliefs showed high mean, except social dissuasion. Belief about salary is also slightly lower than other beliefs, especially with prospective language teachers. Prospective language teachers have the highest mean in difficulty with other major students also showing high means, F(7,333)= 2.4292, p = 0.0061092, η_p^2=0.05. Social status also showed a statistical significance, F(7,328)= 1.8181, p = 0.045252, η_p^2=0.04.

A MANOVA was also conducted for variation between the six beliefs and instruction languages. The difference in beliefs about teaching career between the three-instruction media showed only one significant difference in expertise, F(2,367)= 5.2184, p = <0.001, η_p^2=0.04. The mean values are given in Table 8. Similar to the previous analysis, social dissuasion scored the lowest with the low salary belief mean.

Figure 5

Beliefs about teaching careers for rural and urban student teachers



A MANOVA for the student teachers living in rural and urban areas did not show a statistically significant difference in their beliefs. There is almost no difference between the

two areas regarding beliefs. The mean values for the beliefs are given in Figure 5. Still, social dissuasion had the lowest mean. A significant difference between the rural and urban student teachers is in the salary belief, where urban student teachers rate this belief lower than rural student teachers.

How to Attract More Men into Education

In the last section of the survey, the student teachers were asked for their ideas on ways to attract more men into the teaching profession. There were seven scale questions and one open-ended question. The mean values of the last seven questions on how to attract men into teaching were calculated. “Men having more privilege” had the lowest mean at 4.41, while “increase in salary” and “increase in status” had the highest mean at 5.86 for both items.

The open-ended question was designed for the student teachers to express their opinion on how to attract more men into teaching. 18 different topics emerged. “Increase in salary” was mentioned most often, with 18 out of 48 suggestions, corresponding to the mean values. A language teacher’s thoughts on the salary issue:

> Does not matter what gender is a specialist. Specialist needs stable, high, and honest earnings. Not just to cover the food needs, but relatively fast save for a real estate, car, children’s education, yearly vacation abroad etc.

One more specific opinion stated that there is a need for a salary increase for teachers in urban areas. Student teachers also mentioned that there is a need for a positive learning experience. Exemplar teachers can not only can get students interested in teaching but also can provide a exemplar role model, regardless of gender. Another often mentioned factor, 5 of 48, is counselling work. Student teachers recommend better counselling work at schools, which also had a high mean of 5.53. A student teacher studying social pedagogy and tutoring expressed his ideas regarding the counselling and gender prejudice:

> Teaching is not related to gender or sex. I think these days many people do not think so, many boys, men think that teaching is a feminine job. In my opinion in order to make teaching more attractive for men, to increase their interest, a lot of work must be done at school. Teaching is not a gender bounded profession. This needs to be explained to boys from a young age.

Student teachers expressed that there is a need to advertise the teaching career, explain that it is not a gender-specific profession, and explain its benefits. In addition, teachers should also be engaging in counselling work daily in the classroom. Some other ways to attract more men were noted as increasing career advancement opportunities, decreasing teaching hours, competition, better working conditions, freeing teachers from the army, less paperwork, attracting capable students, eliminate prejudice, more grants, higher status, and decreasing the retirement age. One of the student teachers expressed the idea that there is no need to have more men in education. As the MANOVAs and chi-square test showed there is no one simple answer to the research questions posed. Student teachers had different opinions on ways to attract men into teaching; however, almost all of them agreed on the existing problem.

Chapter Summary

This chapter presented the demographics of the survey with comprehensive distribution by university, instructions medium, living area, and study major. Results of the chi-square tests of the demographics and career choice items part of the survey showed statistical significance. The instruction language was significant in choosing a teaching career as the first-choice career as well as the study major. Significant and important differences were emphasised and described. Mean values for the FIT choice scale are calculated and results of multiple MANOVAs are reported. Both motivational factors and beliefs had significant variations with study majors and instruction languages. In the next chapter, the findings

presented in this chapter will be discussed. The results and numbers will be interpreted, and possible explanations provided. Connections with existing literature will be stated.

Chapter 5. Discussion

The FIT choice scale was used for this research to understand men's motivation to enter a teaching career in Kazakhstan. The previous, findings chapter, showed numerical and graphical data derived from the analysis of responses to the survey. In this chapter demographics, the FIT choice motivation and beliefs findings, and how to get more men into teaching will be discussed.

Results of the demographics analysis show that the data taken from the statistical analysis and interpretation should be considered conscientiously. Respondents from some parts of the country are not presented, while some, K. Zhubanov Aktobe University and Kozybayev University prevail among the respondents. Language distribution had more respondents in the Kazakh language and with the Kazakh instruction medium, however, considering the population of the country it is reasonable.

Although many of the student teachers chose to teach as their priority career, 28.1% of them see this option as a fallback career. This strongly correlates with Irsaliyev et al.'s (2019) findings stating that 27.4% of men saw teaching as a fallback option. According to the findings 93% of the student teachers will stay in education after graduation. This is a positive and promising result, meaning that most of the student teachers will retain, at least for some time in teaching. Some quantitative and mixed-method studies suggest that about 60% of teachers stay in the profession at least for a few years (Geiger & Pivovarova, 2018; Heineke et al., 2014; Liu & Onwuegbuzie, 2012). The question posed in the Irsaliyev et al.'s (2019) study has more options and therefore only results in 22% of participants planning to work in schools. Options with a clear non-teaching, non-educational nature comprise 19%.

The chi-square test for instruction medium and teaching as the first choice career gave a weak effect size, however, it has shown interesting associations. Kazakh language medium

students are positively associated with teaching their first choice career, while Russian language medium students have a strong negative association. This difference can be due to government stimulations. In 2020, the Ministry of education and science decided to award grants regardless of the instruction language, but before this change, state grants had Kazakh and Russian language distribution. Generally, the ministry gave more state grants to Kazakh language medium students (MoES, 2019), hence, there were more Kazakh instruction language students, and they were more motivated as the number of grants was higher. Some other secondary factors also may explain this difference, such as culture, family, teaching, and learning experiences. It is harder to draw connections based on one question item and two-factor levels, these will be discussed in MANOVAs results.

The chi-square test for major and teaching as the first-choice career gave a large effect size, it also gave controversial associations. Primary, physical education, and non-subject student teachers showed positive correlations as expected. These majors require closer contact with children of different ages and they focus more on upbringing. Skelton (2009) and Cushman (2006) in their qualitative studies concluded that primary teachers, despite their gender, are mainly motivated by their love for children and teaching. Student teachers majoring in languages are less associated with choosing teaching as their priority career. This is possible because these majors allow working as translators (Irsaliyev et al., 2019). However, humanities major had the same association as languages. This as well as the languages major can be due to a fallback career path. Business, international relations, management, economics, finances, and the law require the same majors as humanities teacher programs at the unified national testing system in Kazakhstan (Univision.kz, 2018). A similar quantitative study (Glutsch & König, 2019) found that affiliation with the humanities major showed lower

pedagogical motivation than with other majors, suggesting that it was not their priority career either.

The living area and teaching as the first-choice career did not show a statistical significance, although rural and urban student teachers had different results. The positive association of rural students with teaching as the first-choice career and the negative association of their urban counterparts can be due to the role model they see. Rural areas of Kazakhstan often have limited workplaces. While most of the schools in Kazakhstan 5 262 are rural, 70.7%, with 2 178 urban schools (BoNS, 2020b), they also offer jobs in rural areas with over 1.1 million workforces, it is easy to see the dominance of the teaching profession in the rural area (Workforce Development Centre, 2021). Kazakhstani villages and small towns usually have government-funded institutions, such as hospitals and schools. Some rural areas have private businesses, either related to agriculture or trade. In rural areas 71.2% of employment falls into teaching with 21.2% in healthcare and the rest 7.6% in culture, sports, social welfare, and agro-industry (Nurbai, 2019). Rural students have fewer role models and professions to see. Rural areas lose significantly compared to urban areas in the diversity of careers and professions. Pupils in those areas have a higher chance of seeing teachers outside their jobs at school. Urban areas have more variety in jobs and employment opportunities. Hence, pupils from urban areas often see the teacher role model only at school.

The findings of the time when students decide to become teachers suggest that secondary school is the most influential period for choosing a teaching career. According to Fox's (1961) study, men decide to become teachers later than women, with the majority deciding in college. However, a newer quantitative study by Faulstich-Wieland et al. (2010, as cited in Keck Frei et al., 2017, p. 537) stated that more students, at 45%, decided to become teachers in high school. Additional chi-square test between this question item and teaching as

the first-choice career showed a meaningful result. Deciding to become a teacher while in primary and secondary leads to becoming a teacher, as it was their choice from the beginning. While those student teachers who decided to become teachers later at university or work probably switched or saw it as a fallback option. Some students who alter or simply do not want to become teachers might be influenced by the assumption of the feminine nature of teaching, especially among primary teachers (Cushman, 2005; Moreau et al., 2007; Skelton, 2012).

First Research Question: Why Do Men Choose to Become Teachers?

The MANOVA conducted for motivational factors has shown many statistically significant differences in the 11 majors, instruction languages, and the living area. Factors job security, shape future, and social contribution were rated higher among majors, with fallback and social influence on the lower end. Similar results were among the three instruction languages. The living area did not show statistically significant variance but showed a similar trend in the motivational factors.

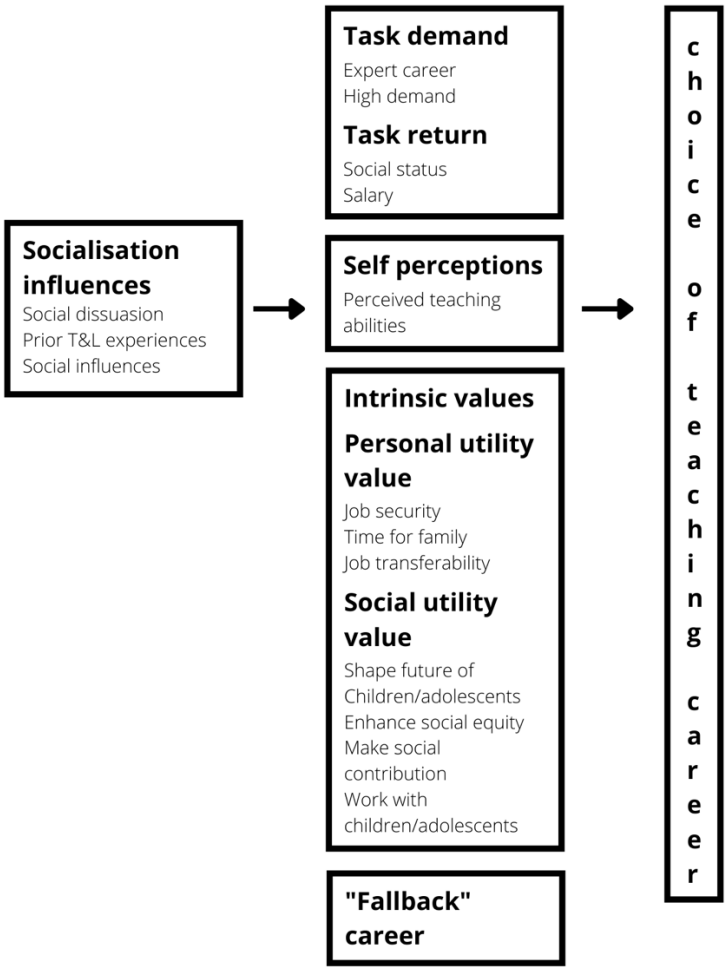
Ability to Teach and Intrinsic Factors

According to the FIT choice theoretical model by Richardson and Watt (2010), the ability to teach and intrinsic motivation belong to different higher-order constructs. The theoretical model (Figure 6) differentiates abilities to teach as self-perceived while intrinsic as a separate one. In a broader sense ability to be a teacher, good skills, or qualities, are closely related to intrinsic factors (Bergmark et al., 2018; Heckert et al., 2002). Both of these factors appeared to have a significant difference. According to the findings, intrinsic affiliation and aspiration to become a teacher have a stronger motivational influence on student teachers in primary and non-subject majors. Probably, this is because primary teachers, SEN teachers, psychologists, vospitatels, and speech therapists must deal more with upbringing. Also, they

work more and closer with children, especially those of younger age. These majors also showed high mean values in work with children and adolescents factor.

Figure 6

The FIT choice theoretical model



Note. FIT choice theoretical model. From *Who Chooses Teaching and Why? Profiling Characteristics and Motivations Across Three Australian Universities* (p. 32), by Richarson & Watt, 2006, Taylor & Francis. Copyright 2006 by Taylor & Francis. Offered for reproduction for a thesis or dissertation free of charge.

Science, math, languages, and humanities on the other hand have an aspect of content or subject. They are not only dealing with upbringing but also delivering subject knowledge

and developing certain skills. Some of them may have a stronger affiliation to the subject nature of their profession, e.g. subject teachers prioritise their subject and content rather than children and teaching (Kyriacou & Coulthard, 2000). Student teachers of these majors showed high mean values in ability to teach and intrinsic motivations, but lower than primary and non-subject majors' student teachers. A Turkish FIT choice study also found a statistically significant difference that showed lower means in perceived ability to teach and intrinsic motivation in science major student teachers (Kılınç et al., 2012). Although physical education students have a lower mean in the ability factor of 4,87, it is one of the highest among all other factors for this major. Thus, they are motivated by the abilities they have to be a teacher.

Regarding the instruction languages, there is a general trend that the Kazakh language instructions student teachers had higher means in all of the factors than the Russian ones, with no particular trend in the English language instruction. These interpretations should be considered carefully. Both ability to teach and intrinsic were rated positively, these are not statistically significant, with intrinsic being less influential for student teachers with Russian language instructions.

Teaching as a Fallback Career

Both fallback and time for family are on the lower end of motivational factors. These factors were constantly rated as the least motivating factor in many of the FIT choice studies (Glutsch & König, 2019; Lin et al., 2012; Watt et al., 2017). Math student teachers had the lowest mean in the fallback factor, contrary to Watt et al.'s (2017) findings where preservice math teachers rated it higher than preservice English teachers. This was explained due to lack of options with English degree and variety with math, also the age profile difference. In this study, languages were the second lowest in this factor after math student teachers. Considering

the questionable reliability of this factor, Cronbach's alpha 0.663, discussing individual differences would be unreasonable.

Students with Kazakh instruction medium thought of a teaching career as a fallback more than students with Russian instruction medium. It is important to emphasize that this factor was the lowest in all three languages among all motivational factors.

Job Security

This motivational factor was rated high among all majors and instruction languages, neither of which showed a statistically significant variance. A FIT choice study that was conducted in Turkey (Kılınç et al., 2012) also found that job security was an important factor, explained by the high popularity of secure jobs in developing countries. Contrary to some (Fokkens-Bruinsma & Canrinus, 2012; Goller et al., 2019; Watt et al., 2012) where job security was not rated as high, due to additional certification requirements. Indeed, Kazakhstan is a developing country and people seek stable, secure jobs. According to Irsaliyev et al. (2019), job stability or security is an important factor influencing career choice, as a teacher you will always find a job. Currently, in Kazakhstan teachers are still in demand. The number of grants for teaching professions is stable, around 8000 each year (MoES, 2021; MoES, 2019).

According to the FIT choice theoretical model (Richardson & Watt, 2010) job security, time for family, and job transferability comprise a higher-order construct personal utility value. These motivational factors are considered to be extrinsic (Azman, 2013). Although Irsaliyev et al. (2019) found that intrinsic and altruistic motivational factors prevail among Kazakhstani students, job security was one of the important factors.

Time for Family

Time for family had lower means both in majors and instruction languages. Both variances showed statistical significance. Math teachers also showed the lowest mean in time for family. Regarding the instruction languages, the difference is marginal, with a slightly higher mean among Kazakh language medium student teachers.

This factor was rated low in many FIT choice studies (Fokkens-Bruinsma & Canrinus, 2012; Goller et al., 2019; Kılınç et al., 2012; Watt et al., 2017). Student teachers responding to the survey are at a young age, the age mean of 20, therefore they probably do not yet have a family or think about one.

Job Transferability

The job transfer factor had similarly average results for all majors. Similar results were shown by Kılınç et al. (2012). In their study items of this particular factor were changed to consider regional differences. Kazakhstani teachers, in the same way as Turkish teachers, do not have many opportunities to teach abroad. In this study the question items were not adapted or changed, probably therefore the factor had questionable reliability, 0.591.

Shape Future

Student teachers of all majors considered influencing the next generation as an important factor. According to the FIT choice theoretical model (Richardson & Watt, 2010) shape future of children, enhance social equity, social contribution, and work with children and adolescents comprise a higher-order construct social utility value. These are similar to what is considered to be an altruistic motivation (Drudy et al., 2005). Teachers are the people who influence children through the educational process. The high mean shows that student teachers were indeed interested in teaching, impacting, and influencing children.

A statistically significant difference was found between Kazakh and Russian instruction language student teachers. This finding implies that student teachers with Kazakh instruction language considered shaping future factor more important than their Russian instruction language peers. This can be due to a type II error. However, considering the chi-square statistics where student teachers with the Russian medium were less associated with choosing to teach as 1st choice career, the difference might exist. According to Kyriacou & Coulthard (2000), people who want to be teachers have more altruistic motivation. If the Kazakh medium student teachers were more associated with choosing to teach as their 1st choice career they should have a higher mean in altruistic factors, as shape future.

Social Equity

Watt et al. (2017) found that English preservice teachers rate social equity as a motivational factor higher than math preservice teachers. The findings of this study suggest that there is no statistically significant variance among majors or instruction languages. This factor was rated on average slightly positive, at 4.75. Watt et al. (2017) study suggested that the difference is due to major or subject natures. Math and sciences curricula have more subject and content nature, while languages and social sciences may touch on social issues. Kılınç et al. (2012) also found that non-science student teachers rated this factor higher than science student teachers.

In Kazakhstan, the main equity issue is the gap in the quality of education between rural and urban schools. The Kazakhstani government acknowledges the problem (Decree of the Government of the Republic of Kazakhstan No. 460, 2018), they also acknowledge other issues as the 8.6% of children from 0 to 18 are vulnerable as of January 2017. There are children with health issues, children from low-income families, and orphans. The Turkish FIT choice study (Kılınç et al., 2012) where social equity was rated higher implies that women in

the sample contributed to the high mean. Some other FIT choice studies with a comparative approach showed similarity to this study (Lin et al., 2012; Watt et al., 2012) in Chinese and Australian samples, while other countries showed a higher mean (Goller et al., 2019).

Social Contribution

Student teachers of all majors showed a relatively high mean in social contribution. The non-FIT choice study found that social contribution is an important motivational factor for students considering teaching as a career (Kyriacou & Coulthard, 2000). The social contribution was among the top motivational factors for some other FIT choice studies (Kılınç et al., 2012; Lin et al., 2012; Watt et al., 2017). The altruistic nature of the profession, contributing back to the society, strongly motivates Kazakhstani student teachers who are men.

The mean of student teachers with Kazakh medium in this factor was higher than their Russian medium peers, with statistically significant variance. Similar to shape future factor, the presence of type II error or linking to the chi-square on the medium language and choosing teaching as their 1st choice career can explain the difference.

Work with Children and Adolescents

Generally, this factor was ranked positively, only languages and humanities major student teachers showed relatively low means. This correlates to their teaching as a non-priority career, discussed in the demographics and career choice items, and relatively lower intrinsic motivation. In the FIT choice study by Goller et al. (2019) primary and non-subject student teachers rated this factor higher than subject major student teachers. In other FIT choice studies work with children and adolescents along with other social utility factors is the highly-rated motivational factor (Fokkens-Bruinsma & Canrinus, 2012; Kılınç et al., 2012; Lin et al., 2012). Another quantitative non-FIT choice study (Azman, 2013) found that a similar

altruistic reason, teaching the young ones, is an important factor motivating Malaysian teachers. Irsaliyev et al. (2019) state that 37% of the participants were motivated by this factor.

Prior Teaching and Learning

Prior teaching and learning showed that students majoring in languages were less motivated by prior positive teaching and learning experiences compared to other majors. However, a general high rating of this factor correlates with some other FIT choice studies (Kılınç et al., 2012; Watt et al., 2017; Watt et al., 2012). Finnish sample in Goller et al. (2019) showed that it was a more important factor for subject student teachers than primary or preschool student teachers. This is true to some degree for this study, science and math teachers had higher means in their subjects among all factors. This means subject teachers motivated their students, now student teachers, to choose a teaching career through positive learning experiences, role models, and inspiration.

There is a significant difference between Kazakh and Russian instruction media students. Kazakh and Russian languages may indirectly be influenced by cultural differences. Russian culture has always been European (Butorov, 2015), while Kazakh culture is more Asian and has Muslim influence (Uzakbayeva & Beisenbayeva, 2015). The strongly pronounced respect for elders in Kazakh culture (Kabuldinov et al., 2016) can be a reason for higher respect for teachers and therefore stronger influence and motivation from that learning experience.

Social Influences

Social influences factor scored low among all majors. Languages and physical education had the lowest means, indicating a more independent choice. Generally low mean showed a lesser influence from family, friends, and coworkers. This factor had questionable reliability, alpha 0.695. Some other FIT choice studies (Fokkens-Bruinsma & Canrinus, 2012;

Goller et al., 2019; Kılınç et al., 2012; Lin et al., 2012; Watt et al., 2017) reported this factor as a low motivating factor.

Second Research Question: What Beliefs Do Men Have About Teaching?

Another set of MANOVAs was conducted for the six beliefs and the same majors, instruction language, and living area. This was conducted to find differences in variation in beliefs among the variables and answer the research question.

Task Demand: Expertise and Difficulty

Regardless of the major, expertise or expert knowledge showed a high mean. Student teachers think that teaching requires high expert knowledge and skills. This belief often positively correlates with difficulty (Kılınç et al., 2012; Lin et al., 2012; Watt et al., 2017). In the FIT choice theoretical model (Figure 6) expertise and difficulty comprise a higher-order construct task demand. “On teacher status” law highlights the requirements for a teacher, setting a specific standard for teachers. Some of the requirements for a teacher are one must be competent in teaching, follow the teaching ethics, keep the education standard, professionally develop, etc. (President of the Republic of Kazakhstan, 2019). Apart from the formal requirements, this profession requires working with children, which brings high responsibility and expertise demands. There is a statistically significant difference in the instruction languages, the few student teachers with English language instructions thought of the teaching profession as less expertise demanding. The explanation for this can be the low number of student teachers, therefore distorted statistics.

Most student teachers consider teaching as a difficult profession, that is demanding and hard. Except, for those majoring in physical education. This finding is in line with other FIT choice scale studies (Goller et al., 2019; Hennessy & Lynch, 2016; Watt et al., 2017). Similar to Watt et al.’s (2017) findings student teachers majoring in languages rated demand higher

than those majoring in math. Irsaliyev et al. (2019) explain the demanding part of teaching as unnecessary paperwork, unpaid activities requested by local authorities, and too many reports. Other FIT choice studies (Fokkens-Bruinsma & Canrinus, 2012; Lin et al., 2012; Watt et al., 2012) also found that the demand of the teaching profession was rated high. Indeed, Kazakhstani teachers were having more paperwork, reports, and workload than was expected for the money paid. According to the law "On teacher status" (President of the Republic of Kazakhstan, 2019) most of the paperwork and the extra workload were disburdened, the current workload is 16 teaching hours against 18 before, yet the student teachers seemed to still have that belief. Other than the paperwork and workload there are changes in the educational setting. According to Irsaliyev et al.'s (2019) findings, 45.5% of teachers surveyed think that there are too many reforms and changes in the education system. In 2016 the new criteria-based assessment (MoES, 2016) and new educational programs (Decree of the Government of the Republic of Kazakhstan No. 460, 2018) were introduced in Kazakhstan. Since 2019 the new COVID-19 pandemic forced governments around the world to switch to online education. The Kazakhstani education system was prepared to some degree, but remote areas had no internet, and some families were not able to afford computers (Bokayev et al., 2021). Teachers, mostly in rural areas, had to deal with these issues to deliver quality education. Perhaps these factors contribute to the belief that teaching is a demanding profession. The instruction language seemed not to have an effect on this perception with similar results for both Russian and Kazakh languages.

Social Status

Non-subject and primary major students had a higher belief about the status of the profession, while math students had a lower mean in this belief. Irsaliyev et al. (2019) also showed that about 67% of respondents at least somewhat believe that teaching has a high

status in society. Other FIT choice studies report a low mean, around 4 or lower, for this belief (Fokkens-Bruinsma & Canrinus, 2012; Kılınç et al., 2012; Lin et al., 2012; Watt et al., 2017). Banning the possibility to force teachers to do work that is not related to their professional duties, such as conducting elections, helped to increase the teacher status (President of the Republic of Kazakhstan, 2019). Student teachers get higher stipend money than students taking other programs (Decree of the Government of the Republic of Kazakhstan No. 116, 2008). These factors may explain the higher-ranked status belief compared to other FIT choice findings.

Salary

The salary was one of the beliefs with statistically significant variation among majors. For the primary, science, and non-subject majors' student teachers the salary was rated higher than for maths, languages, humanities, and PE majors student teachers. Although all of the means show more or less positive opinions about the salaries, this belief was on the lower end. This belief was also low rated in Australia, the US, Germany (Lin et al., 2012; Watt et al., 2012), the Netherlands (Fokkens-Bruinsma & Canrinus, 2012), and Irsaliyev et al. (2019) study. Student teachers with the Kazakh instruction language rated the salary belief slightly higher than the Russian instruction language student teachers, and at the same level as the few English instruction language student teachers.

Urban student teachers have a lower expectation about salary, with other beliefs showing similar results for both urban and rural students. According to the Decree of the Government of the Republic of Kazakhstan dated No. 1193 (2015) teachers in rural areas are eligible to get not less than 25% higher salary than their urban colleagues. Also, the law "On teacher status" (President of the Republic of Kazakhstan, 2019) states that there are some

other advantages for work in rural areas, the installation grant and covering support for utilities. Thus, the rural student teachers know and see that teachers are paid better.

Social Dissuasion

Social dissuasion showed the lowest mean values regardless of major, instruction language, and living area. It means that the student teachers were least negatively affected or not affected at all by social surroundings. This aligns with other FIT choice findings (Fokkens-Bruinsma & Canrinus, 2012; Goller et al., 2019; Irsaliyev et al., 2019; Watt et al., 2012). Only science student teachers rated it higher than others, at 4.39, perhaps due to other, higher status, career paths available for this major. However, this belief should be discussed with caution because of its poor reliability, alpha 0.578.

Satisfaction with the Choice

Most of the student teachers were satisfied with the choice, with lower results among languages and humanities majors. This can be due to the negative association with teaching as the first-choice career. This belief positively correlated with the ability to teach, and intrinsic motivation (Lin et al., 2012; Watt & Richardson, 2007). Probably some student teachers with these majors did not want to become teachers and were less satisfied with the outcome.

Getting More Men into Teaching

The last eight items of the survey were designed to get student teachers' opinions on how to attract more men into teaching. Salary and status of the profession were the highest scoring factors. The increasing salary suggestion was also one of the major possible measures to make teaching more attractive in a quantitative study by Kyriacou & Coulthard (2000). The government and the ministry of education and science of Kazakhstan are taking significant steps to increase teachers' salaries and status (President of the Republic of Kazakhstan, 2019). These include yearly increases in salary, less paperwork, and decreased workload in general

for teachers. Another important factor the student teachers mentioned, was guidance and counselling work. Kazakhstani schools lack qualitative guidance at the school level, Irsaliyev et al. (2019) stated that there is a need for proper guidance and counselling in Kazakhstani secondary schools. A recent qualitative study (Almukhambetova & Kuzhabekova, 2020) also stated that little career guidance is provided for students in Kazakhstan. Student teachers of this study suggest that through career guidance at the school level and advertising teaching it is possible to get more men into teaching.

Chapter Summary

This chapter discussed the findings of the demographics and career choice items of the survey. Three chi-square tests showed statistical significance, with weak or large effects. The MANOVAs' results for the two research questions, namely "Why do men choose to become teachers?" and "What beliefs do men have about teaching?", were discussed. Motivational factors and beliefs among the student teachers who participated in this study showed similar trends to international FIT choice findings. Intrinsic and altruistic motivational factors, such as social contribution and ability to teach, showed a more positive motivational influence. That is similar to international findings. However, some extrinsic factors, job security and prior teaching and learning, appeared to be influential for the student teachers. That is unlike some of the western countries' results. Possible explanations for low and high mean values were suggested. In the conclusion chapter, concise summary answers for the two research questions will be given. Suggestions on how to get more men into teaching will be described. Limitations of the study and further research prospects will be outlined.

Chapter 6. Conclusion

Teaching in Kazakhstan is heavily dominated by women, especially the disparity is pronounced at primary and pre-school levels. This quantitative study aimed to explore the motivation of Kazakhstani men to choose to become a teacher. It was conducted via the FIT choice scale, a tested set of items, by Watt and Richardson (2007). The scale measures motivation by 11 factors and beliefs by six groups. Participants of this study are men who are taking teaching undergraduate courses. This chapter provides an overview of the findings, analysis and discussions over the two research questions:

1. Why do men choose to become teachers?
2. What beliefs do men have about teaching?

The findings of the research provide necessary data to make recommendations for recruitment policies and getting more men into teaching. Limitations of the study and recommendations for further research will be discussed.

Why Do Men Choose to Become Teachers?

The findings of this study correlate with the existing literature. This study overlaps with Irsaliyev et al. (2019) analytical report. Irsaliyev et al. (2019) also used the FIT choice scale as part of their analysis tool. Men in Kazakhstan are motivated by intrinsic and altruistic factors. Teachers who are men like teaching and have good teaching skills. Student teachers want to shape the future of the children they teach, similar to western student teachers (Goller et al., 2019; Watt et al., 2012). Student teachers understand the social contribution done via teaching. Student teachers also like the idea of working with children and adolescents to some positive degree. However, extrinsic factors are also important. Teaching in Kazakhstan is a reliable and secure job, student teachers appreciate this quality of the profession, unlike their western peers (Watt et al., 2012). Student teachers acknowledge the good learning experiences

that influenced their career choice. Inspirational teachers and their positive role models influenced student teachers' career choices.

Although teachers are in need, it is not a profession in Kazakhstan that has many travel opportunities. Kazakhstani student teachers who are men showed a medium contribution of this factor. To a similar degree, they rated the fact that they can help and impact the socially disadvantaged. Even less influential was the free time student teachers get for their family, similar to student teachers in Australia, the USA, Germany, and Norway (Watt et al., 2012). Men in Kazakhstan were not influenced in career choices by family members or friends.

This study found that 92.6% of men will stay in the teaching profession. Irsaliyev et al. (2019) found that many student teachers, men and women, around 80%, will quit teaching in five years or less. It was suggested that low salary, overwork, countless reports, and unnecessary paperwork are the main reasons for teacher attrition. There is a big amount, 28%, of men who chose to teach as a fallback option. The fact that more than 1/5 still get into teaching randomly shows the low passing requirements to enter teaching. This will be discussed in the implications for policy changes.

What Beliefs Do Men Have About Teaching?

Student teachers in Kazakhstan saw teaching as a demanding profession that requires high expert skills and knowledge. These are common beliefs among teachers worldwide (Goller et al., 2019). There was a positive opinion on teacher status, similar to Irsaliyev et al. (2019) findings. The high status of the teaching profession is contradicting other FIT choice studies (Kılınç et al., 2012; Lin et al., 2012; Watt et al., 2017). There was some disparity regarding the salary between rural and urban student teachers, with rural student teachers rating it higher than urban ones. Overall student teachers showed a positive opinion about their satisfaction with their career choice. Unlike the original FIT choice findings (Richardson &

Watt; 2006; Watt et al., 2017) Kazakhstani student teachers who are men did not see teaching as highly demanding with a low return, instead they see it as highly demanding but high returns as well.

Student teachers of this study did not feel social discouragement, which is similar, yet not to the same degree as Finnish and German samples (Goller et al., 2019). Sometimes family members may discourage men from entering teaching (Dickson & Le Roux, 2012). Considering the motivational factors it seems that men who get into teaching in Kazakhstan were not strongly influenced and encouraged to enter teaching neither they were dissuaded.

Implications of the Study

The respondents suggested different ways to attract more men into teaching. An increase in salary and status was the most frequently suggested idea. Policies to increase the salary and status are currently undertaken by the Ministry of Education and Science and the government of Kazakhstan (President of the Republic of Kazakhstan, 2019). A practical implication on a school level, both for teachers and school leaders, is to improve the quality of career counselling in high school. The findings of this study suggest that secondary school is the most influential period to motivate boys to choose to teach. Considering guidance as one of the weak points of Kazakhstani schools, positive changes in this system may benefit boys and the number of men in teaching. Not only a school should have a guidance counsellor but the teachers must contribute to students' understanding of career choices. Prior teaching and learning motivational factor was rated as an important factor, hence inspirational teachers, positive learning experiences, and teacher role models are also important.

The FIT choice findings also contribute to the understanding of the attracting men into teaching question. The social and family influence had a low effect on student teachers' motivation to become a teacher. They, student teachers, want to teach, work with children,

shape their future – they realise it is a demanding career. Student teachers see positive changes in salary but want a further increase in salary. The benefits of teaching as a secure career are important and probably should be kept or even further improved. Azman (2013) recommends that apart from salary, benefit packages and even better job security must be provided to make teaching attractive for men. Instead of emphasizing only the altruistic nature of teaching in attempts to attract more people into teaching, the demanding side of the profession should be advertised. In fact, altruistic, intrinsic, and extrinsic, motivational factors in combination must be present to address the wider population (Azman, 2013; Watt et al., 2012).

Career advancement is also an important way to attract more men. Student teachers rated this item as a positive one, 5.38. Government or Schools should think of more leadership positions than just a vice principal. Irsaliyev et al. (2019) came to the same conclusion. There are many ways to improve schools and provide more leadership positions simultaneously, such as heads of year, different team leaders, and coordinators.

The high number of student teachers going into the profession due to not getting into their priority careers sets a direction for teacher training programs. The standards of passing grades for teaching undergraduate programs should be reconsidered. The recent changes in 2021 in the Decree of the Government of the Republic of Kazakhstan No. 58 (2008) introduced a higher minimum Unified National Test [UNT] result for teaching programs to get the state grant. However, the real situation may differ as some universities and some programs are more popular and get a higher passing grade. It is not that teaching programs have to be impossible to get into, rather they should filter random people. When thinking of attracting more men into teaching policies should also consider increasing the quality of the personnel (Martino & Kehler, 2007).

As the results of this study show, some men may decide to become a teacher at the university level or even when they start working after graduation. For the people deciding to get into teaching, there are a few ways to do that. The six months retraining courses introduced by the Kazakhstani MoES (MoES, 2020) are a way of getting more teachers and men in particular. The idea of making teaching attractive can be translated through further education opportunities. For example, the Graduate School of Education (GSE) at Nazarbayev University gives excellent opportunities for post-graduate studies for teachers. And yet, student teachers and teachers not from the capital city or Almaty may not know about the programs that GSE offers. Distributing such information may motivate more men to get into teaching, especially people in rural areas.

Limitations of the Study

The primary limitation is the uneven sample distribution. The initial plan was to collect balanced data from each oblast. Some, 39.8%, of the respondents are from a single university, which can lead to lopsided data if there are differences between oblasts. The data pool from half of the universities is too small or naught to analyse oblasts' effects on motivation. Southern, western, and central Kazakhstani oblasts were poorly presented. All the regions of Kazakhstan differ in the urbanization level, average income, language use, quality of education. These are important factors that possibly could contribute to the study's validity. Although the findings mostly correlate with other FIT choice studies' findings, additional information would improve its validity.

There is a chance that among the 562 student teachers some can be women. There is no possible way to confirm that all of the student teachers were men, although the recruitment letter and tone of the survey addressed men, some percentage of women might have participated. This could happen accidentally, if a student teacher followed the link without

reading the preface and consent form. The verbs in the Kazakh language are gender neutral; therefore, question items sound equally fit for men and women. It is a common practice for instructors and curators (university faculty members who supervise students) to force their students to fill out forms and often without ensuring that it applies to everyone. This would also decrease the validity of the study.

A methodological issue is also present in this study. The Bonferroni adjustment used as a post-hoc test for MANOVAs is known to protect from type I errors while leaving a possibility of type II errors (Sedgwick, 2012). Although accepting a false null hypothesis is less undermining than rejecting a true null hypothesis it may reduce many significant differences which are in fact significant.

Small effect sizes were observed in many of the MANOVAs conducted. The statistically significant variance found among the 11 majors and instruction languages showed a small difference in the means. The medium effect size findings had a more gap between the means. The total mean should be valued instead of looking for the difference in the small effect size findings. Statistically significant variances especially small among different majors.

Recommendations for Further Research

Some of the recommendations directly flow from the limitations. Different areas and universities of Kazakhstan may have opinions about teaching that slightly differ from opinions of other areas and universities. Further studies should consider having equal or comparable sample sizes from different areas of Kazakhstan. More balanced data with representatives from each oblast would improve the validity of the research.

This study used the FIT choice scale which is based on the FIT choice framework. The framework was developed based on a different context. A qualitative study addressing the same issue might provide an in-depth foundation and understanding of the Kazakhstani

context within the FIT choice framework. Kazakhstani culture and context may provide a foundation for a modification of the FIT choice framework or even a new framework. Structural equation modelling can be applied in a quantitative study to build the model. Not only student teachers, but teachers, and other supporting staff may provide a useful insight to the lack of men in teaching issue.

Some of the FIT choice studies (Glutsch & König, 2019; Lin et al., 2012) use confirmatory factor analysis (CFA) rather than MANOVA. Even using the same raw data a new study with CFA could improve the reliability of the current findings. Latent correlations among the motivational factors may add to the understanding of the correlation between the 11 factors and 6 beliefs. Path analysis also can be applied to explain the effect of majors, instruction language, and living area on the motivational factors and beliefs. It would also help to understand to what degree major, instruction language, or living area explain choosing teaching as the first-choice career and retention in the career.

This study did not acknowledge student teachers' secondary school backgrounds. There are single-gender schools in Kazakhstan. Single-gender schools have a different culture within a school and different role models. Considering a variable of the secondary school type may broaden the understanding of career choice motivation.

Currently, the Kazakhstani government is increasing salaries and trying to improve teachers' workload. A longitudinal study capturing changes in the motivational factors and beliefs would contribute significantly to the understanding of teacher attrition during the first five years of teaching. The purpose of this study was to understand the motivation behind the teaching career choice of Kazakhstani men. However, the issues related to teaching careers do not end with hiring issues, teacher retention and attrition are also part of the problem and relate to all genders.

Chapter Summary

Kazakhstani student teachers who are men had many reasons to become teachers. Their motivation comprised intrinsic, altruistic, and extrinsic factors. Student teachers saw teaching as a profession that helps to shape the future of children and make social contributions. The ability to teach that the student teachers have was one of the strong motivational factors. Student teachers valued job security and prior teaching and learning experiences. Men student teachers had positive beliefs about the teaching profession, they were satisfied with the choice. However, they acknowledged the demanding nature of the profession. Implications of the study were described for men teachers, school leadership, and policymakers. Limitations of the study were discussed, and corresponding further recommendations were suggested. Overall, understanding the complex nature of the motivation of Kazakhstani men to choose a teaching career provided results for future changes.

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Appendices

Appendix A: Recruitment Letter

Dear University Name Administration office,

My name is Duman Bakayev, I am a second-year student at the Graduate School of Education, Nazarbayev University. I am conducting research about men in teaching and their motivation for teaching career choice. I hope you can help me to distribute this email to students at your university.

There is a survey that takes about 10 minutes to complete. I am inviting men student teachers to participate. It is in Kazakh and Russian. I will be glad for every single response and it is a great contribution to this research field. I will send another email next week as a reminder and will call to check that you have received my email, thank you for your understanding.

If you agree to help in this important research, I would ask that you email all the students who are taking educational courses (e.g. Bachelor of Education) with the following information.

The email to the students

To student teachers: Dear Future Teachers,

Are you a man planning to go into the education field? If yes, then I invite you to participate in an important research study, the first of its kind in Kazakhstan. I will be thankful if you take about 10 minutes to participate in this research. This will help to understand the career choice of men teachers in Kazakhstan. The survey is anonymous, you only label your university and it will affect your studies in any regard. The survey will be open until December 15, 2021, by the link given.

The purpose of this quantitative study, i.e. using quantitative analysis tools (survey in this case), is to understand why men in Kazakhstan choose to become a teacher. Understanding men's teaching career choices can help bring more men into teaching. It can broaden and deepen the current understanding of gender and teaching career choice relationships. I am replicating the Factors Influencing Teaching as a career choice (FIT) scale by Watt & Richardson, with some questions added to collect opinions on how to attract more men into teaching. It is the first of this kind of study in Kazakhstan.

Please use this link:
https://nukz.qualtrics.com/jfe/form/SV_bJZSXoeSGuDuK4C

Құрметті Университеттің аты Әкімшілік офисі,

Менің аты жөнім Думан Бакаев, мен Назарбаев Университетіндегі, Жоғары Білім Мектебінің екінші жыл студентімін. Мен оқытудағы ер адамдар және олардың мамандықты таңдау мотивациясын зерттеп жатырмын. Сіз маған осы хатты сіздің университетінің студенттеріңізге таратуға көмектесесіз деп үміттенемін.

Төменде сауалнамаға сілтеме бар, оны толтыру шамамен 10 минут уақыт алады. Мен педагогикалық мамандыққы оқып жатқан ер студенттерді осы сауалнамада қатысуға шақырамын. Сауалнама қазақ және орыс тілдерінде. Әр жауап мен үшін маңызды және ол осы саладағы зерттеуге зор пайдасын тигізеді. Келесі аптада мен сізге

тағыда осы емейлді ескерту ретінде жіберемін және осы емейл жеткеннің көз жету үшін қоңырау шаламын, сіздің түсінісшілігіңіз үшін рақмет.

Егер сіз осы маңызды зерттеуде көмектесуге дайын болсаңыз, сізден білім беру бағдарламасыларында оқып жатқан студенттерге (мысалы Білім беру бакалавры, Bachelor of Education) төменде жазылған емейлді жіберуді сұраймын.

Студенттерге арналған емейл

Мұғалім-студенттерге: Құрметті келешектегі мұғалімдер,

Сіз білім саласына баруды жоспарлаған ер адамсыз ба? Олай болса, мен сізді, Қазақстандағы осындай алғашқы, маңызды зерттеуде қатысуға шақырамын. Сіз осы шамамен 10 минуттық сауалнамада қатысқаныңыз үшін мен өте риза боламын. Бұл зерттеу Қазақстандағы ер мұғалімдердің мамандықты таңдау үрдісін түсінуге көмектеседі. Сауалнама анонимді, сіз тек өз университетіңізді белгілейсіз және осы сауалнама сіздің оқуыңызға еш әсер етпейді. Сілтеме бойынша сауалнама 2021 Желтоқсан 15-ге дейін ашық болады.

Осы сілтемені қолданыңыз:

https://nukz.qualtrics.com/jfe/form/SV_bJZSXoeSGuDuK4C

Қазақстандағы ер азаматтар неліктен мұғалім мамандығын таңдайтындығын түсіну осы сандық зерттеудің мақсаты. Сандық зерттеу ол сандық талдау құралдарын қолданатын (мысалы сауалнама). Ер азаматтардың мұғалімдікті таңдауды түсіну мамандыққа көбірек ерлерді әкелуге көмек ете алады. Сонымен бірге жыныс және мұғалім мамандығын таңдау байланыстарының қазіргі түсінуін толықтыра алады. Мен Watt & Richardson жасаған Мұғалімдікке Әсер ететін Факторлар (FIT) шкаласын осы зерттеуде қайталап қолданамын. Осы шкалаға ерлерді мамандыққа тартумен байланысты бірнеше сұрақты қостым. Бұл зерттеу Қазақстанда алғашқы рет өткізіледі.

Уважамая Администрация Название университета,

Меня зовут Думан Бакаев, я студент второго курса Высшей Школы Образования при Назарбаев Университете. Я провожу исследование о учителях мужчинах, их мотивации при выборе карьеры. Я надеюсь на вашу помощь в распространении этого письма студентам вашего университета.

Ниже приведена ссылка на опрос который занием около 10 минут. Я приглашаю студентов мужского пола обучающихся на образовательных программах поучавствовать в нем. Опрос составлен на Казахском и Русском языках. Я буду рад каждому респонденту и каждый ответ вносит вклад в исследование в этой области. Через неделю я отправлю еще один емейл в качестве напоминания и позвоню чтобы удостовериться что вы его получили, спасибо за ваше понимание.

Если вы согласны помочь в этом важном исследовании, я попрошу вас отправить емейл студентам на образовательных программах (например Бакалавр Образования, Bachelor of Education) с последющей информацей.

Емейл для студентов

Учителям-студентам: Дорогие будущие учителя,

Вы мужчина который планирует идти в сферу образования? Тогда я приглашаю вас принять участие в важном исследовании, первом своего рода в Казахстане. Я буду

очень благодарен если вы пройдете этот 10 минутный опрос. Это поможет в понимании выбора профессии среди учителей мужчин Казахстана. Опрос анонимный, вы только укажете своей университет и этот опрос никак не повлияет на вашу учебу. Опрос будет доступен по ссылке до 15 Декабря 2021.

Цель этого количественного исследования, т.е. использование методов количественного анализа (например опрос), понять почему мужчины в Казахстане выбирают профессию учителя. Понимание выбора профессии учителя у мужчин может привлечь больше мужчин в учительство. Это может помочь углубить и расширить понимание связей между гендером и выбором профессии учителя. Я повторяю шкалу Факторы Влияющие на Учительство как карьерный выбор (FIT) разработанную Watt & Richardson, с некоторыми дополнительными вопросами о привлечении мужчин в профессию учителя. Это первое исследование такого рода в Казахстане.

Пожалуйста используйте эту ссылку:
https://nukz.qualtrics.com/jfe/form/SV_bJZSXoeSGuDuK4C

Appendix B: Formal request letter

Председателю Правления

От Бакаева Думана Шынгысовича,
ФИО
Студент при Назарбаев Университете
должность
тел. +7 747 2922665

ЗАЯВЛЕНИЕ.

Прошу посодействовать в распространении этого письма студентам вашего университета. Ниже приведена ссылка на опрос который занием около 10 минут. Я приглашаю студентов мужского пола обучающихся на образовательных программах поучавствовать в нем. Опрос составлен на Казахском и Русском языках. Я буду рад каждому респонденту и каждый ответ вносит вклад в исследование в этой области.

Если вы согласны помочь в этом важном исследовании, я попрошу вас отправить емейл студентам на образовательных программах (например Бакалавр Образования, Bachelor of Education) с последющей информацей.

Так же я прилагаю электронную версию этого сообщения по данным емейлам:

Емейл для студентов

Учителям-студентам: Дорогие будущие учителя,

Вы мужчина который планирует идти в сферу образования? Тогда я приглашаю вас принять участие в важном исследовании, первом своего рода в Казахстане. Я буду очень благодарен если вы пройдете этот 10 минутный опрос. Это поможет в понимании выбора профессии среди учителей мужчин Казахстана. Опрос анонимный, вы только укажете своей университет и этот опрос никак не повлияет на вашу учебу. Опрос будет доступен по ссылке до 15 Декабря 2021.

Цель этого количественного исследования, т.е. использование методов количественного анализа (например опрос), понять почему мужчины в Казахстане выбирают профессию учителя. Понимание выбора профессии учителя у мужчин может привлечь больше мужчин в учительство. Это может помочь углубить и расширить понимание связей между гендером и выбором профессии учителя. Я повторяю шкалу Факторы Влияющие на Учительство как карьерный выбор (FIT) разработанную Watt & Richardson, с некоторыми дополнительными вопросами о привлечении мужчин в профессию учителя. Это первое исследование такого рода в Казахстане.

Пожалуйста используйте эту ссылку: https://nukz.qualtrics.com/jfe/form/SV_bJZSXoeSGuDuK4C

Бакаев Думан Шынгысович _____ «13» ноября 2021 г.
/ФИО/ /подпись/

Appendix C: Survey Questions

English

Part 1:

1. Select the year you are currently studying 1, 2, 3, 4

2. How old are you? insert age

3. Select the major of your studies: primary, secondary science, secondary math, secondary language, secondary humanities, PE, other (please specify)

4. Select the medium language: Kazakh, Russian

5. Did you grow up in a rural or urban area? Rural Urban

6. Choose the university in which you are studying. The list of 17 universities.

7. Was teaching your 1st choice of profession? Yes, no

8. When did you decide you wanted to become a teacher: during primary years, during secondary years, during college/university years, as related to work

9. Are you planning to work in education after graduation? Yes, no

Part 2:

PART B – INFLUENTIAL FACTORS[1]

For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).

Please CIRCLE the number that best describes the importance of each.

---

[1] replicated from Watt & Richardson (2007)

"I chose to become a teacher because…"

		not at all important						extremely important	
B1.	I am interested in teaching	1	2	3	4	5	6	7	B1.
B2.	Part-time teaching could allow more family time	1	2	3	4	5	6	7	B2.
B3.	My friends think I should become a teacher	1	2	3	4	5	6	7	B3.
B4.	As a teacher I will have lengthy holidays	1	2	3	4	5	6	7	B4.
B5.	I have the qualities of a good teacher	1	2	3	4	5	6	7	B5.
B6.	Teaching allows me to provide a service to society	1	2	3	4	5	6	7	B6.
B7.	I've always wanted to be a teacher	1	2	3	4	5	6	7	B7.
B8.	Teaching may give me the chance to work abroad	1	2	3	4	5	6	7	B8.
B9.	Teaching will allow me to shape child/adolescent values	1	2	3	4	5	6	7	B9.
B11.	I was unsure of what career I wanted	1	2	3	4	5	6	7	B11.
B12.	I like teaching	1	2	3	4	5	6	7	B12.
B13.	I want a job that involves working with children/adolescents	1	2	3	4	5	6	7	B13.
B14.	Teaching will offer a steady career path	1	2	3	4	5	6	7	B14.
B16.	Teaching hours will fit with the responsibilities of having a family	1	2	3	4	5	6	7	B16.
B17.	I have had inspirational teachers	1	2	3	4	5	6	7	B17.
B18.	As a teacher I will have a short working day	1	2	3	4	5	6	7	B18.
B19.	I have good teaching skills	1	2	3	4	5	6	7	B19.
B20.	Teachers make a worthwhile social contribution	1	2	3	4	5	6	7	B20.
B22.	A teaching qualification is recognised everywhere	1	2	3	4	5	6	7	B22.
B23.	Teaching will allow me to influence the next generation	1	2	3	4	5	6	7	B23.
B24.	My family think I should become a teacher	1	2	3	4	5	6	7	B24.
B26.	I want to work in a child/adolescent-centred environment	1	2	3	4	5	6	7	B26.
B27.	Teaching will provide a reliable income	1	2	3	4	5	6	7	B27.
B29.	School holidays will fit in with family commitments	1	2	3	4	5	6	7	B29.
B30.	I have had good teachers as role-models	1	2	3	4	5	6	7	B30.
B31.	Teaching enables me to 'give back' to society	1	2	3	4	5	6	7	B31.
B35.	I was not accepted into my first-choice career	1	2	3	4	5	6	7	B35.
B36.	Teaching will allow me to raise the ambitions of underprivileged youth	1	2	3	4	5	6	7	B36.
B37.	I like working with children/adolescents	1	2	3	4	5	6	7	B37.
B38.	Teaching will be a secure job	1	2	3	4	5	6	7	B38.
B39.	I have had positive learning experiences	1	2	3	4	5	6	7	B39.
B40.	People I've worked with think I should become a teacher	1	2	3	4	5	6	7	B40.
B43.	Teaching is a career suited to my abilities	1	2	3	4	5	6	7	B43.
B45.	A teaching job will allow me to choose where I wish to live	1	2	3	4	5	6	7	B45.
B48.	I chose teaching as a last-resort career	1	2	3	4	5	6	7	B48.
B49.	Teaching will allow me to benefit the socially disadvantaged	1	2	3	4	5	6	7	B49.
B53.	Teaching will allow me to have an impact on children/adolescents	1	2	3	4	5	6	7	B53.
B54.	Teaching will allow me to work against social disadvantage	1	2	3	4	5	6	7	B54.

PART C – BELIEFS ABOUT TEACHING[2]

For each question below, please rate the extent to which YOU agree it is true about teaching, from

1 (not at all) to 7 (extremely). Please CIRCLE the number that best describes your agreement for each

		not at all extremely	
C1.	Do you think teaching is well paid?	1 2 3 4 5 6 7	C1.
C2.	Do you think teachers have a heavy workload?	1 2 3 4 5 6 7	C2.
C3.	Do you think teachers earn a good salary?	1 2 3 4 5 6 7	C3.
C4.	Do you believe teachers are perceived as professionals?	1 2 3 4 5 6 7	C4.
C5.	Do you think teachers have high morale?	1 2 3 4 5 6 7	C5.
C7.	Do you think teaching is emotionally demanding?	1 2 3 4 5 6 7	C7.
C8.	Do you believe teaching is perceived as a high-status occupation?	1 2 3 4 5 6 7	C8.
C9.	Do you think teachers feel valued by society?	1 2 3 4 5 6 7	C9.
C10.	Do you think teaching requires high levels of expert knowledge?	1 2 3 4 5 6 7	C10.
C11.	Do you think teaching is hard work?	1 2 3 4 5 6 7	C11.
C12.	Do you believe teaching is a well-respected career?	1 2 3 4 5 6 7	C12.
C13	Do you think teachers feel their occupation has high social status?	1 2 3 4 5 6 7	C13
C14.	Do you think teachers need high levels of technical knowledge?	1 2 3 4 5 6 7	C14.
C15	Do you think teachers need highly specialised knowledge?	1 2 3 4 5 6 7	C15

[2] replicated from Watt & Richardson (2007)

PART D – YOUR DECISION TO BECOME A TEACHER[3]

For each question below, please rate the extent to which it is true for YOU, from 1 (not at all) to 7 (extremely). Please CIRCLE the number that best describes your agreement for each.

		not at all						extremely	
D1.	How carefully have you thought about becoming a teacher?	1	2	3	4	5	6	7	D1.
D2.	Were you encouraged to pursue careers other than teaching?	1	2	3	4	5	6	7	D2.
D3.	How satisfied are you with your choice of becoming a teacher?	1	2	3	4	5	6	7	D3.
D4.	Did others tell you teaching was not a good career choice?	1	2	3	4	5	6	7	D4.
D5.	How happy are you with your decision to become a teacher?	1	2	3	4	5	6	7	D5.
D6.	Did others influence you to consider careers other than teaching?	1	2	3	4	5	6	7	D6.

Part E - ATTRACTING MORE MEN

For each statement below, please rate how it is needed to attract more men teachers, from 1 (strongly disagree) to 7 (strongly agree).

Please CIRCLE the number that best describes the need of each.

I think teaching would be more attractive for men if... (1 strongly disagree, 7 strongly agree)

1. there would be an increase in salary

2. there would be more leadership positions available

3. the profession had a higher status

4. society had less prejudice about teaching and teacher gender

5. there would be a privilege for men in teaching

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[3] replicated from Watt & Richardson (2007)

6. teaching were a more competitive profession (higher requirements, demanding, where you need to be better than others)

7. guidance and counselling at school level explained the teaching profession better

8. can you think of other ways to make the teaching profession more attractive to men? (please write below)

Kazakh

Part 1:

1. Оқу жылын таңдаңыз (курс) 1, 2, 3, 4

2. Жасыңыз нешеде? Санды жазыңыз

3. Сіздің оқып жатқан бағдарламаңызды таңдаңыз: бастауыш мұғалімі, жаратылыстану (орта мектеп), математика (орта мектеп), тілдер мұғалімі (орта мектеп), гуманитарлық пән мұғалімі (орта мектеп), дене шынықтыру, басқа (белгілеңіз)

4. Оқу тілін таңдаңыз: Қазақ, Русский

5. Сіз қай жерде өстіңіз? Ауылды аймақта Қалалық аймақта

6. Сіз оқып жатқан университетті таңдаңыз. 17 университеттердің тізімі.

7. Мұғалімдік сіздің бірінші таңдауыңыз (мамандық) болды ма? Иә Жоқ

8. Мұғалім боламын деген ой сізге қашан келді: бастауыш мектепте, орта мектепте, колледж/жоғары білім алу барысында, жұмыста

9. Университет бітіргеннен кейін білім беру саласында жұмыс істейсіз бе? Иә, жоқ

Part 2:

В Бөлімі – Әсер ететін факторлар

Төменде орналасқан әр тұжырымның 1-ден (сіздің шешіміңіз үшін мүлдем маңызды емес) 7-ге (сіздің шешіміңізге өте маңызды) дейін СІЗДІҢ мұғалім боламын

деген шешіміңізге әсерін бағалаңыз. Әр тұжырым үшін ең жақсы сипаттама беретің санды таңдаңыз.

“Мен мұғалім болғым келді, өйткені … ”

		толықтай маңызды емес						өте маңызды	
B1.	Маған үйрету қызықты	1	2	3	4	5	6	7	B1.
B2.	Жартылай мұғалім ретінде жұмыс жасау (ставка) отбасыма көбірек уақыт бөлуге жағдай жасайды	1	2	3	4	5	6	7	B2.
B3.	Достарым менің мұғалім болғанымды дұрыс деп ойлайды	1	2	3	4	5	6	7	B3.
B4.	Мұғалім ретінде менің көбірек демалу күндерім болады	1	2	3	4	5	6	7	B4.
B5.	Менде сапалы мұғалімнің қасиеттері бар	1	2	3	4	5	6	7	B5.
B6.	Мұғалімдік маған қоғамға қызмет ету мүмкіншілігін береді	1	2	3	4	5	6	7	B6.
B7.	Мен әрдайым мұғалім болғым келген	1	2	3	4	5	6	7	B7.
B8.	Мұғалімдік шетелде жұмыс жасауға мүмкіндік береді	1	2	3	4	5	6	7	B8.
B9.	Мұғалімдік балалардың/жасөспірімдердің құндылықтарын қалыптастыруға мүмкіндік береді	1	2	3	4	5	6	7	B9.
B11.	Мен қандай мамандықты қалайтынымды білмедім	1	2	3	4	5	6	7	B11.
B12.	Маған үйрету ұнайды	1	2	3	4	5	6	7	B12.
B13.	Мен балаларға/жасөспірімдерге байланысы бар мамандықты қаладым	1	2	3	4	5	6	7	B13.
B14.	Мұғалімдік тұрақты мансап жолын ұсынады	1	2	3	4	5	6	7	B14.
B16.	Сабақ беру үдерісі отбасылық жауапкершілікпен жақсы үйлеседі	1	2	3	4	5	6	7	B16.
B17.	Менің шабыт алатын мұғалімдерім болды	1	2	3	4	5	6	7	B17.
B18.	Мұғалім ретінде менің жұмыс күнім қысқа болады	1	2	3	4	5	6	7	B18.
B19.	Менің мұғалімдік қабілетерім бар	1	2	3	4	5	6	7	B19.
B20.	Мұғалімдер қоғамға сапалы үлес қосады	1	2	3	4	5	6	7	B20.
B22.	Мұғалімдік квалификация кез келген жерде керек болады	1	2	3	4	5	6	7	B22.
B23.	Мұғалім мамандығы келешек ұрпаққа әсер етуге мүмкіндік береді	1	2	3	4	5	6	7	B23.
B24.	Отбасымның айтуы бойынша, мен мұғалім болуым керек	1	2	3	4	5	6	7	B24.
B26.	Мен негізгі бағыт бала/жасөспірім болған ортада жұмыс істегім келеді	1	2	3	4	5	6	7	B26.
B27.	Мұғалімдік тұрақты табысты (айлықты) қамтамасыз етеді	1	2	3	4	5	6	7	B27.
B29.	Мектептің демалыс күндері отбасылық міндеттеріммен үйлеседі	1	2	3	4	5	6	7	B29.
B30.	Менің үлгі алатын жақсы мұғалімдерім болды	1	2	3	4	5	6	7	B30.
B31.	Мұғалімдік қоғамға ‘қайтарым жасауға’ мүмкіндік береді	1	2	3	4	5	6	7	B31.
B35.	Мені бірінші таңдаған мамандығым қабылдамады	1	2	3	4	5	6	7	B35.
B36.	Мұғалімдік әлеуметтік жағдайы төмен жастардың ұмтылысын көтеруге мүмкіндік береді	1	2	3	4	5	6	7	B36.
B37.	Маған балалармен/жасөспірімдермен жұмыс істеген ұнайды	1	2	3	4	5	6	7	B37.
B38.	Мұғалімдік сенімді жұмысқа айналады	1	2	3	4	5	6	7	B38.

B39.	Менің жағымды (жақсы) оқу тәжірибем болды	1 2 3 4 5 6 7	B39.
B40.	Бірге жұмыс істеген адамдардың айтуы бойынша, мен мұғалім болуым керек	1 2 3 4 5 6 7	B40.
B43.	Мұғалімдік менің қабілеттіріме сай мамандық	1 2 3 4 5 6 7	B43.
B45.	Мұғалім мамандығы маған қай жерде тұрғым келетіндігін таңдауға жағдай жасайды	1 2 3 4 5 6 7	B45.
B48.	Соңғы үміт еткен мамандық ретінде мұғалімдікті таңдадым	1 2 3 4 5 6 7	B48.
B49.	Мұғалімдік әлеуметтік жағдайы әлсіздерге көмектесуге мүмкіндік жасайды	1 2 3 4 5 6 7	B49.
B53.	Мұғалімдік балаларға/жасөспірімдерге әсер етуге мүмкіндік береді	1 2 3 4 5 6 7	B53.
B54.	Мұғалімдік әлсіз әлеуметтік жағдайға қарсы жұмыс істеуге мүмкіндік береді	1 2 3 4 5 6 7	B54.

С Бөлімі – Мұғалімдікке қатысты пікірлер

Төмендегі әр сұрақты оқып, қаншалықты келісетіндігіңізді бағалаңыз.

Әр сұрақ үшін сіздің келісетіндігіңізді жақсы сипаттайтын 1-ден (мүлде келіспеймін) 7-ге дейінгі (толығымен келісемін) санды таңдаңыз.

		мүлде келіспеймін толығымен келісемін	
C1.	Сіздің ойыңызша, мұғалімдік жақсы төленетін мамандық па?	1 2 3 4 5 6 7	C1.
C2.	Сіздің ойыңызша, мұғалімдер көп жұмыс істейді ме (жұмыстың көптігі)?	1 2 3 4 5 6 7	C2.
C3.	Сіздің ойыңызша, мұғалімдер жақсы жалақы алады ма?	1 2 3 4 5 6 7	C3.
C4.	Сіз мұғалімдерді кәсіпқой маман ретінде қабылдайтынына сенесіз бе?	1 2 3 4 5 6 7	C4.
C5.	Сіз мұғалімдерде жоғары дәрежедегі әдеп/ ақылақ бар деп ойлайсызба?	1 2 3 4 5 6 7	C5.
C7.	Сіздің ойыңызша, мұғалімдік эмоцияны көп талап ететін жұмыс па (эмоция жағынан қиын/қатал)?	1 2 3 4 5 6 7	C7.
C8.	Сіз мұғалімдік жоғары мәртебелік мамандық ретінде қабылданады дегенге сенесіз бе?	1 2 3 4 5 6 7	C8.
C9.	Қоғамда мұғалімдер өзін бағалы сезінеді деп ойлайсыз ба?	1 2 3 4 5 6 7	C9.
C10.	Мұғалімдік (оқыту/білім беру) саласында жоғары (эксперттік білім) білімді талап етеді ме?	1 2 3 4 5 6 7	C10.

C11.	Сіздің ойыңызша, мұғалімдік қиын жұмыс па?	1 2 3 4 5 6 7	C11.
C12.	Мұғалімдік құрметтелетін мамандық деп ойлайсыз ба?	1 2 3 4 5 6 7	C12.
C13	Сіздің ойыңызша, мұғалімдер мамандығын жоғары мәртебеге ие деп ойлайды ма?	1 2 3 4 5 6 7	C13
C14.	Сіздің ойыңызша, мұғалімдік (оқыту/білім беру) жоғары техникалық білімді талап етеді ме?	1 2 3 4 5 6 7	C14.
C15	Сіз мұғалімдерге жоғары мамандырылған білім қажет деп ойлайсыз ба?	1 2 3 4 5 6 7	C15

D Бөлімі – СІЗДІҢ мұғалім боламын деген шешіміңіз

Төмендегі әр сұрақтың қаншалықты дұрыс екендігін бағалаңыз, 1-ден (мүлде жоқ) 7-ге дейін (өте). Әр сұрақ үшін сіздің келісетіндігіңізді жақсы сипаттайтын санды таңдаңыз.

		мүлде жоқ						өте	
D1.	Мұғалім боламын деп қаншалықты мұқият ойландыңыз?	1	2	3	4	5	6	7	D1.
D2.	Сізге мұғалімдіктен басқа жұмыспен айналысуға ұсыныстар келді ме?	1	2	3	4	5	6	7	D2.
D3.	Мұғалім боламын деген таңдауыңызға қаншалықты қанағаттанасыз?	1	2	3	4	5	6	7	D3.
D4.	Басқа адамдар сізге таңдаған мамандығыңыз мансаптық тұрғыдан жақсы шешім емес деп айтты ма?	1	2	3	4	5	6	7	D4.
D5.	Мұғалім боламын деген таңдауыңызға қаншалықты разысыз?	1	2	3	4	5	6	7	D5.
D6.	Басқа мамандық туралы ойлауыңызға адамдар әсер етті ме?	1	2	3	4	5	6	7	D6.

Е бөлімі – Ер азаматтарды мамандыққа тарту

Төменде орналасқан әр тұжырымның 1-ден (мүлдем керек емес) 7-ге (өте керек) дейін сіздің ойыңызша ер адамдарды мамандыққа тарту үшін керектігін бағалаңыз. Әр тұжырым үшін ең жақсы сипаттама беретің санды таңдаңыз.

Мұғалім мамандығы ер азаматтарға тартымдырақ болуы үшін төмендегі тұжырымдардың қайсысы орындалуы тиіс деп ойлайсыз: (1 толығымен келіспеймін, 7 толығымен келісемін)

1. Жалақыны (еңбекақы) көтерсе (барлық мұғалімдерге, ерлерге де әйелдерге де)

2. Жетекшілік/басқарушылық лауазым саны көбірек болса

3. Мұғалім мамандығының мәртебесі көтерілсе

4. Мұғалімдік/оқыту және мұғалім гендері (жынысы) туралы әлеуметте ағат пікірі төменірек/әлсіздеу болса

5. Оқытуда ерлердің артықшылығы болса

6. Мұғалім мамандығында бәсекелестік көбірек болса (жоғары талаптар, басқа мұғалімдермен бәсекелсіп олардан озық болу керектігі)

7. Мектеп деңгейінде кәсіби бағдар жұмысы мұғалім мамандығын жақсырақ түсіндірсе

8. Мұғалім мамандығын ер азаматтарға тартымдырақ болуы үшін басқа жолдары ойыңызға келді ме? (төменге жазыңыз):

Russian

Part 1:

1. Выберите обучения (курс) 1, 2, 3, 4

2. Сколько вам лет? Укажите число

3. Выберите программу на которой вы обучаетесь Начальные классы, Учитель предмета естественных наук (средняя школа), Учитель математики (средняя школа), Учитель языков (средняя школа), Учитель предмета гуманитарного цикла (средняя школа), Учитель физической культуры, другое (пожалуйста уточните)

4. Выберите язык обучения Қазақ, Русский

5. Откуда вы родом? Сельская местность, городская местность

6. Выберите ваш университет. Список из 17 университетов.

7. Была ли профессия учителя вашим выбором номер 1? Да, нет

8. Когда вы решили стать учителем? когда учились в начальных классах, средней школе, колледже/университете, на работе

9. Собираетесь ли вы работать в сфере образования после завершения вашего обучения? Да, нет

Part 2:

Часть В – Факторы воздействия

Для каждого высказывания ниже оцените насколько оно было важным для ВАШЕГО решения стать учителем, от 1 (совсем не важно для принятия решения) до 7 (очень важно для принятия решения). Пожалуйста ВЫБЕРИТЕ число которое лучшим образом описывает важность каждого высказывания.

“Я хочу/хотел стать учителем потому что … ”

		совсем не важно						очень важно	
B1.	Мне интересно учительство/преподавание	1	2	3	4	5	6	7	B1.
B2.	Неполная занятость учителя позволит уделять больше времени семье	1	2	3	4	5	6	7	B2.
B3.	Мои друзья думают, что я должен стать учителем	1	2	3	4	5	6	7	B3.
B4.	Как у учителя у меня будут продолжительные каникулы/отпуск	1	2	3	4	5	6	7	B4.
B5.	У меня есть качества хорошего учителя	1	2	3	4	5	6	7	B5.
B6.	Преподавание/учительство позволит мне служить обществу	1	2	3	4	5	6	7	B6.
B7.	Я всегда хотел стать учителем	1	2	3	4	5	6	7	B7.
B8.	Преподавание/учительство может дать мне шанс работать зарубежом	1	2	3	4	5	6	7	B8.
B9.	Преподавание/учительство позволит мне формировать ценности детей/подростков	1	2	3	4	5	6	7	B9.
B11.	Я был неуверен какую профессию/карьеру я хотел	1	2	3	4	5	6	7	B11.
B12.	Мне нравится преподавать/учительство	1	2	3	4	5	6	7	B12.
B13.	Я хочу работу которая включает работу с детьми/подростками	1	2	3	4	5	6	7	B13.
B14.	Преподавание/учительство дает стабильную карьеру	1	2	3	4	5	6	7	B14.

B16.	Часы преподавания/учительства согласуются с обязанностями, связанными с семьей	1 2 3 4 5 6 7	B16.
B17.	У меня были мотивирующие учителя	1 2 3 4 5 6 7	B17.
B18.	В качестве учителя у меня будет короткий рабочий день	1 2 3 4 5 6 7	B18.
B19.	У меня хорошие навыки преподавания/учителя	1 2 3 4 5 6 7	B19.
B20.	Учителя делают достойный общественный вклад	1 2 3 4 5 6 7	B20.
B22.	Квалификация учителя признается везде	1 2 3 4 5 6 7	B22.
B23.	Преподавание/учительство позволит мне влиять на следующее поколение	1 2 3 4 5 6 7	B23.
B24.	Моя семья думает что я должен быть учителем	1 2 3 4 5 6 7	B24.
B26.	Я хочу работать в среде с детьми/подростками	1 2 3 4 5 6 7	B26.
B27.	Учительство/преподавание обеспечит стабильный заработок	1 2 3 4 5 6 7	B27.
B29.	Школьные выходные подходят для семейных обязательств	1 2 3 4 5 6 7	B29.
B30.	У меня были хорошие учителя в качестве образца для подражания	1 2 3 4 5 6 7	B30.
B31.	Преподавание/учительство позволяет мне ‘возвращать/давать обратно’ обществу	1 2 3 4 5 6 7	B31.
B35.	Меня не взяли на профессию которую я выбрал изначально	1 2 3 4 5 6 7	B35.
B36.	Преподавание/учительство позволит мне повысить амбиции непривилигерованной молодежи	1 2 3 4 5 6 7	B36.
B37.	Мне нравится работать с детьми/подростками	1 2 3 4 5 6 7	B37.
B38.	Учительство/преподавание будет надежной профессией	1 2 3 4 5 6 7	B38.
B39.	У меня был хороший (позитивный) опыт обучения	1 2 3 4 5 6 7	B39.
B40.	Люди, с которыми я работал, думают что я должен быть учителем	1 2 3 4 5 6 7	B40.
B43.	Преподавание/учительство является профессией подходящей к моим навыкам	1 2 3 4 5 6 7	B43.
B45.	Работа учителя позволит мне выбрать где я хочу жить	1 2 3 4 5 6 7	B45.
B48.	Я выбрал преподавание/учительство в качестве крайней/последней профессии	1 2 3 4 5 6 7	B48.
B49.	Преподавание/учительство позволит мне помогать социально неблагополучным	1 2 3 4 5 6 7	B49.
B53.	Преподавание/учительство позволит мне вилять на детей/подростком	1 2 3 4 5 6 7	B53.
B54.	Преподавание/учительство позволит мне противостоять социальному неблагополучию/уязвимости	1 2 3 4 5 6 7	B54.

Часть С – Убеждения о преподавании/учительстве

Для каждого вопроса ниже, пожалуйста оцените до какой степени ВЫ согласны с ним, от 1 (совсем нет) до 7 (очень). Пожалуйста ВЫБЕРИТЕ число которое наилучшим образом описывает ваше согласие с каждым вопросом

		совсем нет						очень	
C1.	Как вы думаете преподавание/учительство хорошо оплачивается?	1	2	3	4	5	6	7	C1.
C2.	Как вы думаете у учителей большой обьем работы?	1	2	3	4	5	6	7	C2.
C3.	Как вы думаете учителя зарабатывают хорошо?	1	2	3	4	5	6	7	C3.
C4.	Верите ли вы что учителя воспринимаются как профессионалы?	1	2	3	4	5	6	7	C4.
C5.	Как вы думаете имеют ли учителя высокие моральные ценности?	1	2	3	4	5	6	7	C5.
C7.	Как вы думаете преподавание/учительство требует эмоциональных усилий?	1	2	3	4	5	6	7	C7.
C8.	Верите ли вы что преподавание/учительство воспринимается в качестве профессии с высоким статусом?	1	2	3	4	5	6	7	C8.
C9.	Как вы думаете учителя чувствуют что они ценятся обществом?	1	2	3	4	5	6	7	C9.
C10.	Как вы думаете преподавание/учительство требует высокий уровень экспертных знаний?	1	2	3	4	5	6	7	C10.
C11.	Как вы думаете преподавания/учительство это сложная/тяжелая работа?	1	2	3	4	5	6	7	C11.
C12.	Верите ли вы что учитель это уважаемая профессия?	1	2	3	4	5	6	7	C12.
C13	Как вы думаете учителя чувствуют что их профессия имеет высокий статус?	1	2	3	4	5	6	7	C13
C14.	Как вы думаете учителям необходимо иметь высокий уровень технических знаний?	1	2	3	4	5	6	7	C14.
C15	Как вы думаете учителям необходимо иметь узко специлизированные знания?	1	2	3	4	5	6	7	C15

Часть D – Ваше решение стать учителем

Для каждого вопроса ниже, пожалуйста выбери то что подходит ВАМ, 1 (совсем нет) to 7 (очень). Пожалуйста ВЫБЕРИТЕ число которое лучше всего описывает ваше мнение для каждого вопроса.

		совсем нет						очень	
D1.	Как тщательно вы думали о том чтобы стать учителем?	1	2	3	4	5	6	7	D1.
D2.	Мотивировали ли вас попробывать другую профессию кроме учительства?	1	2	3	4	5	6	7	D2.

D3.	Насколько вы удовлетворены вашим выбором стать учителем?	1 2 3 4 5 6 7	D3.
D4.	Говорили ли вам другие люди что учительство это не самый хороший выбор профессии?	1 2 3 4 5 6 7	D4.
D5.	Насколько вы счастливы вашим решением стать учителем?	1 2 3 4 5 6 7	D5.
D6.	Влияли ли другие люди на вас чтобы вы подумали о других профессиях кроме учительства?	1 2 3 4 5 6 7	D6.

Часть Е – Привлечение мужчин в профессию

Для каждого высказывания ниже оцените насколько оно необходимо для привлечение большего числа мужчин в профессию учителя, от 1 (полностью несогласен) до 7 (полностью согласен). Пожалуйста ВЫБЕРИТЕ число которое лучшим образом описывает необходимость каждого высказывания

Я думаю преподавание (карьера учителя) будет более привлекательна для мужчин если (1 полностью несогласен, 7 полностью согласен)

1. Увеличат заработную плату (всем, не только мужчинам)

2. Будет больше лидерских (управленческих) должностей

3. Статус профессии будет выше

4. Общество будет менее предвзято об учительстве (преподавании) и гендерной пренадлежности учителя (м/ж)

5. Будет привелегия для мужчин

6. Будет больше конкуренции в профессии (более высокие требования, необходимость быть лучше чем другие)

7. Профессиональная ориентация в школе будет лучше обьяснять профессию учителя

8. Можете ли вы подумать о других возможных способах привлечения мужчин в профессию учителя? (пожалуйста напишите внизу):

Appendix D: Items per Factors and Beliefs Distribution

Factor	Items	Anchors
Ability to teach	I have the qualities of a good teacher I have good teaching skills Teaching is a career suited to my abilities	1 (not at all important), to 7 (extremely important)
Intrinsic	I am interested in teaching I've always wanted to be a teacher I like teaching	
Fallback	I was unsure of what career I wanted I was not accepted into my first-choice career I chose teaching as a last-resort career	
Job security	Teaching will offer a steady career path Teaching will provide a reliable income Teaching will be a secure job	
Time for family	Part-time teaching could allow more family time As a teacher I will have lengthy holidays Teaching hours will fit with the responsibilities of having a family As a teacher I will have a short working day School holidays will fit in with family commitments	
Job transferability	Teaching may give me the chance to work abroad A teaching qualification is recognised everywhere A teaching job will allow me to choose where I wish to live	
Shape future	Teaching will allow me to shape child/adolescent values Teaching will allow me to influence the next generation Teaching will allow me to have an impact on children/adolescents	
Social equity	Teaching will allow me to raise the ambitions of underprivileged youth Teaching will allow me to benefit the socially disadvantaged Teaching will allow me to work against social disadvantage	
Social contribution	Teaching allows me to provide a service to society Teachers make a worthwhile social contribution Teaching enables me to 'give back' to society	

Work with children/adolescents	I want a job that involves working with children/adolescents I want to work in a child/adolescent-centred environment I like working with children/adolescents	
Prior T&L	I have had inspirational teachers I have had good teachers as role-models I have had positive learning experiences	
Social influence	My friends think I should become a teacher My family think I should become a teacher People I've worked with think I should become a teacher	
Beliefs	Items	Anchors
Expertise	Do you think teaching requires high levels of expert knowledge? Do you think teachers need high levels of technical knowledge? Do you think teachers need highly specialised knowledge?	1 (not at all), to 7 (extremely)
Difficulty	Do you think teachers have a heavy workload? Do you think teaching is emotionally demanding? Do you think teaching is hard work?	
Social status	Do you believe teachers are perceived as professionals? Do you think teachers have high morale? Do you believe teaching is perceived as a high-status occupation? Do you think teachers feel valued by society? Do you believe teaching is a well-respected career? Do you think teachers feel their occupation has high social status?	
Salary	Do you think teaching is well paid? Do you think teachers earn a good salary?	
Social dissuasion	Were you encouraged to pursue careers other than teaching? Did others tell you teaching was not a good career choice? Did others influence you to consider careers other than teaching?	
Satisfaction with choice	How carefully have you thought about becoming a teacher? How satisfied are you with your choice of becoming a teacher? How happy are you with your decision to become a teacher?	

Appendix E: MANOVAs p-values and Bonferroni Adjustment

Factor	Major		Instruction language		Living area	
	Raw p value	Adjusted p value	Raw p value	Adjusted p value	Raw p value	Adjusted p value
Ability to teach	0.002593	0.04667400	0.04216	0.758880000	0.42	1.000000
Intrinsic	0.0001943	0.00349740	0.02033	0.365940000	0.6949	1.000000
Fallback	0.003811	0.06859800	0.0001469	0.002692800	0.3701	1.000000
Job security	0.02315	0.41670000	0.04757	0.856260000	0.9276	1.000000
Time for family	0.0004367	0.00786060	9.253e-05	0.001665540	0.2482	1.000000
Job transferability	0.00457	0.08226000	0.4818	1.000000000	0.04633	0.83394
Shape future	0.01766	0.31788000	0.0009105	0.016389000	0.8015	1.000000
Social equity	0.1738	1.00000000	0.006705	0.120690000	0.8704	1.000000
Social contribution	0.002833	0.05099400	1.064e-06	0.000019152	0.9178	1.000000
Work with children/adolescents	0.002245	0.04041000	0.00126	0.022680000	0.409	1.000000
Prior T&L	9.138e-06	0.000164484	0.0004017	0.007230600	0.8954	1.000000
Social influence	0.003308	0.059544000	1.19e-06	0.000021420	0.7719	1.000000
Expertise	0.01952	0.351360000	2.839e-05	0.000511020	0.2722	1.000000
Difficulty	0.0003394	0.006109200	0.02699	0.485820000	0.9727	1.000000
Social status	0.002514	0.045252000	0.03934	0.708120000	0.7397	1.000000
Salary	0.01227	0.220860000	0.3626	1.000000000	0.01634	0.29412
Social dissuasion	0.2908	1.000000000	0.02285	0.411300000	0.07293	1.000000
Satisfaction with choice	0.1873	1.000000000	0.1217	1.000000000	0.6662	1.000000