Gender and Education in Central Asia

Edited by Aliya Kuzhabekova
Naureen Durrani · Zumrad Kataeva

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Preface

This edited volume was created with the purpose to highlight current research and issues related to gender in education in Central Asia, as well as to bring together emerging and more experienced scholars from within and from outside the region in a dialogue about the emerging issues and research ideas. The countries covered in the volume include Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan. The book includes empirical and analytical explorations using a variety of methodological approaches and theoretical frameworks, which emerged locally or came from other country contexts. Although the studies explored the experiences of women at different levels of education as students, educators, and leaders, as well as the construction of gender in formal education in the context of Central Asia, the methodological, theoretical, and empirical implications from the studies will be relevant for scholars of gender equality in countries outside the region. Educational inequality and employment discrimination in the education sector along gender lines continue to persist globally to a different extent; and, despite Central Asia's peculiarities related to the post-Soviet legacies and unique cultural views on gender, many factors contributing to gender inequality in education in the region are similar to those in other country contexts. Therefore, the authors hope that the book will stir new discussions and will equip researchers, practitioners, and policymakers in the region and

beyond with new conceptualizations and approaches to exploring and addressing the issues of access and equity with respect to gender in education.

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Notes on Contributors

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Zhazira Bekzhanova is a lecturer at Aktobe Regional Zhubanov University and a research assistant at Nazarbayev University in a project on gender and schooling in Kazakhstan. Her research interests include sociolinguistics, discourse studies with the focus on social (in)equalities.

Naureen Durrani is a Professor in Education at the Graduate School of Education, Nazarbayev University (NU) where she also serves as the Director at the Central Asian Research Centre for Educational Innovation and Transformation (CARCEIT). She directs the Central Asia hub of the PEER Network, which aims to support research expertise in the political economy of education in Central Asia and Africa. Before joining NU, she worked at the Centre for International Education, University of Sussex, and has also held research and teaching positions at Northumbria University, the University of Central Lancashire, and the University of Peshawar. Her research interests lie in the social, cultural, political, and economic influences on education policy formulation and enactment and the outcomes of education on identity formation and social relations. She co-authored the book, Troubling Muslim Youth Identities: Nation, Religion, Gender, which is a comparative study of youth identity formations in four Muslim majority postcolonial contexts—Pakistan, Senegal, Lebanon, and Nigeria. Her recent research focuses on Kazakhstan and explores the relationship between gender and schooling, gender mainstreaming in higher education, the role of education in empowering women entrepreneurs, and the ongoing impact of COVID-19 on education.

Emma Harden-Wolfson is an Assistant Professor in the Faculty of Education at McGill University, Canada. She is an international and comparative higher education policy specialist with regional specializations in Central Asia, Canada, Europe, and Latin America. Over the last two decades, Emma has worked in higher education research, teaching, policy analysis, and university administration across four continents. Prior to joining McGill, Emma was Head of Research and Foresight at UNESCO's International Institute for Higher Education in Latin America and the Caribbean. Emma's research on higher education uses a range of qualitative methods to explore how and why education policy changes across contexts and the implications of policy change and reform.

Zumrad Kataeva is an Assistant Professor at the Nazarbayev University Graduate School of Education, Kazakhstan. She holds a Ph.D. in Studies

in Higher Education from the University of Kentucky, USA, where she also held research and teaching positions. Prior to her current appointment, she worked at the Institute of Education of the National Research University Higher School of Economics, Moscow, Russia, where she was a part of the international project on 25 Years of Transformations of Higher Education in Post-Soviet Countries. Dr. Kataeva is an alumnus of the Doctoral Fellowship Program of the Open Society Foundations and served as a consultant for the United Nations Development Program (UNDP), UNICEF, and the World Bank. Her research interests lie in comparative and international higher education, with a particular focus on gender equality in higher education, international academic profession, higher education governance, and educational policy. Her recent projects focus on the enactment of gender mainstreaming policies in higher education, the relationship between gender and schooling, gender inequalities in STEM fields, and reforms in the governance of higher education institutions. She has a track record of publishing in leading journals and books on higher education in Central Asia and other post-Soviet countries.

Aliya Kuzhabekova is an Assistant Professor in Leadership, Policy, and Governance specialization at the Werklund School of Education. Dr. Kuzhabekova has extensive experience as a faculty member, administrator, and scholar in international and Canadian contexts. Upon graduation from Ph.D. in Higher Education Policy and Administration, Aliya was a Postdoctoral Scholar at the Centre for Science, Technology and Public Policy in her alma mater in the U.S. She then worked as an Assistant and then Associate Professor of Higher Education Leadership at Nazarbayev University in Kazakhstan, where she became a recognized scholar in international education and higher education reform in post-Soviet Central Asia. She has produced a number of publications on such topics as 1) research capacity building in higher education in transitional contexts, doctoral education reform, and researcher development; 2) internationalization and international mobility (faculty mobility, mobility of graduate students, immigrant student experiences); 3) equity issues in higher education (women in higher education leadership, women and international mobility, women in STEM fields). Aliya has supervised over 30 Master's and graduate students, many of whom were non-native speakers of English. She has managed 10 funded research projects, including grants from the Ministry of Education of Kazakhstan, Norwegian Institute

for International Affairs, and Social Sciences and Humanities Research Council of Canada (Insight grant and Partnership Engage grant).

Aknur Orazova originally from Turkmenistan, is a Fulbright alumna who recently completed her MSc in Child, Youth, and Family Studies at the University of Nebraska-Lincoln. Her final project focused on developing a reporting tool to help parents support their child's language development. Aknur's research interests include positive parenting and how it results in child development. She plans to continue studying parenting culture, with a focus on how parental well-being influences a child's language and overall development and educational outcomes.

Lyazzat Shakirova is pursuing a Ph.D. in Higher Education at the Ontario Institute for Studies in Education, University of Toronto, Canada, focusing on Comparative, International, and Development Education, particularly in Central Asia. Over a decade Lyazzat has held various administrative roles in higher education and education statistics in Kazakhstan. She participated in a project aimed at harmonizing Kazakhstan's national education statistics with the International Standard Classification of Education (ISCED) of the UNESCO Institute for Statistics (UIS) and was responsible for providing data on Kazakhstan's education system to the UIS.

Almira Tabaeva is a Ph.D. candidate and a research assistant for the CARE (Central Asian Research Ethics) project at Nazarbayev University, Graduate School of Education, Kazakhstan. She is also a committee member of the Consortium of Gender Scholars. During her Master's degree at Pune University in India, she studied feminism, comparing the traditions and cultures of South Asian and Central Asian women. Almira's research interests encompass gender issues and visual creative arts in Central Asia, with a particular focus on Uzbekistan, approached through postcolonial and decolonial perspectives.

Christopher Whitsel is a Professor of Sociology at the Department of Sociology and Anthropology, North Dakota State University, USA. He has a Ph.D. degree from Indiana University. His research focus has been education and inequality of access in post-Soviet Central Asia. More specifically, his work highlights barriers that families face in sending their children to school and the ways that community differences constrain their decisions. In addition to his academic endeavors, Dr. Whitsel has worked with international organizations like UNICEF-Tajikistan on

projects about social aspects of poverty and the Soros Foundation on projects with early childhood education in Tajikistan.

Parvina Yakubova is a Research Project Analyst Lead at the Center for Health Policy at the University of Missouri. She has a Master's in Sociology and Anthropology from North Dakota State University and another Master's in Public Health from the University of Missouri. Parvina's research in education focused on the exploration of the effects of traditional gender roles on the fate of girls' education in Tajikistan.

Abbreviations and Acronyms

ADB	Asian Development Bank
CA	Central Asia
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CEECIS	Central, Eastern Europe and the Commonwealth of Independent States
COVID-19	Coronavirus Disease 2019
DSM	Doctoral Student Mothers
EU	European Union
FTE	Full-Time Equivalent
GBAO	Gorno-Badakhshan Autonomous Oblast' (Region)
GCF	Global Challenges Fund
GDI	Gender Development Index
GDP	Gross Domestic Product
GEGGI	Global Equality and Global Governance Index
GGGI	Global Gender Gap Index
GII	Gender Inequality Index
HEI	Higher Education Institution
ILO	International Labor Organization
IMF	International Monetary Fund
LFS	Labour Force Survey
LGBTI+	Lesbian, Gay, Bisexual, Transgender, Intersex and others
MGIEP	Mahatma Gandhi Institute of Education for Peace and Sustainable Development
MoE	Ministry of Education
NEET	Not in Employment, Education or Training

NGO	Non-Government Organization
SDG	Sustainable Development Goals
STEM	Science, Technology, Engineering, and Mathematics
TAJSTAT	Agency on Statistics under the President of the Republic of Tajikistan
UN	United Nations
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCO IES	United Nations Educational, Scientific and Cultural Organization Institute for Educational Statistics
UNESCO IESALC	United National Educational, Scientific and Cultural Organization InternationalInstitute for Higher Education in Latin America and the Caribbean
UNICEF	United Nations Children's Fund
USSR	Union of Soviet Socialist Republics
UzStat	Uzbekistan Statistics

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Introduction

Situating Gender and Education in Central Asia: An Introduction

Aliya Kuzhabekova, Naureen Durrani, and Zumrad Kataeva

This edited volume is devoted to a comparative analysis of gender equality in Central Asia. The region is comprised of five post-Soviet countries—Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, and Tajikistan, which became independent from the Soviet Union in 1991. These countries share common historical and linguistic roots and neighbor one another in the landlocked area in the center of Eurasia. The countries are multiethnic with a dominant Muslim majority and a significant share of youth in the total composition of the population. They vary in the level of economic development with Kazakhstan being the richest and Tajikistan being the

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poorest among the five (Tabaeva et al., 2021). The countries have inherited a well developed educational system from the Soviet Union and at the start of independence had strong legacies of the Soviet gender equality promoting policies.

Due to the presence of similarities and differences between the Central Asian countries, the region is an interesting context for comparative analysis of gender equality in education. Such an analysis would provide useful insights into how variations in gender equality might be explained by differences in economic, social, and cultural contexts across the countries, as well as reveal some common features of the country contexts, which might explain similarities in gender-related issues, norms, and policies. Moreover, the comparative study would bring an important contribution for global scholarship of gender in education. Despite the uniqueness of the context, the region shares some similarities with both the Global North and the South. Like the Global North, the region exhibits nearly universal access to schools, with the teaching profession largely feminized. Yet at the same time, these countries are young nation-states involved in constructing and consolidating their national identities which is a gendered process globally but more so in emerging nations.

Gender equality has been one of the main priorities in educational reform in Central Asia for over a century. The region's pursuit of a better condition for women and girls both in education and in other spheres of social and economic life is as old as that in the West and other countries of the world. Interestingly, throughout most of the history of the region, the concern about gender equality has been fueled, to a larger extent, by a variety of external players rather than by local activists. Recently, however, the increase in socio-economic differentiation across the region, as well as the accompanying revival of traditional and Islamic beliefs and practices, have led to the worsening of the situation with women's rights. This contributed to the awakening of local activism and scholarship, which was concerned about the declining situation with gender equality in education and other spheres of social life. Gender equality will most likely continue to be an important item on the education reform agenda in the region.

The first efforts at expanding women's access to education and other human rights date back to the beginning of the twentieth century during the first achievements of the women's suffrage movement in Europe. These achievements were reincarnated in the Bolshevik's women's rights agenda in pre-revolutionary Tsarist Russia, whose struggle for women's liberalization, educational opportunities, and universal voting rights,

together with the struggle for access to capital for peasantry and factory workers played a pivotal role in the October revolution, the fall of Tsarism and, eventually, the creation of the Soviet Union. As the Soviet leadership tried to maintain imperial Russia's grip on Central Asia, the problematization of gender became an important tool in the recolonizing discourse of the Soviets. This facilitated the framing of the traditional social structures in Central Asia as patriarchal and backward and the valorization of the educational reform efforts in the region as acts of civilizing modernization (Kennedy-Pipe, 2004).

With the declaration of independence from the Soviet Union in the early 1990s and the arrival of the new West-driven modernization project across Central Asian countries, gender has been re-problematized on the educational reform agenda in Central Asia. The Soviet achievements have been frequently and conveniently disregarded, while the reviving of traditional norms has been often and somewhat unjustifiably blamed for impeding progress toward the currently idealized Western achievements in gender equality in education and beyond. Central Asia countries are now part of international gender assessments (such as the Global Gender Index) and are committed participants of the UN's initiatives aimed at the elimination of discrimination against women and the achievement of gender equality around the world. Influenced by the Western liberal democratic agenda, gender equality in education has surfaced in the region's policy discourse for the first time, albeit in rather subtle and subdued ways.

Although to a different extent, women in the countries of the region continue to have less economic and political power, as well as experience greater rates of poverty, exploitation, marginalization, and violence. They are more likely than men to be unemployed. In 2022, the labor force participation rate of women stood at 48.5% for women as compared to that of men—64.3%. The gender wage gap is larger than the similar gap in other countries of the world: working women earn about 60% of what men earn in Tajikistan, 61% in Uzbekistan, 75% in the Kyrgyz Republic, and 78% in Kazakhstan (Proskuryakova & Seitz, 2023). Women are persistently underrepresented in the governments and leadership positions across the countries of the region. In 2022, the lowest female representation was found in the upper and lower houses of the Uzbekistan parliament (17% and 16%, respectively) and the upper house of Kazakhstan (10%) (UNICEF, 2022). Finally, 18% of women in Central Asia have reported being victims of domestic violence in 2023 (Paramo et al.,

2023). The deteriorating state of gender equality in the region can be attributed to increasing socio-economic disparities, declining educational quality, and the resurgence of patriarchal traditional and Islamic norms and practices, which have been brought about by economic liberalization at the expense of social support and associated policies. Unsurprisingly, Central Asia has recently seen an increase in domestically originating gender equality activism (Mattei, 2022). Although the situation with the rights of LGBTQ+ individuals is harder to assess in the absence of official statistics, gay activism is also present in some countries of the region (Amatbekova, 2023). Overall, gender will stay a key item of the socio-economic reform agenda in Central Asia for decades to come.

Gender equality remains a significant focus in the region's educational reform efforts. In some aspects, gender equality indicators in education are similarly low across the countries of the region, whereas, in other aspects, the region is very heterogeneous. For example, across all Central Asian countries, women are poorly represented in educational leadership at various levels, whereas in Kazakhstan women's representation in leadership surpasses the global trends (UNESCO Almaty, unpublished). In addition to that, they continue to be rather underrepresented as both faculty and students in science, technology, mathematics, and engineering fields (UNESCO Almaty, unpublished). On the other hand, in terms of rates of enrollment in postsecondary education, Kazakhstan and Kyrgyzstan have women outnumbering men, whereas the opposite is true for Uzbekistan and Tajikistan (UNESCO Almaty, 2021). On a similar note, the representation of female teachers at the tertiary level varies between 37% in Tajikistan to 66% in Kazakhstan (UNESCO Almaty, 2021). The variation in achievement on gender equity parameters is determined by a variety of socio-cultural and economic factors. Educators in the region are increasingly concerned about achieving greater equality in education.

Among Central Asian policymakers, there is a growing recognition that achieving gender equality in education plays a crucial role in advancing the more general goal of achieving greater gender equality in society. Concerning the rights of women and girls, for example, some of the cited benefits include the following:

1. Quality education that is inclusive and responsive to the diverse needs of all learners can help to break down gender stereotypes and promote gender equity in the rest of society.

2. Gender-equitable education is one of the best ways to empower women and girls, help them reach their full potential, and contribute to national economic growth as productive members of society.
3. Educated women and girls are more likely to be active and informed citizens, and to participate in social and political activities.
4. Girls' education has a multigenerational impact. Educated girls are more likely to educate their own children, breaking the cycle of poverty and inequality.
5. Gender-equitable education, which provides girls and boys with education on healthy relationships and gender equality, can help to reduce the risk of gender-based violence (Gray Group International, 2024).

The renewed attention to gender equality in education in the policy and practitioner circles has been accompanied by the growth in scholarly interest. Increasingly, studies on gender equality in education in Central Asia are conducted by emerging local scholars. In some country contexts, such as Kazakhstan, this research is now supported not only by external donors but also by domestic funding agencies. This research holds the promise of improving the existing understanding of the causes and extent of the gender equality-related problems in education, as well as producing innovative research approaches, and resulting policy and practical solutions. Much of this research remains sporadic, spread across institutions and research centers, and scattered across domestic and international publication venues in a variety of disciplines. In the absence of local scholarly societies, local scholars have issues connecting with their international counterparts and one another. The transformative capacity of this research is undermined by this lack of a common research agenda and systematic understanding of the regional research community specializing in the topic.

This book serves as a timely and pivotal contribution to the field of gender and education research in Central Asia, offering a foundational framework for comparative research on the ways the region's educational policies, contents, processes, and practices impact gender relations. Despite the growing body of educational (Hernández-Torrano et al., 2021) and gender studies research (Kataeva et al., 2023) in post-Soviet nations, including those in Central Asia, their global influence remains marginal in a global context. For instance, Hernández-Torrano et al.'s (2021) comprehensive review of educational research spanning

30 years (1992–2020) within post-Soviet regions revealed a mere 1.95% contribution to all education publications in the Web of Science Core Collection, with Central Asian nations collectively accounting for 4.2% of the total 6609 publications (p. 4). Similarly, Kataeva et al.'s (2023) analysis mapping gender studies literature from 1993 to 2021 in the Web of Science database illuminated the limited international visibility of gender studies publications within the region, which are predominantly found in local rather than global journals. Both studies underscore Kazakhstan's dominance in published research within these fields, overshadowing the other four Central Asian nations. Notably, Turkmenistan made a solitary contribution to both education (Hernández-Torrano et al., 2021) and gender research (Kataeva et al., 2023), reflecting the challenges researchers face in the country with limited civil liberties and firmer control of the state on knowledge production.

Moreover, there is a scarcity of comparative studies within the region concerning education (Li, 2019) and gender studies (Kamp, 2009), with limited integration between these disciplines. This lack of disciplinary interaction emphasizes the urgent necessity for scholarly dialogues at the intersection of education and gender studies from a comparative standpoint. This book, therefore, seeks to provide a comparative perspective on education and gender dynamics in the region, aiming to enrich our comprehension of education's role in social transformation and reproduction within Central Asia.

Furthermore, historically, gender studies within post-Soviet contexts have predominantly focused on gender and sex disparities among children and adolescents (Kataeva et al., 2023). Yet, the recent shift toward a heightened emphasis on gender and gender equality indicates a pivotal juncture in academic discourse. By fostering essential scholarly discussions and interactions within a broader gender conceptualization as a social construct, which entails "norms, behaviors, and roles associated with being a woman, man, girl, or boy, as well as relationships with each other" as opposed to "biological and physiological characteristics of females, males and intersex persons", which entail sex (World Health Organization, 2024), the book endeavors to illuminate critical insights for academic advancement and improving policy and practice.

The purpose of this book is to present the ongoing research on gender equality in education in Central Asia. The edited volume brings together established and emerging scholars from Central Asia and scholars conducting research on the region from the West to explore policies,

statistical trends, and representative research on gender equality in education across post-Soviet Central Asia. In particular, the book provides (1) an overview of the development of policies aimed at the promotion of gender equality in education adopted by the governments of Central Asian countries since the countries became independent from the Soviet Union; (2) a comparative summary of statistics on change in gender equality indicators at various levels of education in the four countries throughout three decades of independence; (3) a sample of current research on various issues related to gender equality in education across the region by scholars from the region and beyond. We cover all five countries in the region—Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan, although to a different extent. This difference in coverage is linked to the variation in the local research capacity, levels of the country's openness and participation in international gender-related indices, as well as the different extent of public access to the statistical data.

The book presents a broad picture of the state of gender equality in education, relevant policies, and research, which will be beneficial for (1) scholars of educational reform, comparative education policy, international development, and gender equality in the post-Soviet area and beyond, (2) practitioners, development experts, and policymakers in the field of education in the region and other transitional economies with similar issues, (3) students enrolled in courses in sociology of education, educational policy, comparative education, development studies, and gender studies at universities within the region, other post-Soviet countries and Global North institutions that focus on Central Asia and post-Soviet contexts. The book serves as the first attempt to provide a comprehensive comparative analysis of gender issues in education in the region.

Many chapters in the book are the result of collaborative efforts between established and emerging scholars, some of whom are our own students or alumni pursuing further education abroad or within the region. Our goal was to introduce the reader to the current research leaders on the topic, but also to give voice and offer training opportunity to local scholars entering the field, who will likely lead scholarship on the topic in the region. We believe that the voices of the emerging scholars are critical, especially considering that many come from the region and are women who have experienced gender inequality in their education and employment trajectories. Ensuring representation is crucial, as

Chankseliani (2017) points out that the majority of first authors of publications on post-Soviet countries are associated with institutions outside the region, and Waljee (2008) expresses concern that gender dynamics in Central Asia are predominantly studied by Western scholars. In contrast, the authors and editors of this volume are predominantly Central Asians. In the rare instances where they are not, they have either resided and worked extensively in the region or focused their studies on it at length. Thus, the book amplifies the marginalized indigenous perspectives within the uneven landscape of knowledge creation concerning Central Asia.

Outline of the Chapters

The volume is organized into four parts and 12 chapters. The first part includes this introduction, the second part of the book sets the stage for understanding the context in terms of gender equality in education while presenting some systematic analyses of existing scholarship, policy documents, and statistics on the region, while the third part provides examples of empirical studies of different issues in education with respect to gender equality. The chapters within the third part are organized without any particular order because we do not believe that any of the themes or countries are more important than others. The last part of the book entails key conclusions and recommendations.

The second part of the volume, as mentioned above, provides a context for gender equality reforms in the region, discussing key policy initiatives and related statistics. Chapter 2 provides an overview of the policy context for gender equality reforms in education in the region. It analyzes the evolution of gender equality policies from the post-Soviet era to the present, examining the interplay between Soviet legacies and contemporary Western influences on gender policies and reforms. It presents a landscape of the key players shaping gender equality initiatives within and outside education in each of the five countries in the region. It also summarizes key policy documents and reports serving as a framework for shaping gender equality initiatives with a focus on the education sector. The chapter concludes by addressing critical challenges faced by policymakers in advancing gender equality within education.

Chapter 3 identifies current and emerging issues related to gender equality in education using available statistical data. More specifically, the chapter provides a comparative analysis of education-related gender

equality indicators across Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan. Comparative data includes (1) girls' expected and mean years of schooling, (2) girls' net enrolment rates in school by level, (3) girls' out-of-school rate, (4) male and female enrollment in tertiary education, (5) upper secondary school and tertiary completion rates for males and females, (6) tertiary graduation rates by the field of study, (7) statistics on the representation of women in teaching professions, (8) share of female researchers in various fields, and (9) statistics on women representation in leadership.

Part 3 of the book showcases a collection of contemporary empirical research on gender and education in the region. Most of the studies have been conducted by collaborative teams of emerging scholars from the region and established researchers working at the intersection of education and gender studies in Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan. The aim was to both provide an overview of gender issues in education and to facilitate the development of local research capacity on the topic. While the majority of chapters focus on Kazakhstan due to varying research capacities in the region, all Central Asian countries, including Turkmenistan, are represented, filling a critical gap in the literature. Two chapters offer comparative perspectives: one contrasting the experiences of doctoral student mothers in Kazakhstan and Uzbekistan (Chapter 8) and another exploring female leadership experiences in Kazakhstan and Kyrgyzstan (Chapter 10). The remaining chapters investigate a single country in Central Asia. Collectively, Chapters 4 to 11 investigate diverse topics, including gender and textbook discourses, the education of rural girls, the factors associated with the under-representation of women in higher education and challenges in implementing affirmative policies, factors associated with the propensity of women's inclusion in NEET (people who are not in education, employment or training) statistics, barriers and facilitators for women's progression in science, technology, engineering and mathematics (STEM), the experiences of women leaders in academia, and the experiences of women in the under-explored context of Turkmenistan.

Altogether, the diverse array of chapters sheds light on crucial gender and education issues across Central Asia. Nevertheless, despite our efforts to address the overlooked research on LGBTQ + youth experiences in education in Central Asia, this gap remains. We originally planned to include an empirical study to examine how sexuality education is incorporated into the curriculum for LGBTQ + youth. Unfortunately, this

chapter did not come to fruition as the author withdrew from the book due to safety concerns amid heightened persecution of gay activists in the region, exacerbated by Russia's invasion of Ukraine. Research on LGBTQ+ youth education will be covered in the next edition of the volume.

Part 3 of the book begins with Chapter 4, in which Bekzhanova and Durrani highlight the critical role of history textbooks in nation-building in post-Soviet Kazakhstan by exploring the complex interplay between gender dynamics, national identity construction, and textbook discourses in history, a compulsory subject taught across all secondary schools. The authors analyze seven textbooks for grades 7 to 11 in Kazakh medium schools, utilizing both discursive and quantitative methods that conceptualize gender as three interrelated constructs—gender as category, construction, and deconstruction. Using poststructuralist notions of gender and national identities as performative and produced discursively via social regulation, particularly within educational settings, they underscore the power of textbooks in shaping discourses of national and gender identities. The authors contend that history textbooks often uphold male dominance, invisibilize female icons in national historiography, reinforce hegemonic masculinities, and promote idealized femininities. Even when portraying gender nonconformity, such as the depiction of female warriors, textbook narratives fail to challenge patriarchal norms, perpetuating male dominance and glorifying warfare. To shift education toward fostering egalitarian gender relations rather than reproducing gender power relations in society, the authors advocate for immediate action in addressing gendered messages in textbooks, developing inclusive curriculum guidelines for authors and reviewers, and supporting teachers in implementing gender-responsive practices.

In Chapter 5, Yakubova, Whitsel, Kuzhabekova, and Kataeva present the results of interviews with girls in Tajikistan to understand how cultural expectations of marriage affect the girls' educational aspirations and pursuits. The analysis is based on the data from 20 such interviews conducted with students at the secondary level. The study found that marriage expectations significantly influence girls' educational attainment, contributing to the persistently lower completion rates among females compared to their male counterparts. The chapter ends with a discussion of implications for research and educational practice.

Chapter 6, by Alimkhanova, explores Kazakhstani youth who are not in education, employment, or training (NEET). Pointing to the over-representation of women among NEET youth in the region, the study aims to fill the current gap in research on the youth by investigating why young women more often arrive at the NEET circumstance in Kazakhstan. By making use of the nationwide statistical database (the Labour Force Survey and PISA), this chapter identifies the socio-demographic and economic factors that affect girls on their way to becoming NEET in Kazakhstan. Beginning by reviewing and discussing the world and local literature on NEET women, the chapter is then followed by the analysis of the secondary statistical data. The chapter ends with a discussion of the implications of the findings for policy and practice aimed at assisting NEET women in Kazakhstan.

In Chapter 7, Kataeva explores barriers to girls' access and persistence in higher education in Tajikistan. Noting that currently less than 40% of women and girls are enrolled in higher education institutions in the country, the government introduced quotas to admit girls from rural areas into higher education institutions without university entrance examinations. While this policy has helped many girls enroll in and graduate from universities, it has faced difficulties in its implementation due to economic and cultural barriers that women encounter in the country. Additionally, the quota mainly channels women into traditionally feminized fields like teaching and medicine, with few women entering STEM disciplines. Using the analysis of policy documents, statistical data, reports of international organizations, available research articles, media sources, and an interview with an alumna of the quota program, the chapter concludes with a discussion on the implications for advancing, reimagining, and reinvigorating gender equality policies in higher education in Tajikistan.

In Chapter 8, Tabaeva and Durrani explore the lived experiences of doctoral student mothers (DSMs) in Kazakhstan and Uzbekistan as they navigate the intricate balance of familial responsibilities and academic pursuits. Despite historical similarities between the two countries, their distinct gender norms and educational systems call for a comparative examination. Drawing on Butler's gender theory and O'Reilly's maternal theory, this qualitative study uncovers shared challenges faced by DSMs in juggling roles as mothers, spouses, academics, and *kelins* (young brides living with their husband's extended family), leading to feelings of guilt and inadequacy. Factors such as gender expectations, lack of support, financial constraints, and negative feedback from supervisors

hinder their academic advancement, emphasizing the need for extended study timelines, supportive mentors, and accommodating institutions. Coping mechanisms, including family and peer support, as well as self-motivation, play a crucial role in addressing the mental health impact of these challenges. Notably, differences in experiences between Kazakhstani and Uzbekistani doctoral student mothers emerge, with the latter facing heightened pressures as *kelins*, limited spousal support, mobility constraints to field sites, and encountering greater institutional biases. The study advocates for broader implications to foster equal opportunities for DSMs in the region.

Chapter 9, by Almukhambetova, brings the reader back to Kazakhstan to explore the experiences of girls and women in the STEM pipeline. Women continue to be underrepresented in STEM fields across the world, as well as in Central Asia. Although women's representation in STEM majors and jobs is improving in Kazakhstan, barriers remain, and women experience the challenges associated with gender stereotyping and gendered structures in family, society, academia, professional societies, internship sites, and hiring organizations. Almukhambetova draws insights from her multiple studies undertaken over five years on the topic to contribute to our understanding of barriers that hinder girls' and women's participation, as well as facilitators to their retention and progression in the STEM educational and occupational pipeline in Kazakhstan.

Chapter 10, by Kuzhabekova and Almukhambetova, shifts focus from women and girls in the STEM pipeline to their experiences as leaders in higher education, zooming on the context of Kazakhstan and Kyrgyzstan. The chapter reports the results of a comparative narrative inquiry conducted in the two countries. The reported study utilizes a combination of theories from gender studies (psycho-social, organizational, professionalization, institutional) to analyze the factors that shaped the experiences of female leaders as compared to their male counterparts in university settings and at the departments and ministries of education. The research also identifies the strategies women use to succeed in leadership positions, exploring both similarities and differences across the two country contexts.

Chapter 11, by Orazova and Kuzhabekova, brings us to the first English-language exploration of gender equality in education in Turkmenistan, a country previously hidden from scholars due to its relatively restricted access to research and the lack of interaction of domestic scholars with the international research community. In this chapter, the

scholars provide an overview of the government documents and available statistics, which shed light on the state of gender equality in the country during the Soviet period and post-independence. Subsequently, the chapter summarizes current research on the topic, which is relevant to the situation in Turkmenistan. Finally, the authors present the results of a qualitative study based on written accounts of Turkmen women, which explored the experiences of the women in education and the way in which the women's educational and career pathways had been influenced by societal expectations and gender norms.

In Part 4, the concluding Chapter 12 presents some final thoughts and implications from the studies included in the volume. Some general observations about differences and commonalities in the state of gender equality in education are made. Recommendations are provided for educational practitioners and policymakers inside and outside the region. Some directions for future research are delineated, including thematic gaps, promising theoretical orientations, and methodological approaches.

References

Amatbekova, A. (2023, June 29). *Queering Central Asia: Frida's role in supporting queer activism in the region and the challenges that come with it*. FRIDA. https://youngfeministfund.org/queering-central-asia-fridas-role-in-supporting-queer-activism-in-the-region-and-the-challenges-that-come-with-it/

Chankseliani, M. (2017). Charting the development of knowledge on Soviet and post-Soviet education through the pages of comparative and international education journals. *Comparative Education, 53*(2), 265–283. https://doi.org/10.1080/03050068.2017.1293407

Gay Group International. (2024, January 19). *Promoting gender equality: The educational imperative*. Retrieved from https://www.graygroupintl.com/blog/promoting-gender-equality

Hernández-Torrano, D., Karabassova, L., Izekenova, Z., & Courtney, M. G. R. (2021). Mapping education research in post-Soviet countries: A bibliometric analysis. *International Journal of Educational Development, 87*, 102502. https://doi.org/10.1016/j.ijedudev.2021.102502

Kamp, M. (2009). Women's studies and gender studies in Central Asia: Are we talking to one another. *Central Eurasian Studies Review, 8*(1), 2–12.

Kataeva, Z., Durrani, N., Izekenova, Z., & Rakhimzhanova, A. (2023). Evolution of gender research in the social sciences in post-Soviet countries: A

bibliometric analysis. *Scientometrics, 128*(3), 1639–1666. https://doi.org/10.1007/s11192-022-04619-9

Kennedy-Pipe, C. (2004). Whose security? State-building and the 'emancipation' of women in Central Asia. *International Relations, 18*(1), 91–107.

Li, A. (2019). Comparative education in Central Asia. In C.C. Wolhuter & A. W. Wiseman (Eds.), *Comparative and international education: Survey of an infinite field (International perspectives on education and society* (pp. 175–182), vol. 36. Emerald Publishing Limited. https://doi.org/10.1108/S1479-367920190000036010

Mattei, V. (2022, January 31). *Feminism in Central Asia: More and more voices are being raised*. Regard Sur L'Est. https://regard-est.com/feminism-in-central-asia-more-and-more-voices-are-beingraised#:~:text=In%20May%2DJune%202021%2C%2094,resurgence%20of%20violence%20against%20women

Paramo, C., Vemuru, V., & Zaman, S. (2023, November 30). Gender-based violence affects 20% of women in ECA, costing countries billions of dollars in lost potential human capital each year. *Eurasian Perspectives*. Retrieved from https://blogs.worldbank.org/europeandcentralasia/gender-based-violence-affects-20-women-eca-costing-countries-billions-dollars

Proskuryakova, T., & Seitz, W. (2023, March 2). For faster growth, Central Asia must confront biased perceptions about the value of women's work. *Eurasian Perspectives*. Retrieved from https://blogs.worldbank.org/europeandcentralasia/faster-growth-central-asia-must-confront-biased-perceptions-about-value-womens

Tabaeva, A., Ozawa, V., Durrani, N., & Thibault, H. (2021). The political economy of society and education in Central Asia: A scoping literature review. *The PEER Network: Astana, Kazakhstan*. https://d1wqtxts1xzle7.cloudfront.net/84941359/ScopingReview_Final_23June2021-libre.pdf?1650947786=&response-content-disposition=inline%3B+filename%3DThe_Political_Economy_of_Society_and_Edu.pdf&Expires=1719294502&Signature=I2lzAfdEyLFb3M1xqYY~Cu6lBeYoNiO9BHEGGO1Y18nwRiV1ZJZsl3eiXVFhl3bA1zmTs9kQLzcVRZjB1C2nMRjUDyysCTpuFlh48KnIdUF2989r31Fq~1CKbn9aviy200Y5PWAtcR6KiOLZvZZpHufdevPq5Jitfiwm-iyoOhbrrrnzrEJSOyD~NDiVAX7cV7yj3ksjvCkOxMfHeyMh~tQne-rIj3CHk9P9l1R~CU8IQz~faKuMFBa90OgxB1ZJNPNObVeZpDOp7rh2Gelr3aHvrseKxQ03b7ZhHf2BQKNAsbZI1jksiWikNyv8UvNZNuZN15L0Qdihl34qW9tojw__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

UNESCO Almaty. (2021). *Policy brief: Gender equality in and through education in Central Asia*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000377910

UNESCO Almaty. Unpublished. *The intersection of gender equality and education in Central Asia: A regional situation analysis between SDG4 (Quality*

Education) and SDG5 (Gender Equality). https://unesdoc.unesco.org/ark:/48223/pf0000377910

UNICEF. (2022). *Gender counts. A quantitative assessment of gender inequality and its impacts on girls and boys*. Retrieved from https://www.unicef.org/eca/media/23331/file/Gender%20Counts:%20Central%20Asia.pdf

Waljee, A. (2008). Researching transitions: Gendered education, marketisation and Islam in Tajikistan. In F. Shailaja & M. Arnot (Eds.), *Gender education and equality in a global context* (pp. 87–101). Routledge.

World Health Organization (2024). Definition of gender. Gender and health. Retrieved on December 16, 2024 from https://www.who.int/health-topics/gender#tab=tab_1

Policy Context and Statistical Analysis of the Current Situation With Gender Equity in Education in Central Asia

Policy Context for Gender Equality Reforms in Education in Central Asia

Naureen Durrani, Zumrad Kataeva, and Aliya Kuzhabekova

Introduction

Gender equality, as a universally embraced policy objective, traverses boundaries, with numerous nations and international entities committed to its realisation (Lombardo et al., 2009). However, the interpretation and implementation of gender equality are subject to diverse perspectives and debates, allowing for varied applications in different contexts (Verloo, 2007). Therefore, a comparative analysis of gender policies is relevant from a research standpoint (Dombos et al., 2012).

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Central Asia has been relatively well investigated concerning gender issues and gender policies (Cleuziou & Direnberger, 2016). However, few studies have been conducted from a comparative perspective (Li, 2019) or have focused on education. This chapter intends to fill the gap by conducting a comparative analysis of gender equality policies in the educational sector across Central Asian countries, drawing on academic and grey literature.

The chapter first provides an overview of the historical policy landscape, focusing on the impact of Soviet gender equality policies on women in Muslim Central Asia. Next, it analyses the complex interplay between the Soviet legacy, globalisation, neoliberalism, and nationalist discourses, shedding light on their influence on contemporary gender equality policies and identities. Additionally, the study explores post-independence gender equality frameworks and policies, highlighting key stakeholders, international gender equality commitments, and policy structures unique to each Central Asian nation. Finally, the significance of gender social norms as a primary barrier to the effectiveness of gender equality policies and initiatives within the region is discussed.

Soviet's Approach to Gender Equality in Central Asia

The "Liberation" of Muslim Women

The Soviet approach to addressing "*zhenskii vopros*" [the woman question] evolved from a late imperial Russian discourse on women's rights and roles, highlighting women's enduring inequality in Soviet society (Kamp, 2009). Academic discussions have scrutinised whether the Soviet modernisation of gender relations in Central Asia and beyond stemmed from genuine progressive ideals or mirrored European imperial projects in colonised countries (Kane & Gorbenko, 2016). In contrast to the ad hoc and reactionary strategies of Western imperial powers, the Soviet state substantially intervened in gender relations through policymaking (Kane & Gorbenko, 2016), although the extent to which it succeeded in transforming Central Asian societies remains open to debate (Constantine, 2007).

Following the Bolshevik victory in 1917, the Communist Party appropriated the discourse of women's emancipation for divergent objectives (Kandiyoti, 2007). By expanding state control into previously untouched

domains, the Soviets actively intervened in societal norms. By the 1920s, secular family laws replaced *shari'a* courts for sedentary communities and customary *adat* laws for nomadic regions, leading to the prohibition of practices like polygyny, underage and forced marriages, as well as bride price payments (Kandiyoti, 2007). These transformations were also central to the *Jadid* movement, an indigenous reform effort within Uzbek society aiming to modernise and elevate women's status, yet its influence on altering these practices was limited (Kane & Gorbenko, 2016; Khalid, 2015).

While the Soviets prioritised the "emancipation" of Central Asian women, unveiling as a policy objective emerged after land reforms and anti-religious efforts failed to achieve their anticipated outcomes (Northrop, 2004). The veil symbolised "the primitive East", creating a stark contrast between seclusion and the bright promise of a Soviet future (p. 80). Unveiling was seen as necessary for the active participation of Central Asian women in the workforce, thereby contributing to industrialisation and supporting the growth of a native proletariat (Kane & Gorbenko, 2016). The *hujum*, an unveiling campaign, was launched on 8 March 1927. It is notable that while sedentary women predominantly wore veils, nomadic women seldom veiled.

The *hujum* encountered fierce resistance in Uzbekistan, leading to violence where many unveiled women were killed by relatives or rebels (Kane & Gorbenko, 2016). Unveiling was viewed as violating community dignity and honour (Akiner, 1997), with the murder of unveiled women being lauded by communities, transforming the veil into a symbol "of religious virtue and national-cultural identity" (Northrop, 2004, p. 171). By contrast, in Kazakhstan, where the veil lacked symbolic importance, the *hujum* did not provoke party activism or community resistance. Instead, the Soviet attacks on traditional lifestyle and the collectivisation campaign, which resulted in famine and displacement among Kazakhs, caused resistance among nomadic groups (Dave, 2007). While unveiling encountered no resistance in nomadic Turkmenistan, women were killed for divorcing their spouses, engaging in party activities, or defying community gender norms (Edgar, 2006).

To encourage women's participation in the workforce, the Soviet state established a network of daycare centres, freeing women to engage in productive labour outside the home (Michaels, 1998). Despite the increasing involvement of Central Asian women in paid labour beyond the household, they continued to shoulder the majority of domestic

responsibilities, similar to women in other modernising states. An effective mechanism for empowering Central Asian women during the Soviet times was the establishment of *zhensovet* (women's council), an institution dedicated to addressing women's concerns (Turaeva, 2018). The *zhensovet* aimed to involve women in political and economic spheres through literacy campaigns, economic empowerment, community involvement, and leadership support. It played a pervasive role in various state agencies responsible for women's affairs, whether in the workplace, educational institutions, or within organisations.

State interventions led to bringing Central Asian women out of their homes into paid employment. In the late 1980s, Kazakh women were the most economically productive among Central Asian women, with higher representation in both blue- and white-collar jobs (49% compared to 43% for Uzbek women and 39% for Tajik women) and as enterprise directors (5% compared to 2.7% for Tajik women and 2.5% for Uzbek women) (Michaels, 1998). In terms of farm work, Uzbek women had the highest participation rate at 55%, followed by Tajik women at 52% and Kazakh women at 38% due to the country's geographical locations and the availability of agricultural land.

Although Central Asia exhibited high literacy rates and active female workforce participation, it also displayed high fertility rates, large families, and traditional gender roles due to social welfare policies and the strong emphasis on motherhood as a societal duty (Kandiyoti, 2007). In contrast, men were primarily expected to engage in wage labour and socio-political activities, distancing them from household responsibilities and childcare duties, as highlighted by Peshkova (2014).

Soviet Education Policy

Alongside political, legal, economic, and social interventions, education policy was pivotal in the construction of the emancipated Soviet woman. The Soviets envisioned the ideal citizen as someone diligent and loyal to state objectives, possessing the necessary skills to advance socialist ideals. The Soviet educational policy aimed to instil these qualities in both men and women (DeYoung & Constantine, 2009).

Upon the establishment of the Soviet Union, Central Asia faced widespread illiteracy, with limited educational options (Johnson, 2004). Russian schools primarily served the children of political elites, while Islamic education predominantly targeted boys in the region. However,

a growing number of "new method" schools initiated by *Jadids* advocated for female education as well (Khalid, 2015). In Kazakhstan, Ybyrai Altynsarin made early efforts to develop methodological books, set up rural and boarding schools for gifted children, and establish a girls' school (Abdrakhmanova & Gapbassova, 2021).

To create the liberated Soviet woman, the Soviet regime expanded educational opportunities and promoted adult literacy, particularly focusing on girls' and women's education (DeYoung & Constantine, 2009). Women were actively encouraged to pursue education, resulting in a substantial number of highly educated women in Central Asia (Turaeva, 2018). Policies were implemented to ensure women's access to university education and men who obstructed their wives' and daughters' educational paths were penalised (Zhussipbek, 2017). Women from rural areas could attend free higher education institutions in major Soviet cities with financial support from the state (Turaeva, 2018). Following graduation, female graduates were dispersed across the Soviet Union through the state quota system. By the 1980s, the Soviet Union achieved universal literacy, with 54% of Central Asian women enrolled in higher education (Gündüz, 2015). In 1970, Kazakh women (45%) boasted the highest participation in higher education in Central Asia, followed by Uzbeks (33%) and Tajiks (23%) (Michaels, 1998, p.196).

Gender Policy Post-independence: Disjunctures and Continuities

Following independence, gender policies in the region underwent significant changes, although remnants of Soviet influence persisted. During the transition period, women encountered various forms of discrimination, including male-dominated wealth appropriation, gender-based dispossession, and violence (Nazpary, 2002; Zhussipbek & Nagayeva, 2023). As Central Asian nations shifted towards capitalist economies, embraced globalisation, and adopted neoliberal principles, state support for public services aiding women in their dual roles as mothers and employees diminished. Consequently, there was a reduction in women's political involvement, a rise in female unemployment, and the elimination of social protections for working women (Kandiyoti, 2007; Zhussipbek & Nagayeva, 2023).

The ideological revival in newly independent Central Asian states and the construction of their national imaginaries revolved around the "official

restoration of male privilege as an item of national culture" (Kandiyoti, 2007, p. 613). However, it is essential to emphasise that the ideal image of the modern Central Asian citizen integrates traditional values with forward-looking perspectives that are adaptable to economic needs and developmental projects (Zhussipbek & Nagayeva, 2023).

Alongside the retraditionalisation of gender discourses, globalisation and the spread of Western liberal perspectives on women's societal roles (Kandiyoti, 2007) have heightened women's expectations regarding full-time employment, salaries, professional advancement, and workplace equality (Almukhambetova & Kuzhabekova, 2021). However, they have also introduced elements of sexism and fostered a diminished perception of women through messages in popular culture and mass media. The intersection of globalisation, Westernisation, calls to protect "national" culture, the rise of neoliberal market economies, and the decline of socialist welfare have created diverse conditions for Central Asian women (Ozawa et al., 2024).

Despite Central Asian states distancing themselves from their Soviet legacy and emphasising positive connections to their ancient ethnic histories, the principle of gender equality established during the Soviet era persists, albeit without overtly celebrating Soviet gender equality initiatives (Kamp, 2016). All states have enshrined gender equality in their constitutions, guaranteeing free access to quality education for all (DeYoung & Constantine, 2009) and ratified international human rights treaties. The newly adopted constitutions and laws in Central Asian nations, including education laws, are designed to uphold gender equality in alignment with the human rights conventions they have ratified (Silova & Abdushukurova, 2009).

Gender Equality Frameworks and Policies

Actors

Apart from government agencies, multilateral organisations play a significant role in gender discourse and policy developments. Following the dissolution of the Soviet Union in 1991, the concept of "gender" entered policy discourse in Central Asia through development initiatives led by entities like UNESCO, the United Nations (UN), and the World Bank (Kamp, 2009). The UN assigned the United Nations Development Programme (UNDP) to launch a regional project focused on establishing

Women in Development (WID) Bureaus in all five Central Asian republics (Liczek, 2005). This period also witnessed a surge in NGOs (Kamp, 2009). Simpson (2006) describes this phenomenon as "globalising gender politics", highlighting the increasing integration of gender considerations by "national, international, and transnational actors, working within Western frameworks of development, democratisation and civil society" (p. 9). International actors championed gender equality as a facet of democratic governance, ensuring state stability, countering religious extremism and global terrorism, and providing economic advantages for both national and international enterprises (Hoare, 2016; Shakirova, 2015). International funding supported gender-focused NGOs, offering a new avenue of employment and income, particularly for women.

In Kazakhstan, international organisations backed and financed the integration of gender equality (Shakirova, 2015), and donor engagement in Kyrgyzstan led to the development of a thriving NGO sector (Hoare, 2016). Tajikistan experienced a Civil War (1992–1997), leading to a significant surge in aid. Foreign donors emerged as pivotal champions for gender equality and women's empowerment in the country (Kluczewska, 2022). Turkmenistan required women's NGOs to register under the Women's Union, a structure established under the Soviet Union enabling activism and the development of the women's movement in Turkmenistan (Liczek, 2005). Likewise, most Uzbekistani initiatives were based on international organisations' principles and policies (Ibodova, 2020). However, across the region, women's NGOs tend to focus on less contentious areas of women's rights, such as education and healthcare, as dissenting voices challenging the prevailing gender norms are frequently undermined by labelling them as agents of the West (Kamp, 2016).

In recent years, NGOs have faced heightened surveillance and restriction, with Central Asian republics, except Kyrgyzstan, progressively restricting foreign-funded NGOs (Hoare, 2016). Accusations of working against the state and serving foreign interests have led to a crackdown, severely limiting civil society activities in Uzbekistan and Turkmenistan, where non-sanctioned NGOs are deemed illegal. Kazakhstan and Tajikistan impose strict controls on NGOs receiving external funds. Conversely, Kyrgyzstan stands out where the development sector has been firmly embedded (Pares, 2021).

International Commitments to Gender Equality

In 1995, all Central Asian countries participated in the Fourth World Conference on Women in Beijing, endorsing the Beijing Declaration and the Platform for Action (Liczek, 2005). All are signatories to several international treaties, policies and conventions on gender equality (Kamp, 2016), such as the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), and the Convention on the Rights of the Child (CRC). Furthermore, all states endorsed the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs). All countries have submitted their voluntary national review on the implementation of SDGs to the UN. Kazakhstan submitted reports in 2019 and 2022, Tajikistan in 2017 and 2023, Uzbekistan in 2020 and 2023, Turkmenistan in 2019 and 2023, and Kyrgyzstan in 2020.

Policy Frameworks and Structures

The gender equality policy landscapes and outcomes within each state are shaped by the historical context, national economy, political landscape, and integration into the neoliberal economy. Across the region, the Soviet approach, emphasising sex over gender in addressing the "woman question", constrains the understanding of gender relations as relational categories rooted in socially constructed and idealised notions of masculinity and femininity (Kamp, 2009; Liczek, 2005). Furthermore, the paucity of rigorous research on monitoring and assessing the outcomes of policy initiatives and programmes, as well as implementational gaps, are reported across all countries. Within education, a lack of sufficient attention to gender equality issues in policies, curriculum documents, and textbooks has been reported (UNESCO & MGIEP, 2017).

Kazakhstan

Historically, Kazakhstani nomadic women on the steppes enjoyed significant freedom and mobility, contributing substantially to the nomadic economy and household management despite men holding nominal household leadership roles (Aldashev & Guirkinger, 2012). They also played crucial roles in the military during wartime (Abdikadyrova et al.,

2018). During the Soviet period, the Kazakhs became the most Sovietised Muslim nation (Dave, 2007, p. 2), resulting in Kazakh women particularly benefiting from Soviet initiatives for women's empowerment in education, politics, and the economy (Michaels, 1998). Kazakhstan has experienced significant economic growth since the 2000s, fuelled by market-oriented reforms, mineral resource extraction, and substantial foreign direct investment, elevating the country to an upper middle-income economy (Zhussipbek & Nagayeva, 2023). As a key partner of OECD countries in Eurasia, gender equality discourse enables Kazakhstan to enhance its international standing, project a modern image, and garner support from its female electorate.

The National Commission on Women's Affairs and Family and Demographic Policy is the national entity that promotes gender equality. The Asian Development Bank (ADB) (2018a) acknowledges Kazakhstan's firm commitment to gender equality and its proactive engagement in global initiatives. A concise summary of policy developments and milestones is presented in Table 2.1.

While the country's constitutional and human rights provisions guarantee equality, there are implementation gaps, particularly due to the lack of clear mechanisms in the constitution for women and other groups to exercise their rights effectively (International Commission of Jurists, 2013). While the Gender Equality Strategy for 2006–2016 achieved milestones over a decade, such as a gender parity in education, improved maternal health, sustained women's labour force participation, increased women's ownership of businesses, enhanced women's representation in political bodies, and the promotion of gender equality values through media messages, it had shortcomings (Sarsembayeva, 2017). The strategy lacked clear implementation methods, budgetary plans, accountability measures, and robust monitoring systems. Despite emphasising women's political and economic empowerment, the strategy frequently linked women's roles to motherhood, family, and demographic policies (ADB, 2018a), highlighting the need to separate family and gender policy objectives to ensure that the role of women is not confined to the family domain (OECD, 2017).

A significant initiative in education was the establishment of the Central Asian Network for Gender Studies in Almaty in 2002 to advance gender equality discourse throughout Central Asia (Shakirova, 2015). In 1999, gender courses were introduced in Kazakhstani universities, and classes on gender equality and women's rights were introduced into the curriculum

Table 2.1 Key policies, initiatives, and milestones addressing gender—Kazakhstan

1.	In 1995, the ***National Commission for Women, Family, and Demographic Policy was founded*** to establish an institutional framework for ensuring gender equality
2.	Gender has been integrated into economic planning since 2001
3.	In 2005, President Nursultan Nazarbayev (1991–2019) approved the ***Gender Equality Strategy for 2006–2016,*** aiming to foster partnership between the sexes and ensure women's equal participation in social development. The strategy focused on political and public spheres, the economy, gender education, reproductive health, gender-based violence prevention, and the family, as well as public awareness, with defined goals, objectives, and monitoring indicators for each. Implementation plans were executed in phases (2006–2008, 2009–2011, and 2012–2016) to achieve these aims
4.	In 2009, the ***Law on State Guarantees of Equal Rights and Equal Opportunities of Men and Women*** was enacted, legally establishing equal rights and opportunities for men and women, defining gender discrimination, ensuring state guarantees in various areas, and assigning responsibility for implementing gender policies to all state agencies
5.	In 2009, the ***Law on Prevention of Domestic Violence*** was approved
6.	In 2016, the ***Concept of Family and Gender Policies in the Republic of Kazakhstan until 2030*** was approved. The policy aimed to address gender stereotypes in education and society, among other objectives
7.	In 2021, the ***Concept was updated*** to address modern challenges, including early marriage, reproductive health, domestic violence prevention, women's economic empowerment, and inadequate representation of women in decision-making roles
8.	In 2021, ***Election Laws were amended***, mandating a 30% quota for women and youth, guaranteeing the representation of women in both local and national political structures
9.	On 15 April 2024, President Kassym-Jomart Tokayev signed ***amendments to Domestic Violence laws*** amid ongoing civic activism. The updated legislation intends to provide stronger deterrence for perpetrators compared to previous lenient measures

Sources #1, 5 (UNFPA, 2022); #2 (Shakirova, 2015); #3–4 (ADB, 2018a); #7 (Ministry of National Economy, Republic of Kazakhstan, 2022); #8 (Nurbayev et al., 2024); #9 (Embassy of the Republic of Kazakhstan in the Federal Republic of Germany, 2024)

of civil servants, the police, judges, healthcare workers, and statisticians (Shakirova, 2015). However, the extent to which these initiatives were enacted remains unclear, although an ongoing research project now explores the enactment of gender-focused courses (Kataeva et al., 2025). The Gender Equality Strategy 2006–2016 required schools to integrate gender education into the school curricula. Despite this, school textbooks

were not revised to address gender stereotypes throughout the strategy's 10-year duration, with recent studies revealing prevalent gender stereotypes in school textbooks (Bekzhanova, 2023; Durrani et al., 2022; see also Chapter 4).

Kyrgyzstan
Historically, Kyrgyzstan followed a nomadic lifestyle with comparatively fewer constraints on women's mobility but within a patriarchal social structure. Following independence, Kyrgyz society predominantly depicts women as domestic wives, perpetuating discriminatory practices that normalise male dominance and may justify violence against them (Childress et al., 2023). Similar to other post-Soviet Central Asian countries, the construction of Kyrgyz nationalism heavily relies on the retraditionalisation of national values, positioning women as symbols and defenders of national culture, tradition, and honour (Kim, 2020). Public opinion concerning women's rights and gender equality in Kyrgyzstan is polarised, with social media often framing gender equality movements as foreign impositions on traditional culture (Childress et al., 2023).

Kyrgyzstan, a lower-middle-income country, depends significantly on donor funding (Erisheva, 2023). The country has experienced political instability, characterised by presidential overthrows in 2005, 2010, and 2020 (Ozawa et al., 2024). After independence, the state's rapid downsizing led to widespread poverty and unemployment, particularly impacting women (Pares, 2021). While Kyrgyzstan is viewed as a pioneer in the region for policy- and law-making supporting human rights, recent international reports reveal a significant decline in gender equality and women's empowerment in the country (Erisheva, 2023). Table 2.2 charts significant developments regarding gender policies and programmes in the country.

Research exploring the relationship between gender and education in Kyrgyzstan highlights a predominant focus on male heroes in history textbooks, marginalising women or depicting a few women as "honorary males", reinforcing gender disparities (Blakkisrud & Abdykapar, 2017, p. 133). Furthermore, early literacy textbooks reinforce gender stereotypes by portraying females as caregivers and sparingly depicting boys in traditional feminine roles while emphasising a historical narrative dominated by male figures (Palandjian et al., 2018).

Table 2.2 Key policies, initiatives, and milestones addressing gender—Kyrgyzstan

1.	In 1996, the *National Council on Gender Policy* was established and located within the President's Office and the State Commission on Family, Women, and Youth Affairs In 2001, the Council was replaced by the *National Council on Women, Family and Gender Affairs* (NCWFGA) by Presidential Decree under the direct supervision of the President's Office
2.	In the early 1990s, the *Program Ayalzat* (1996 to 2000) was adopted for the advancement of women's rights
3.	In 2002, the *National Plan of Action for Achieving Gender Equality* for 2002–2006 was adopted, replacing Ayalzat
4.	In 2002, the *National Poverty Reduction Strategy for 2003–2005* was adopted, which outlined key priorities for advancing gender equality
5.	In 2003, Kyrgyzstan adopted the first Law, "*On Basic State Guarantees of Equal Rights and Equal Opportunities for Men and Women*"
6.	In 2003, the country also adopted the first *Law on Social and Legal Protection against Domestic Violence*
7.	In 2007, a 30% *Gender Quota* in government posts was introduced
8.	In 2008, Kyrgyzstan adopted the new law "*On State Guarantees of Equal Rights and Equal Opportunities for Men and Women*"
9.	In 2012, the *National Gender Strategy (NGS) on Achieving Gender Equality by 2020* was adopted
10.	The NGS is elucidated through the 3-year **National Action Plan on Gender Equality (NAPGE)** for the periods 2012–2014, 2015–2017, and 2018–2020
11.	In 2017, the *new Law on Prevention of Domestic Violence* was adopted (replacing the Law adopted in 2003)
12.	In 2022, the *National Strategy of the Kyrgyz Republic to achieve gender equality by 2030* was adopted
13.	In 2022, the *National Action Plan for 2022–2024* was adopted

Sources #1–3 (ADB, 2005); #4–11 (ADB, 2019); #12–13 (UN, 2024)

Tajikistan

Historically, Tajikistan had an urban culture (Falkingham, 2000; Ubaidulloev, 2015). After the arrival of Islam in Central Asia, the mosque played a central role in social and religious activities, blending traditional practices with Islamic customs (Akiner, 1997). As part of its "liberation of Eastern women", the Soviet policy aimed to alter the traditional social structures within the Tajik society through policies that often appeared superficial and coercive (Kasymova, 2008). Resistance to *hujum* was strong in Tajikistan, with *Zhenotdel* activities mostly concentrated in major cities (Tadjbakhsh, 1998). In the aftermath of independence, economic struggles compounded by the civil war (1992–1997) led to heightened

poverty, unemployment, and educational disruptions, reshaping gender dynamics and profoundly influencing the status of Tajik women and the educational opportunities of girls (Waljee, 2008; Yakubova, 2020).

Tajikistan has made strides in gender equality through legislative measures and strategies overseen by the Committee for Women's and Family Affairs (Table 2.3), with the Agency for Statistics monitoring progress and data reporting. While progress has been made, significant gender equality challenges persist in Tajikistan (World Bank, 2021; see also Chapter 7).

To transform gender norms through education, the Parliament approved the inclusion of a sex education subject in the school curriculum in 2015, sparking varied reactions within Tajik society due to concerns from some that the subject goes against Tajik culture and may encourage early sexual activity among students (Asia-Plus, 2015). Despite being part of the curriculum for seven years, there remains a lack of adequate training for teachers conducting these lessons (Ketting et al., 2021). Higher education institutions regulate women's bodies through the prescription of dress codes according to government instructions (Kataeva, 2024; Ozawa et al., 2024).

Turkmenistan

Academic and grey literature on the role of education and gender in Turkmenistan is exceptionally scarce (Kataeva et al., 2023). Nomadic customs prescribed gender roles in Turkmenistan and later by Islamic practices prior to Russian and Soviet influences (Liczek, 2005). In the post-Soviet transition, the retraditionalisation of society involved replacing the "emancipated" Soviet woman with Turkmen heritage, symbolised by a powerful maternal figure representing the national home (Kepderi, 2022). Due to the limitation of civil liberties, there is limited information available on the implementation of gender policies in Turkmenistan. However, similar to other Central Asian countries, Turkmenistan has developed various gender policies and laws safeguarding women while also submitting reports to international bodies regarding gender indicators (OECD, 2010). However, in practice, unwritten laws based on imagined traditions and community laws are prioritised over the laws of the state (Liczek, 2005).

The WID Bureau and Women's Union were instrumental in establishing the national mechanism for women's advancement, working alongside the UNDP to shape a national agenda and policy framework for

Table 2.3 Key policies, initiatives, and milestones addressing gender—Tajikistan

1.	In 1991, the ***Committee for Women's and Family Affairs*** was established, and its authority was significantly expanded in 2006, making it the primary body for implementing state policies to protect women's interests and rights
2.	In 1997, the Ministry of Education adopted the **policy on the admission of girls from remote areas to universities** without entrance examinations
3.	In 1999, a Presidential Decree was adopted on the ***Enhancement of Role of Women*** to ensure the broad participation of women in public life and government management and to enhance the social status of women
4.	In 2000, the State Program "***Main Directions of State Policy to Ensuring Equal Rights and Opportunities of Men And Women in The Republic of Tajikistan for 2001–2010***" was adopted
5.	In 2005, the Law on "***State Guarantees of Equal Rights and Opportunities for Men and Women***" was adopted to define the concepts of gender. The law prohibits discrimination on the basis of sex while distinguishing special measures to protect pregnancy and the health of women and men, and it guarantees equal rights in public authorities, civil service, education, labour, and the family
6.	In 2006***, the State Program for Education, Selection and Placement of Capable Women and Girls in Leadership Position*** (2007–2016) was adopted and renewed in 2017 (2017–2022)
7.	***In 2011, the National Strategy for Enhancing the Role of Women in the Republic of Tajikistan for 2011–2020*** was adopted
8.	The state programme "O***n training women specialists and promoting their employment for 2012–2015"*** was developed
9.	In 2013, the ***Law on the Prevention of Domestic Violence*** was approved
10.	In 2013, the ***National Program on the Prevention of Domestic Violence for 2014–2023*** was adopted
11.	In 2013, the ***Program on the Development of Gender Statistics in Tajikistan for 2014–2015*** started
12.	In 2021, ***the National Strategy for the Activation of the Role of Women in the Republic of Tajikistan for 2021–2030*** was initiated

Sources #1, 4–12 (World Bank, 2021); #2 (Yakubova, 2020); 3# (EU BOMCA, 2023)

gender equality (Liczek, 2005). However, with three chairperson changes in the Women's Union since 2001, the closure of the WID Bureau, and constrained financial support from international entities, Turkmenistan's gender agenda came to a standstill. Table 2.4 outlines key advancements in gender policies and programs within the country.

Tensions and contradictions exist between the drive to modernise the state and bolster its national identity through education policy and practice. The Government of Turkmenistan (2023) asserts that schools have

Table 2.4 Key policies, initiatives, and milestones addressing gender—Turkmenistan

1.	In 1999, the ***National Action Plan (NAP) (1998–2001)*** was endorsed, which outlined key priorities, including coordinating advocacy efforts nationally and internationally, enhancing women's involvement in governance and decision-making, improving women's education and training, and addressing women's health, economic roles, human rights, and media participation
2.	In November 1999, the ***Women's Sector***, created under the Cabinet of Ministers of Turkmenistan to address women's development and gender equality, was shut down shortly after its inception, with its duties transferred to the ***Women's Union***
3.	In 2015, ***Article 29 of Turkmenistan's Constitution and Law No.264-V*** was passed, granting equal civil rights and opportunities for men and women
4.	On 22 January 2015, the ***2015–2020 National Action Plan on Gender Equality*** was approved, which focuses on developing gender-oriented programmes and policies to promote equal opportunities and access for women
5.	In December 2020, the ***2021–2025 National Action Plan for Gender Equality*** was adopted, which set out national goals, objectives, and priorities to enhance and advocate for gender equality across all aspects of life, both at the national and local levels
6.	On April 20, 2021, Turkmenistan was elected as a ***member of the Executive Board of the UN Entity for Gender Equality and the Empowerment of Women*** (UN-Women) for the term 2020–2024
7.	In November 2022, Turkmenistan created a "***Roadmap" for enhancing the Health and Status of Women in the Family for 2022–2025***. The plan includes reinforcing laws against domestic violence, establishing a comprehensive support system for women affected by violence, implementing measures to prevent violence and gender discrimination, and collecting and analysing data on gender-based violence both within and outside the family

Sources #1–2 (Liczek, 2005); #3,5,6 (Kepderi, 2022); #4 (Government of Turkmenistan, 2019), #7 (Government of Turkmenistan, 2023)

integrated the subject "Basics of Life" since the 2007–2008 academic year, covering topics like healthy lifestyles, reproductive health, gender issues, and family life preparation and the Ministry of Education has established educational standards for reproductive health protection, incorporated in textbooks for grades 7 to 10. Conversely, disciplinary meetings across the country enforce strict dress codes and grooming standards for women and girls in public institutions, including schools and universities, with repercussions for non-compliance, including disciplinary measures and public shaming (Kepderi, 2022).

Uzbekistan

The cosmopolitan cities of Tashkent, Bukhara, and Samarkand were traditional centres of Islamic learning during the pre-Soviet times. The Bolshevik's campaigns against religion and for women's emancipation faced fierce opposition in Uzbekistan, converting gender into a symbolic core of Uzbek national identity, as explained earlier. This historical context continues to impact gender relations in independent Uzbekistan.

Following Karimov's (1991–2016) tenure, President Shavkat Mirziy-oyev has prioritised legal, economic, and social reforms, ushering in positive transformations across various sectors of the economy and social sphere (ADB, 2018b). The government's initiatives have specifically aimed at enhancing women's social and political participation while strengthening their roles in governance, society, and the family. As a result, Uzbekistan has recently emerged as one of the five countries making significant strides in advancing gender equality (World Bank, 2024). Nevertheless, traditional views on women's roles in society continue to influence gender dynamics, creating barriers for women to access leadership positions and equal opportunities in various sectors (ADB, 2018b). The *mahalla*, a residential community with self-governing administrative functions that held substantial influence in Uzbekistan before, during, and after the Soviet era, is cited as a significant channel for perpetuating gender conservatism (Kane & Gorbenko, 2016). Despite legal protections and policy measures, violence against women remains a significant concern (Alieva, 2023). There is a lack of a consistent public message promoting zero tolerance for domestic violence, and state media persist in reinforcing gender inequality and stereotypes that imply women and girls need to be "controlled". This atmosphere supports a culture of violence and establishes a prevailing sense of impunity for offenders. Table 2.5 outlines key gender equality developments in the country.

Gendered Social Norms Hindering Gender Policy Implementation

While Central Asia demonstrates relatively positive gender equality indicators (see Chapter 3), deeply entrenched social norms surrounding gender roles and status pose a significant challenge, leading to discrimination against women in society and education, ultimately hindering the implementation of gender equality policy (Erisheva, 2023; UNFPA,

Table 2.5 Key policies, initiatives and milestones addressing gender—Uzbekistan

1.	Founded in 1991 and designated as a government entity through a presidential decree in 1992, the **Women's Committee of the Republic of Uzbekistan**, with branches across the country, is responsible for steering and upholding the government's focus on women's status
2.	In March 1995, Uzbekistan passed the *decree **Enhancing Women's Role in State and Social Development***, creating a formal political structure including the Deputy Prime Minister for Women's Affairs to promote and monitor women's participation in society
3.	In 1997, the Women's Committee developed and adopted the **National Action Plan for the Improvement of the Status of Women of Uzbekistan**
4.	The presidential decree declared **1999 the "Year of Women"** to spotlight gender-related challenges hindering women's societal participation
5.	In September 2019, the ***Law On Protection of Women from Harassment and Violence*** was passed to provide legal protection to women against all forms of discrimination
6.	Passed in 2019, ***Law On Guarantees With Respect to Equal Rights and Opportunities for Women and Men*** was adopted to promote gender equality and address disparities between men and women in all walks of life
7.	In 2021, the presidential decree "***On Additional Measures for the Rehabilitation of Women Victims of Violence***" introduced a system of support and assistance for women surviving physical and psychological abuse
8.	In 2021, the ***Strategy for Achieving Gender Equality in the Republic of Uzbekistan until 2030*** was passed to promote gender equality across social, economic, and political domains

Sources #1–4 (Mee, 2001); #5–6, 8 (Government of Uzbekistan, 2023); #7 (Makhmudova et al., 2023)

2022). Gender stereotypes regarding women's political, educational, and economic equality and bodily integrity persist in Central Asia, surpassing global averages, as shown in Table 2.6. Cultural biases deeply ingrained in society fuel both structural and direct violence against women by implicitly condoning violence, shaping abusive behaviours, and making it challenging for women to seek help due to limited support systems and societal stigma (Childress et al., 2023).

On a positive note, UNFPA's (2022) research indicates that except for Tajikistan, national policy documents in all countries outline strategies to challenge harmful gender norms. Although these plans often lack a specific focus on engaging men and boys, except in areas like fatherhood, campaigns on healthy boyhood have been launched in the region with

Table 2.6 Gender social norms index values

| Country | Percentage of people biased by dimension | | | | | | | |
| | Political | | Educational | | Economic | | Physical Integrity | |
	Women	Men	Women	Men	Women	Men	Women	Men
#Kazakhstan	62.82	75.29	25.41	32.56	60.84	72.61	67.90	78.48
#Kyrgyzstan	77.54	80.91	48.04	58.94	81.40	86.64	88.53	92.96
#Tajikistan	74.59	82.15	47.36	56.06	71.29	85.02	98.35	96.63
@Uzbekistan	76.23	86.06	44.35	56.42	77.55	86.82	80.85	89.45
*World average	57.34	65.07	24.93	31.23	54.50	64.74	73.36	76.23

Source Prepared from UNDP (2023) Breaking down gender biases: Shifting social norms towards gender equality
* Based on 80 countries with data from wave 6 (2010–2014) or wave 7 (2017–2022) of the World Values Survey
#Period: 2017–2022
@Period: 2010–2014
Data for Turkmenistan is not available
Physical integrity is a proxy indicator for intimate partner violence

the collaborations of community leaders such as male religious figures. While integrating subjects like sex or relationship education into the school curriculum can help foster positive gender norms in the region, Kazakhstan, Tajikistan, and Kyrgyzstan are yet to provide comprehensive sexuality education programmes in schools (Ketting et al., 2021), and teachers are unprepared to teach the subject effectively (Zhuravleva & Helmer, 2024).

CONCLUSION

This chapter has comparatively analysed historical and contemporary gender policies in Central Asia and has illuminated how historical legacies, nation-building agendas, ethnic cultures, national economies, political stability and democratic structure, and global influences shape the current gender policy landscapes in the region. Overall, the chapter highlights a favourable policy climate in these emerging nations, which strive for modernisation, legitimacy, and national distinctiveness by imagining idealised femininities and masculinities. Despite a strong performance in gender equality indicators compared to global standards, persistent gendered norms present obstacles to translating policies into desired

outcomes. Central Asia, like other post-colonial countries (Dunne et al., 2020), illustrates the symbolic role of women in national distinction, reinforcing the dominance of masculinity in public and private spheres.

Educational institutions can drive a shift in gender norms by emphasising gender equality in their content, processes, and structures. While change may be gradual, it requires supportive policies across various sectors of the state (Durrani & Halai, 2018). Gender-transformative initiatives are pivotal in Central Asia to challenge entrenched norms and envision more egalitarian societies (UNFPA, 2022). Shifting from the Soviet emphasis on "women's" issues and, involving men as key stakeholders in gender equality efforts appears crucial. Additionally, gender equality approaches based on universalised interventions for women's empowerment, especially those solely targeting women, might not be suitable for post-colonial contexts where women remain crucial to national identity (Dunne et al., 2020). While progress has been made in engaging men in gender initiatives, further research is needed to develop context-specific approaches. Sharing experiences and insights among countries in the region can enhance efforts to advance gender equality.

The lack of academic literature on gender equality policies and initiatives in education underscores the need for further research across the region, specifically in Turkmenistan and Uzbekistan. Future studies should offer fine-grained analyses of the drivers, initiatives, and enactment of gender equality policies within the education sector. This nuanced exploration is essential for illuminating the processes of transformation and reproduction, emphasising the significance of education as a tool for advancing gender equality.

References

Abdrakhmanova, A., & Gapbassova, G. (2021). *Pedagogical views and activities of Ybyrai Altynsarin*. Arkalyk Pedagogical Institute after Altynsarin, Arkalyk, Kazakhstan.

Abdikadyrova, Z., Kadyrov, Z., Talaspayeva, Z., & Sharypkazy, N. (2018). The role of women in Kazakh nomadic society. *Turkish Online Journal of Design, Art & Communication, 8*, 2404–2419. https://doi.org/10.7456/1080SSE/310

Akiner, S. (1997). Between tradition and modernity: The dilemma facing contemporary Central Asian women. In M. Buckley (Ed.), Post-*Soviet women: From the Baltic to Central Asia* (pp. 261–304). Cambridge University Press.

Aldashev, G., & Guirkinger, C. (2012). Deadly anchor: Gender bias under Russian colonization of Kazakhstan. *Explorations in Economic History, 49*(4), 399–422. https://doi.org/10.1016/j.eeh.2012.07.006

Alieva, K. (2023). Gender inequality in Uzbekistan: Problems of access to justice for women affected by domestic violence. *World Bulletin of Management and Law, 18,* 128–133. https://scholarexpress.net/index.php/wbml/article/view/2061

Almukhambetova, A., & Kuzhabekova, A. (2021). Negotiating conflicting discourses. Female students' experiences in STEM majors in an international university in Central Asia. *International Journal of Science Education*, *43*(4), 570–593. https://doi.org/10.1080/09500693.2021.1875150

ADB. (2005). *Kyrgyz Republic. Country gender assessment*. https://www.adb.org/sites/default/files/institutional-document/32233/cga-kyrgyz-republic.pdf

ADB. (2018a). *Kazakhstan country gender assessment*. ADB. https://doi.org/10.22617/TCS179181

ADB. (2018b). *Uzbekistan country gender assessment update* (0 ed.). Asian Development Bank. https://doi.org/10.22617/TCS199904

ADB. (2019). *Kyrgyz Republic. Country gender assessment*. https://www.adb.org/sites/default/files/institutional-document/546966/kyrgyz-republic-country-gender-assessment-2019.pdf

Asia-Plus. (2015). Polovoj likbez: Za i protiv [*Sex education: Pros and cons*]. https://www.asiaplustj.info/ru/news/life/person/20150303/polovoi-likbez-za-i-protiv

Bekzhanova, Z. (2023). Uncovering gender, language, and intersected asymmetries in history textbooks. In N. Durrani & H. Thibault (Eds.), *The political economy of education in Central Asia* (pp. 117–142). Palgrave Macmillan. https://doi.org/10.1007/978-981-99-8517-3_7

Blakkisrud, H., & Abdykapar, N. (2017). Female heroes in a man's world: The construction of female heroes in Kyrgyzstan's symbolic nation-building. *Demokratizatsiya: The Journal of Post-Soviet Democratisation*, *25*(2), 113–135.

Childress, S., Shrestha, N., Kenensarieva, K., Urbaeva, J., & Schrag, R. V. (2023). The role of culture in the justification and perpetuation of domestic violence: The perspectives of service providers in Kyrgyzstan. *Violence against Women*. https://doi.org/10.1177/10778012231186814

Cleuziou, J., & Direnberger, L. (2016). Gender and nation in post-Soviet Central Asia: From national narratives to women's practices. *Nationalities Papers, 44*(2), 195–206.

Constantine, E. (2007). Practical consequences of Soviet policy and ideology for gender in Central Asia and contemporary reversal. In J. Sahadeo & Z. Russell (Eds.), *Everyday Life in Central Asia: Past and Present* (pp. 115–126). Indiana University Press.

Dave, B. (2007). *Kazakhstan: Ethnicity, language and power*. Routledge.

DeYoung, A. J., & Constantine, E. A. (2009). Re-gendered education and society in the newly independent states (NIS) of Central Asia. In D. P. Baker & A. W. Wiseman (Eds.), *International perspectives on education and society* (pp. 255–299). Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-3679(2009)0000010011

Dombos, T., Krizsan, A., Verloo, M., & Zentai, V. (2012). Critical frame analysis: A comparative methodology for the 'Quality in Gender+ Equality Policies' (QUING) project. Central European University. Retrieved from https://openresearch.ceu.edu/bitstream/handle/20.500.14018/11666/cps-working-paper-critical-frame-analysis-quing-2012.pdf?sequence=1

Dunne, M., Fincham, K., Crossouard, B., & Durrani, N. (2020). Gender symbolism and the expression of post-colonial national and religious identities. *Social Identities, 26*(3), 376–387. https://doi.org/10.1080/13504630.2020.1765765

Durrani, N., CohenMiller, A., Kataeva, Z., Bekzhanova, Z., Seitkhadyrova, A., & Badanova, A. (2022). 'The fearful khan and the delightful beauties': The construction of gender in secondary school textbooks in Kazakhstan. *International Journal of Educational Development, 88*. https://doi.org/10.1016/j.ijedudev.2021.102508

Durrani, N., & Halai, A. (2018). Dynamics of gender justice, conflict and social cohesion: Analysing educational reforms in Pakistan. *International Journal of Educational Development, 61*, 27–39. https://doi.org/10.1016/j.ijedudev.2017.11.010

Edgar, A. (2006). Bolshevism, patriarchy, and the nation: The Soviet "emancipation" of Muslim women in pan-Islamic perspective. *Slavic Review, 65*(2), 252–272. https://doi.org/10.2307/4148592

Embassy of the Republic of Kazakhstan in the Federal Republic of Germany. (2024, April 15). *President Tokayev signs laws aimed at protecting the rights of women and safety of children* [Government Bodies]. Gov.Egov.Kz. https://betaegov.kz/memleket/entities/mfa-berlin/news/details/prezident-kazahstana-kasym-zhomart-tokaev-podpisal-zakony-napravlennye-na-obespechenie-zashchity-prav-zhenshchin-i-bezopasnosti-detey

Erisheva, A. (2023). Gender equality and international human rights law in Kyrgyzstan. In A. Mihr & C. Wittke (Eds.), *Human rights dissemination in Central Asia: Human rights education and capacity building in the Post-Soviet space* (pp. 115–127). Springer International Publishing.

EU BOMCA (2023). Gendernaya politika v Respublike Tadzhikistan: Kartirovanie realizuyemoi politiki, institutov I osnovnikh uchastnikov [*Gender policies in Tajikistan: Mapping of laws, policies, institutions and stakeholders*]. Retrieved from https://www.bomca-eu.org/ru/repository/mapping/gendernaa-politika-v-respublike-tadzikistan

Falkingham, J. (2000). *Women and gender relations in Tajikistan.* https://www.adb.org/sites/default/files/institutional-document/32601/women-tajikistan.pdf

Government of Turkmenistan (2019). *Voluntary national review of Turkmenistan: Empowering people and ensuring inclusiveness and equality.* Turkmen State Publishing Service. https://turkmenistan.un.org/en/196377-voluntary-national-review-turkmenistan

Government of Turkmenistan (2023). *Voluntary national review of Turkmenistan on the progress of implementation of the global agenda for sustainable development.* Turkmen State Publishing Service. https://turkmenistan.un.org/en/239049-voluntary-national-review-turkmenistan-progress-implementation-global-agenda-sustainable

Government of Uzbekistan. (2023). *Voluntary national review of the Republic of Uzbekistan 2023.* https://hlpf.un.org/countries/uzbekistan

Gündüz, Z. Y. (2015). Gendering the neighbors: the European Union's policies on gender and equality on Saharan Africa and Central Asia. In S. Gstöhl, S., & E. Lannon, E. (Eds.), *The European Union's broader neighborhood: Challenges and opportunities for cooperation beyond the European neighbourhood policy* (pp. 162–186). Routledge.

Hoare, J. P. (2016). Doing gender activism in a donor-organized framework: Constraints and opportunities in Kyrgyzstan. *Nationalities Papers, 44*(2), 281–298. https://doi.org/10.1080/00905992.2015.1007344

Ibodova, S.K. (2020). Dostiženie gendernogo ravenstva v uzbekistane—osnova razvitogo obŝestva [Achieving gender equality in Uzbekistan is the basis of a developed society]. *Mirovaya Nauka, 7*(40). https://cyberleninka.ru/article/n/dostizhenie-gendernogo-ravenstva-v-uzbekistane-osnova-razvitogo-obschestva

International Commission of Jurists. (2013). *Women's access to justice in Kazakhstan: Identifying the obstacles & need for change.* Geneva. https://www.refworld.org/reference/countryrep/icjurists/2013/en/98277

Johnson, M. (2004). The legacy of Russian and Soviet education and the shaping of ethnic, religious, and national identities in Central Asia. In S. Heyneman & A. DeYoung (Eds.), *Challenges for education in Central Asia* (pp. 21–36). Information Age Publishing.

Kamp, M. (2009). Women's studies and gender studies XE "gender studies" in Central Asia: Are we talking to one another. *Central Eurasian Studies Review, 8*(1), 2–12.

Kamp, M. (2016). The Soviet legacy and women's rights in Central Asia. *Current History, 115*(783), 270–276.

Kandiyoti, D. (2007). The politics of gender and the Soviet paradox: Neither colonized, nor modern? *Central Asian Survey, 26*(4), 601–623. https://doi.org/10.1080/02634930802018521

Kane, D., & Gorbenko, K. (2016). Colonial legacy and gender inequality in Uzbekistan. *Current Sociology, 64*(5), 718–735. https://doi.org/10.1177/0011392115599583

Kasymova, S. (2008). Gender relations in Tajik society. In C. Hämmerle, N. Langreiter, M. Lanzinger, & E. Saurer (Eds.), *Gender politics in Central Asia.*

Historical perspectives and current living conditions of women (pp. 35–46). Boehlau.

Kataeva, Z. (2024). Gender and the navigation of STEM careers in higher education institutions: Narratives of female faculty in post-Soviet Tajikistan. *Compare: A Journal of Comparative and International Education, 54*(1), 55–73. https://doi.org/10.1080/03057925.2022.2078954

Kataeva, Z., Durrani, N., Izekenova, Z., & Rakhimzhanova, A. (2023). Evolution of gender research in the social sciences in post-Soviet countries: A bibliometric analysis. *Scientometrics, 128*(3), 1639–1666. https://doi.org/10.1007/s11192-022-04619-9

Kataeva, Z., Durrani, N., Rakhimzhanova, R., & Shakirova, S. (2025). Higher education leadership agency in mainstreaming gender equality: Insights from universities in Kazakhstan. *Gender, Work and Organizations*. https://doi.org/10.1111/gwao.13239

Kepderi, A. (2022, 03 May), *Turkmenistan takes policing women's bodies to the next level*. *The Diplomat: Asia*. https://sussex.idm.oclc.org/login?url=https://www.proquest.com/magazines/turkmenistan-takes-policing-women-s-bodies-next/docview/2658592919/se-2?accountid=14182

Ketting, E., Brockschmidt, L., & Ivanova, O. (2021). Investigating the 'C' in CSE: Implementation and effectiveness of comprehensive sexuality education in the WHO European region. *Sex Education, 21*(2), 133–147. https://doi.org/10.1080/14681811.2020.1766435

Khalid, A. (2015). *Making Uzbekistan: Nation, empire, and revolution in the early USSR*. Cornell University Press.

Kim, E. (2020). Re-feminizing the post-soviet women: Identity, politics and virginity ceremonies in contemporary Kyrgyzstan. *Journal of Gender Studies, 29*(6), 706–716. https://doi.org/10.1080/09589236.2020.1758043

Kluczewska, K. (2022). Donor-funded women's empowerment in Tajikistan: Trajectories of women's NGOs and changing attitudes to the international agenda. *Studies in Comparative International Development, 57*(1), 63–84. https://doi.org/10.1007/s12116-021-09343-8

Li, A. (2019). Comparative education in Central Asia. In Wolhuter, C.C. and Wiseman, A.W. (Eds.) *Comparative and international education: Survey of an infinite field (International Perspectives on Education and Society* (pp. 175–182), Vol. 36. Leeds: Emerald Publishing Limited. https://doi.org/10.1108/S1479-367920190000036010

Liczek, I. (2005). Cultural parameters of gender policy making in contemporary Turkmenistan. *Comparative Studies of South Asia, Africa and the Middle East, 25*(3), 567–583. https://doi.org/10.1215/1089201X-25-3-567

Lombardo, E., Meier, P., & Verloo, M. (Eds.). (2009). *The discursive politics of gender equality: Stretching, bending and policymaking*. Routledge.

Makhmudova, G., Madaeva, S., & Yusupova, D. (2023). Systemic analysis of gender relationship formation in the context of national and religious identity of the feminine topic in modern Uzbekistan. *Social Legal Studios, 6*(3), 85–93. https://doi.org/10.32518/sals3.2023.85

Mee, W. (2001). *Women in the republic of Uzbekistan*. Country briefing paper. ADB. https://www.adb.org/sites/default/files/institutional-document/32604/women-uzbekistan.pdf

Michaels, P. A. (1998). Kazak women: Living the heritage of a unique past. In H. L., Bodman & Tawḥīdī, N. (Eds.), *Women in Muslim societies: Diversity within unity* (pp. 187–202). Lynne Rienner Publishers.

Ministry of National Economy, Republic of Kazakhstan. (2022). *Voluntary national review on the implementation of the 20230 agenda for sustainable development: Kazakhstan*. https://hlpf.un.org/countries/kazakhstan

Nazpary, J. (2002). *Post-Soviet chaos, violence and dispossession in Kazakhstan*. Pluto Press.

Northrop, D. T. (2004). *Veiled empire: Gender and power in Stalinist Central Asia*. Cornell University Press.

Nurbayev, Z. Y., Sultangazy, G. Z., & Serikbayev, B. S. (2024). A study of political party affiliation as a means to enhance gender equality and women's political participation in Kazakhstan. *Public Administration and Policy, 27*(1), 45–57. https://doi.org/10.1108/PAP-07-2023-0095

OECD. (2010). Turkmenistan. In *Atlas of gender and development: How social norms affect gender equality in non-OECD countries* (pp. 86–87). OECD Publishing. https://doi.org/10.1787/9789264077478-40-en

OECD. (2017). *Gender policy delivery in Kazakhstan*. OECD. https://doi.org/10.1787/9789264280359-en https://iris.who.int/bitstream/handle/10665/44147/?sequence=1

Ozawa, V., Durrani, N., & Thibault, H. (2024). The political economy of education in Central Asia: Exploring the fault lines of social cohesion. *Globalisation, Societies and Education*, 1–14. https://doi.org/10.1080/14767724.2024.2330361

Palandjian, G., Silova, I., Mun, O., & Zholdoshalieva, R. (2018). Nation and gender in postsocialist education transformations: Comparing early literacy textbooks in Armenia, Kazakhstan, Kyrgyzstan and Latvia. In M. Chankseliani & I. Silova (Eds.), *Comparing post-socialist transformations: Purposes, policies, and practices in education* (pp. 167192). Symposium Books. https://doi.org/10.15730/books.104

Pares, H. J. (2021). Gender, activism, and international development intervention in Kyrgyzstan. *BRILL*. https://doi.org/10.1163/9789004461390

Peshkova, S. (2014). *Women, Islam, and identity: Public life in private spaces in Uzbekistan*. Syracuse University Press.

Sarsembayeva, R. (2017). *Implementation of the strategy for gender equality in the republic of Kazakhstan 2006–2016: The sociological analysis*. Astana. https://www.akorda.kz/upload/nac_komissiya_po_delam_zhenshin/5.2%20%D0%A1%D0%93%D0%A0%20%D0%B0%D0%BD%D0%B3%D0%BB.pdf

Shakirova, S. (2015). Gender equality policy in Kazakhstan and the role of international actors in its institutionalization. In Y. Gradskova & S. Sanders (Eds.), *Institutionalizing gender equality: Historical and global perspectives* (pp. 211–225). Lexington Books.

Silova, I., & Abdushukurova, T. (2009). Global norms and local politics: Uses and abuses of education gender quotas in Tajikistan. *Globalisation, Societies and Education, 7*(3), 357–376. https://doi.org/10.1080/147677209031 66376

Simpson, M. (2006). Local strategies in globalizing gender politics: Women's organizing in Kyrgyzstan and Tajikistan. *Journal of Muslim Minority Affairs, 26*(1), 9–31. https://doi.org/10.1080/13602000600738608

Tadjbakhsh, S. (1998). Between Lenin and Allah: Women and ideology in Tajikistan. In H. L., Bodman & N. Tawḥīdī (Eds.), *Women in Muslim societies* (pp. 163–185). Lynne Rienner Publishers.

Turaeva, R. (2018). Women as change agents. In M. Najafizadeh & L. L. Lindsey (Eds.), *Women of Asia* (1st ed., pp. 424–436). Routledge. https://doi.org/10.4324/9781315458458-32

Ubaidulloev, Z. (2015). The Russian-Soviet legacies in reshaping the national territories in Central Asia: A catastrophic case of Tajikistan. *Journal of Eurasian Studies, 6*(1), 9–87. https://doi.org/10.1016/j.euras.2014.05.009

UNDP. (2023). *Breaking down gender biases: Shifting social norms towards gender equality: 2023 Gender Social Norms Index*. United Nations. https://doi.org/10.18356/9789210028028

UNFPA. (2022). *Situational analysis of men and gender equality in the Central Asia Region*. https://kazakhstan.unfpa.org/sites/default/files/pub-pdf/eng_final_situational_analysis_of_men_and_gender_equality_in_ca_done.pdf

UNESCO. & MGIEP. (2017). *Rethinking schooling for the 21st century: The state of education for peace, sustainable development and global citizenship in Asia*. Mahatma Gandhi Institute of Education for Peace and Sustainable Development.

United Nations (UN). (2024, March 8). *On the road to gender equality: Kyrgyzstan continues to integrate gender-sensitive indicators into national strategies and plans*. Press Release. https://kyrgyzstan.un.org/en/262762-road-gender-equality-kyrgyzstan-continues-integrate-gender-sensitive-indicators-national

Verloo, M. (2007). *Multiple meanings of gender equality. A critical frame analysis of gender policies in Europe*. Central European University Press.

Waljee, A. (2008). Researching transitions: Gendered education, marketisation and Islam in Tajikistan. In F. Shailaja & M. Arnot (Eds.), *Gender education and equality in a global context* (pp. 87–101). Routledge.

World Bank (2024, March 4). *Uzbekistan reaches the ranks of top five improvers in the World Bank's women, business and the law 2024 study*. World Bank.

Retrieved May 30, 2024, from https://www.worldbank.org/en/news/press-release/2024/03/04/uzbekistan-reaches-the-ranks-of-top-five-improvers-in-the-world-banks-women-business-and-the-law-2024-study

World Bank. (2021). *Tajikistan. Country gender assessment* (166199). World Bank. https://documents1.worldbank.org/curated/en/874641637562869105/pdf/Tajikistan-Country-Gender-Assessment.pdf

Yakubova, P. M. (2020). *The effects of traditional gender norms on the fate of girls' education in Tajikistan*. Master's thesis, North Dakota State University. https://hdl.handle.net/10365/31832

Zhuravleva, O., & Helmer, J. (2024). Teachers' perceptions and attitudes around the possible implementation of sex education in schools: Views from teachers in Kazakhstan's Karaganda Region. *Sex Education, 24*(2), 154–171. https://doi.org/10.1080/14681811.2022.2164760

Zhussipbek, G. (2017). History of the Central Asian region – 1700 to 1991. In J. Fitzgerald (Ed.), *Legacies of division: Discrimination on the basis of religion and ethnicity in Central Asia* (pp. 9–40). Equal Rights Trust. https://doi.org/10.5281/zenodo.3247808

Zhussipbek, G., & Nagayeva, Z. (2023). Women's rights in Kazakhstan and Kyrgyzstan: In the grip of conservative re-traditionalisation and neoliberal capitalism. In A-M, Sätre, Y. Gradskova, & V. Vladimirova (Eds), *Post-Soviet women: New challenges and ways to empowerment* (pp. 115–134). Springer International Publishing.

Current and Emerging Issues in Gender Equality in Education: What Does the Data Tell Us?

Emma Harden-Wolfson and Lyazzat Shakirova

Introduction

The use of quantitative data is becoming increasingly widespread in the ongoing struggle for gender equality, accelerated with the adoption of the Sustainable Development Goals (SDG) in 2015. As part of this global agenda, gender cuts across all 17 SDGs and is the specific focus of SDG 5 on gender equality. Even prior to the SDGs, the importance of statistics on gender had been highlighted with the development of the UN Gender Inequality Index (operational since 2010) and the World Economic Forum's Global Gender Gap report (available since 2006) (Eden & Wagstaff, 2021). The logic behind initiatives and databases such

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as these is to increase understanding of gendered challenges in societies, provide data that can be used to inform policymaking and change, and offer benchmarks for countries to compare progress towards reducing gender gaps.

Aligned with these objectives, this chapter examines the available statistical data for Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. It presents descriptive statistics that identify current and emerging issues related to gender equality in education and provides a comparative analysis of the Central Asian region. While gender issues affect everyone, the data in this chapter focuses primarily on the situation of girls and women, given the overall levels of structural and societal discrimination they experience in Central Asia. The methodology section points out some of the limitations of using statistics in gender studies.

Before focussing on education more specifically, it is instructive to compare the countries' current position in terms of gender equality. The 2021 Gender Inequality Index (explained in the next section) produces a world average score of 0.465, where 0 represents gender equality and 1 is the most gender-unequal result. In comparison (see Fig. 3.1), Kazakhstan's index value of 0.161 ranks it first in the region and 41st in the world. Uzbekistan has a value of 0.227 (world ranking of 56), followed by Tajikistan at 0.285 (world ranking of 68) and Kyrgyzstan at 0.370 (world ranking of 87). As a starting point, the results of this index help to situate the findings that follow within the broader socio-economic context in Central Asia. The results also show that Central Asian countries are relatively more gender equal than the world average and that the regional scenario is quite divergent. This may have some connection to the countries' shared recent history in the Soviet Union. While the collapse of the Soviet Union in 1991 was more than a generation ago, the legacies of gender equality (on paper, if not in practice) and high female participation in education are still visible.

Scale from 0 (most gender equal) to 1 (most gender unequal)

🟡 Kazakhstan 🔴 Kyrgyzstan 🟢 Tajikistan 🔵 Uzbekistan ⚫ World

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNDP • Created with Datawrapper
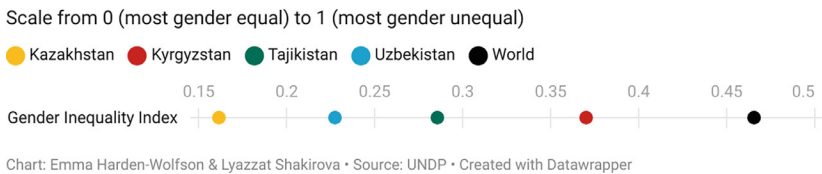
Fig. 3.1   Central Asian countries in the gender inequality index, 2021

To unpack the data on education, the chapter is organized as follows. The next section discusses the methodology, explaining the data sources that were used and the limitations that this presented. The findings of the statistical data collection are then presented in four sections. First, the gendered educational landscape is examined, encompassing educational participation and attainment in compulsory and post-compulsory education across the countries. Second, the chapter explores gender differences in fields of study in higher education to understand patterns of gendered behaviour in education. Third, the chapter examines the role of female educators—teachers and researchers, and fourth, the chapter explores whether educational achievements for women are translating into societal leadership gains. The chapter concludes with brief country summaries highlighting key issues for gender equality in education. Despite presenting some statistics for the first time, caution is warranted due to the subjective nature of data and its limitations in capturing the root causes and structural effects of gender inequality.

Methodology

This chapter takes a quantitative approach to capture current and emerging issues in gender equality in education, using publicly available statistical data that is disaggregated by sex. The findings are presented as descriptive statistics, the purpose of which is to summarize key information and display it visually in a meaningful way for a non-specialist readership alongside written analysis. A key data source was UNESCO Institute for Statistics database UIS.Stat[1] and related UNESCO World Inequality Database on Education.[2] UIS.Stat, with which both authors have previous professional experience, is a widely used and trusted source of a wide range of indicators covering UNESCO's areas of competence: education, science, culture, communication, as well as data relating to demographics and socio-economic factors. UIS.Stat receives data from national governments and covers all countries. We also used the World Bank's Gender Data Portal[3] which collates gender data on education, employment, leadership, and other sectors from a range of sources, and

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[1] http://data.uis.unesco.org/

[2] https://www.education-inequalities.org/

[3] https://genderdata.worldbank.org/

the Gender Inequality Index[4] published by the United Nations Development Programme (UNDP), which includes data on reproductive health, empowerment, and the labour market.

In cases where we were unable to identify data from UNESCO, the Gender Data Portal, or the Gender Inequality Index, or where the country-level data in these databases was lacking or out of date, we also referred directly to the National Agency for Statistics (as named in Tajikistan and Uzbekistan), Bureau of National Statistics (Kazakhstan) or National Statistical Committee (Kyrgyz Republic). In addition to these primary sources, we also searched for secondary sources that included data pertaining to education and gender in Central Asia. These were typically reports by national or international organizations that included the Central Asian states as part of their global approach. Examples of such sources include the UNESCO Science Report (UNESCO, 2021), the UN Human Development Report (UNDP, 2022), and country assessments by international financial institutions (e.g., Asian Development Bank, 2016). Despite this multi-pronged strategy, it was not possible to identify data on all indicators for all countries.

Gender refers to socially constructed roles and understandings and is a different construct from sex, which refers to a human or animal's biological attributes (Canadian Institutes of Health Research, 2014). In this chapter, we refer to 'girls' and 'boys' where data pertains to females/ males under the age of 18, and 'women' and 'men' for their adult counterparts. While neither is constrained to female/woman and male/man, a limitation of this chapter (and in the use of statistics in gender studies more generally) is the reliance on data sources that only collect and report information using these two categorizations. That said, it is very rare to find data on gender or sex and education that considers the true variation that exists both biologically and socially. Furthermore, such data is not collected by any Central Asian countries. Governments in the region are often outwardly hostile when it comes to gender—some of the states outlaw same-sex relationships, for example—and this perpetuates discrimination, repression, and exclusion of people who do not identify with the designations of female or male (ADC Memorial, 2020).

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4 https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index

The Gendered Educational Landscape

This foundational section presents data on some of the key equality-based indicators in education. It covers compulsory (school) and post-compulsory (higher/tertiary) education in four areas. First, we start by asking a key question about how much education girls and women receive. This is examined by expected years and mean years of schooling. Second, data on participation in education at different levels is presented. Third, the outcomes of education in terms of completion/graduation rates are discussed. Fourth, the landscape is studied geographically with data on urban and rural differences in educational attainment.

How Much Education Do Girls and Women Receive?

Expected years of schooling provide a projection of the average number of years a child entering school can expect to receive if current enrolment patterns persist (see Fig. 3.2). On the other hand, mean years of schooling represent the average number of completed years of education for a population. All four countries—Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan—exhibit relatively high expected years of schooling for both girls and boys (see Fig. 3.3) (UNDP, 2022). This suggests a commitment to providing a substantial duration of formal education. The mean years of schooling, while lower than expected years, especially in Kazakhstan and Kyrgyzstan, still indicate a considerable average level of educational attainment in each country. On average, individuals in these countries are completing a significant portion of their expected schooling. In Kazakhstan and Kyrgyzstan, in contrast to Tajikistan and Uzbekistan, girls, on average, study longer than boys and have a higher average expected years of schooling. This pattern holds true not only for the actual mean years of schooling but also aligns with the expected length of schooling.

Participation in School Education

In Central Asia, primary school enrolment is almost universal (Doby, 2018). Gender parity has almost been attained at the primary level across all four nations, with net enrolment rates higher than 95% for both girls and boys. In Kazakhstan and Kyrgyzstan, fewer boys than girls are progressing to upper secondary level, while Uzbekistan demonstrates relative gender parity at all school levels. Although upper secondary

Fig. 3.2 Expected years of schooling, 2021
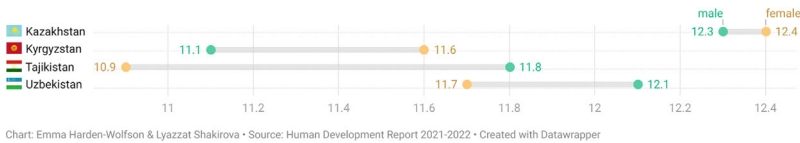
Fig. 3.3 Mean years of schooling, 2021

education is compulsory and tuition-free in Central Asia, except in Tajik-istan, there is still a significant decline in enrolment observed at this level (grades 10–11, ages 16–17) for both genders. In the case of Tajik-istan, education is compulsory only up to grade 9, which adversely affects girls' participation and attainment. Another possible explanation might be that students are opting to pursue college study with the aim of swiftly acquiring a profession and entering the workforce. Additionally, uncer-tainty about the outcomes of mandatory standardized tests at the end of upper secondary education, which serve as prerequisites for university admission, also impacts the decision to leave school.

While girls' net enrolment rate in Tajikistan has improved over the past 20 years, it still remains at under 50% for upper secondary school (48.1%) (see Fig. 3.4). This could be influenced by various factors in addition to the shorter duration of compulsory schooling, such as cultural expectations and traditional gender roles; societal norms related to early marriage and parenthood (Central Asian Bureau for Analytical Reporting, 2019); economic considerations when families prioritize allo-cating resources differently for boys and girls; geographic location and access to educational resources. By the same token, investing in girls'
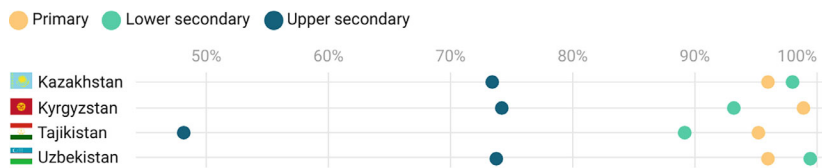
Total net enrolment rate: Enrolment by single years of age in all levels of education. Population of the official age group for the given level of education. Data for Tajikistan for primary is from 2017 and for lower secondary from 2010 (most recent publicly available data)

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.4 Girls' net enrolment rate in school, by level (%), 2023

education is crucial for societal advancement and serves as the cornerstone for their empowerment, fostering increased participation in societal roles (Odinaev, 2020). It is recognized that the gender gap is much larger in Tajikistan than officially reported (Asian Development Bank, 2016) and the available school population data does not monitor absenteeism or attendance. Furthermore, determining the overall count of school-age children is challenging, as births are typically not registered until children commence school, particularly in families where marriage is not officially recorded (Asian Development Bank, 2016).

Despite gains in enrolment, figures show that up to 37.3% of girls are out-of-school in the region (see Fig. 3.5). Mostly, the number of out-of-school girls is increasing along with the education level. While out-of-school rates for girls in primary and lower secondary schools are up to 6.9%, the situation worsens at the upper secondary school level, with the exception of Kazakhstan. Kazakhstan exhibited the lowest rate of out-of-school girls at the upper secondary level (4.4%) among Central Asian countries. In Kyrgyzstan and Uzbekistan, 28.9% and 26.3% of girls, respectively, did not attend upper secondary school in 2023. In Tajikistan, the out-of-school rate highlights a notable disparity in upper secondary education access, with twice as many girls (37.3%) as boys (18%) out-of-school (UNESCO Institute for Statistics, 2023a).

Participation in Tertiary Education

Since gaining independence in 1991, and as a legacy of a shared past in the Soviet Union, patterns in female enrolment in tertiary education have remained consistent: both Kazakhstan and Kyrgyzstan recorded

Most recent data available: Kazakhstan - 2019, Kyrgyzstan - 2023, Tajikistan - 2017, Uzbekistan - 2023
Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper
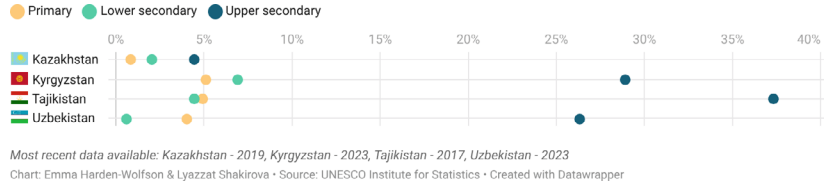
Fig. 3.5   Girls' out-of-school rate (%), 2017–23

higher enrolments of women in comparison to Uzbekistan and Tajikistan (Sabzalieva, 2016). This trend has endured in the present context (see Fig. 3.6).

While the enrolment of women in tertiary education has traditionally been higher in Kazakhstan compared to other countries in the region, there was a 7.1% decrease in the number of women enrolled in tertiary education between 2010 and 2020 (see Fig. 3.7). In contrast, Kyrgyzstan, Tajikistan, and Uzbekistan saw increases in the number of women enrolled in tertiary education over the last decade (see Fig. 3.7). Despite a 66.3% increase in the number of women enrolled in tertiary education from 2010 to 2017 in Tajikistan, gender disparity has persisted, with women comprising 42% of the enrolled population compared to 58% for men in 2017. In Uzbekistan, there has been a remarkable growth of 4.7 times in the number of females enrolled in tertiary education since 2010. The gender gap has also narrowed markedly from 37.4% in 2010 to 9.6% in 2023 (UNESCO Institute for Statistics, 2023a). This can be attributed, to some extent, to the increase in university admission quotas, the emergence of new higher education institutions (HEIs)
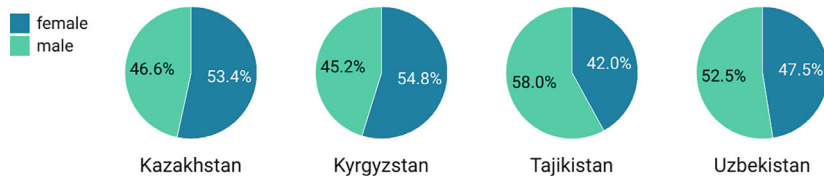
Most recent data available: Kazakhstan - 2020, Kyrgyzstan - 2023, Tajikistan - 2017, Uzbekistan - 2023
Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.6   Enrolment in tertiary education (%)

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.7 Enrolment in tertiary education, all programmes, female, 2010–23

in the country and additional state grants for undergraduate studies for women without previous higher education since 2022 (President of the Republic of Uzbekistan, 2023). The number of universities in the country has also grown significantly, increasing from 77 in 2016 to 213 in 2023 (Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, 2023).

Educational Outcomes

Educational outcomes can be measured quantitatively in terms of completion rates. At all school levels, girls hold a slight edge in Kazakhstan and Kyrgyzstan, whereas boys have the advantage in Tajikistan and Uzbekistan. Overall, all countries have almost reached gender parity in the completion of primary education; in Kazakhstan, Kyrgyzstan, and Uzbekistan, the gender gap is less than 0.3% (UNESCO Institute for Statistics, 2023b). In these countries, girls' completion rates range from 94.2 to 98.3% at the upper secondary level. There has been a positive global trend in the percentage of the population aged 25 and older with at least some

secondary education[5] since 2000 (see Fig. 3.8) and Central Asian countries are well above the world average figures (UNDP, 2022). Notably, Kazakhstan, Kyrgyzstan, and Uzbekistan show consistently high percentages for both females and males, reaching almost gender parity in 2021 (99–100%).

In Tajikistan, gender disparity increases in line with the educational level, with girls being left behind. At the primary and lower secondary levels, the gender gaps are 0.5% and 2.1% respectively, reaching 15.9% at the upper secondary level. While 98.5% of girls completed primary school, only 69% finished upper secondary school in 2020 (UNESCO Institute for Statistics, 2023b). This means that one in three girls in Tajikistan do not complete upper secondary school. Yet, per Fig. 3.8, Tajikistan also demonstrates a significant increase and closing of the gender gap over the past two decades, although slightly lower compared to other Central Asian countries.

In Central Asia, the gross graduation ratio from Bachelor's and Master's level degree programmes is higher for women (30.8%) compared to both the global female population (28.4%) and men (23.3%) (UNESCO Institute for Statistics, 2023a). The highest gross graduation ratio for women in the region is 71.6%, observed in Kazakhstan in 2020 (UNESCO Institute for Statistics, 2023a). Regarding the tertiary completion rate, there are more women aged 25–29 who have completed at least four years of higher education than men in Kazakhstan (50%) and Kyrgyzstan (40%) (see Fig. 3.9). In Tajikistan and Uzbekistan, a very

	females, 2000	males, 2000	females, 2021	males, 2021
World average	46.2%	56.1%	64.2%	70.3%
Kazakhstan	81.5%	87.6%	99.8%	100.0%
Kyrgyzstan	87.3%	92.7%	100.0%	99.8%
Tajikistan	89.9%	95.0%	93.5%	94.6%
Uzbekistan	99.9%	99.8%	99.9%	100.0%
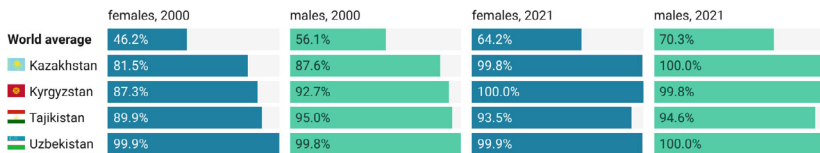
Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: Gender Inequality Index • Created with Datawrapper

Fig. 3.8 Population with at least some secondary education (age 25 and older) (%), 2000, 2021

[5] The GII defines "population with at least some secondary education" as the percentage of the population ages 25 and older that has reached (but not necessarily completed) a secondary level of education.

Tertiary completion rate (%), by gender

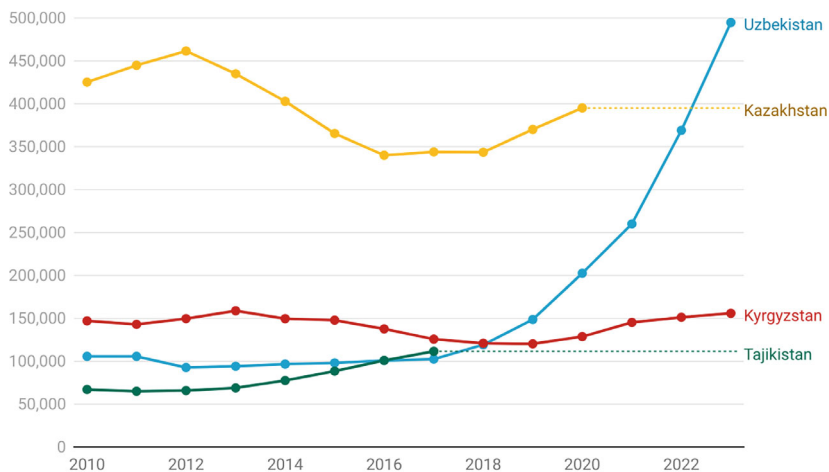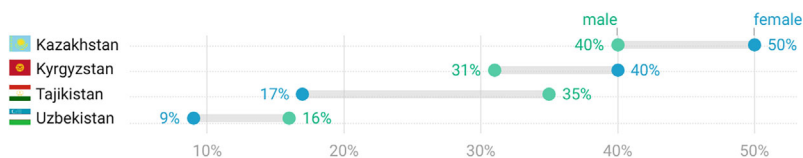Most recent data available: Kazakhstan - 2015, Kyrgyzstan - 2014, Tajikistan - 2017, Uzbekistan - 2021

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.9 Tertiary completion rate, by gender (%)

low percentage of women aged 25–29 have at least four years of higher education: only 17% of women in Tajikistan, which is half the percentage of men, and just 9% in Uzbekistan. In Uzbekistan, this may connect to historical restrictions on participation in higher education, particularly annual admissions quotas allocated to universities that only began to be lifted in the late 2010s. As recently as 2019–2020, for example, over 1 million applicants applied for undergraduate programmes while state universities were given only 110,095 places, almost 10 times less than the number of applicants (Chuyanova & Zokirova, 2019).

Regional Differences in Educational Attainment

Given the varied environmental terrain of the region, with vast rural areas of steppe and mountains, we also examined the differences between the urban and rural educational landscape. At the upper secondary level, the completion rate drops in all four countries, often not in favour of girls in rural areas, except for Kazakhstan (see Fig. 3.10). In Tajikistan specifically, the completion rate for girls at the upper secondary level in rural areas is a point of concern, reported at only 61.5%. Mostly, urban areas tend to have slightly higher completion rates than rural areas, which may reflect differences in educational infrastructure and access.

However, in Tajikistan, there are noteworthy educational indicators at the upper secondary school level in the Gorno-Badakhshan Autonomous Oblast' (Region), or GBAO. GBAO had the lowest rate of out-of-school for both genders at 4%, coupled with the highest completion rate at 95%, while the national average is 2% and 72%, respectively (UNESCO, n.d.). In contrast to this remote and mountainous region, the Regions

	Urban/female	Urban/male	Rural/female	Rural/male
Kazakhstan	97.0%	93.9%	91.9%	91.8%
Kyrgyzstan	84.8%	90.9%	77.6%	83.9%
Tajikistan			61.5%	
Uzbekistan	93.4%	96.6%	94.9%	95.2%

Most recent data available: Kazakhstan - 2015, Kyrgyzstan - 2018, Tajikistan (one data point only) - 2017, Uzbekistan - 2021

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.10   Upper secondary school completion rates (%) by location and gender

of Republican Subordination, geographically adjacent to the capital city Dushanbe, have the lowest level of upper secondary level completion (59%), and the highest out-of-school rate (22%) (UNESCO, n.d.). This pattern is also evident at the tertiary education level, where the highest percentage of women aged 25–29 who have completed at least four years of higher education is found in GBAO (55%), while the lowest percentage is observed in the Regions of Republican Subordination (21%) (UNESCO, n.d.).

Gender Differences in Fields of Study[6]

This section examines gender differences based on fields of study to understand patterns of gendered behaviour in education. To do so, we examine available data on enrolment by field of study in higher education. In line with global data, we appear to find the same two basic gender differences in Central Asian higher education: first, the predominance of females in education fields and second, the overall predominance of males in science, technology, engineering, and mathematics (STEM). While the STEM gender gap has been well documented globally in relation to the lack of females (e.g., Alam, 2020), less attention has been given to the equally large but reversed sex disparities in subjects related to education, although this has significant implications for the teaching profession as well as broader social discourses on education and schooling.

Using the ten subject areas defined by UNESCO (UNESCO Institute for Statistics, 2015), the most recent data available at the time of writing

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[6] We were unable to source data on Tajikistan for this section.

(see Fig. 3.11) show that across Central Asian countries, the subject area with the highest proportion of female graduates is Education (66–87% female). There are equally high proportions of female graduates in the area of Health and Welfare (74–77%) when focussing on Kazakhstan and Kyrgyzstan. This field of study includes nursing and midwifery, child and elder care, social work, pharmacy, alongside dental studies and medicine. By contrast, there is a large under-representation of female compared to male graduates in Engineering, Manufacturing, and Construction (17.7–28.5% female); and Agriculture, Forestry, Fisheries, and Veterinary (25.9–37.5% female). These subject areas are all areas closely related to STEM, appearing to demonstrate that the global female STEM gap also exists in Central Asia.

Nevertheless, one important finding across the region that counters international trends is that there are more female than male graduates in fields relating to natural sciences, mathematics, and statistics, with females representing 67% of graduates in this field in Kazakhstan, 72.9% in Kyrgyzstan, and 52.3% in Uzbekistan. This grouping includes biology, biochemistry, environmental sciences, natural environments and wildlife, chemistry, earth sciences, physics, mathematics, and statistics. Overall, however, when all graduates in all STEM subjects are aggregated, the proportion of females drops to 32.9% in Kazakhstan, 31.3% in Kyrgyzstan, and 24.6% in Uzbekistan.

Some differences in fields of study between countries are observable. In Kazakhstan, there are a higher proportion of females graduates from social sciences, journalism, and information courses than in Kyrgyzstan and Uzbekistan (71.2% vs 49.6% and 55%, respectively), where graduates are more evenly spread by gender. On the contrary, in Kazakhstan and Uzbekistan, there are proportionately fewer female graduates from subjects related to Information and Communication Technologies (ICT) and Services than in Kyrgyzstan (30.4%/17.8% vs 47.4% for ICT and 35.3%/31.5% vs 58.7% for Services). In addition, less than a quarter (23.1%) of Business, Administration & Law graduates in Uzbekistan are female, compared to just over half in Kazakhstan and Kyrgyzstan.

Gender Parity in STEM Has Been Reversed in Kyrgyzstan

In Kazakhstan, the proportion of female STEM graduates was relatively stable between 2010 and 2024, averaging 36.2% per year (Bureau of National Statistics, 2023b). However, a different pattern emerges from
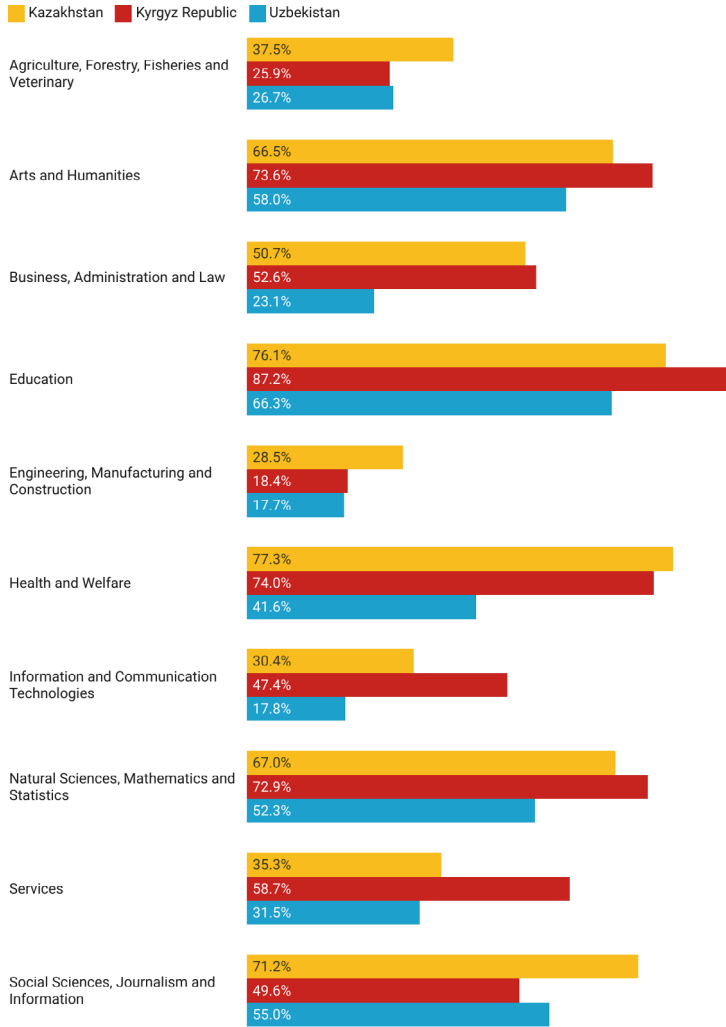
Data for Kazakhstan is from 2019. No data for Tajikistan.
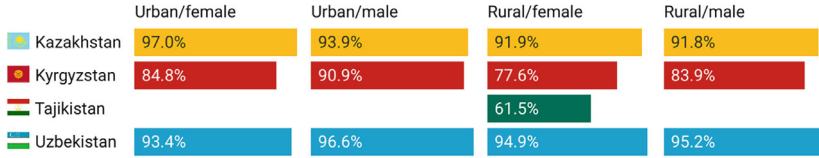Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.11 Female share of tertiary graduates by field of study (%), 2018

the data for Kyrgyzstan (see Fig. 3.12).[7] At the end of the twentieth century, females made up half of all STEM graduates but twenty years later, the proportion of female STEM graduates had dropped to 31.3%. In this way, gender parity in STEM has been reversed in Kyrgyzstan and the current situation is now more typical of global trends, with fewer than one-third of STEM graduates being female. This seemingly counterintuitive display also tells another story, one of the advances made towards (and beyond, in some cases) gender parity during the Soviet period.

Gender-based data by subject of study is not available for this era, but the data for 1988 shows that overall, 48% of students in HEIs in the Kazakh SSR were female, 46% in the Kyrgyz SSR, 43% in the Tajik SSR, and 44% in the Uzbek SSR (USSR State Statistics Agency, 1989). In the same year, 45% of students graduated from STEM-related subjects (USSR State Statistics Agency, 1989). While it is not possible to extrapolate the precise numbers of female STEM graduates for the late Soviet period, it would be reasonable to assume some level of gender parity. In turn, this helps to explain the equal starting point for the post-Soviet-era data on female STEM graduates in Kyrgyzstan.
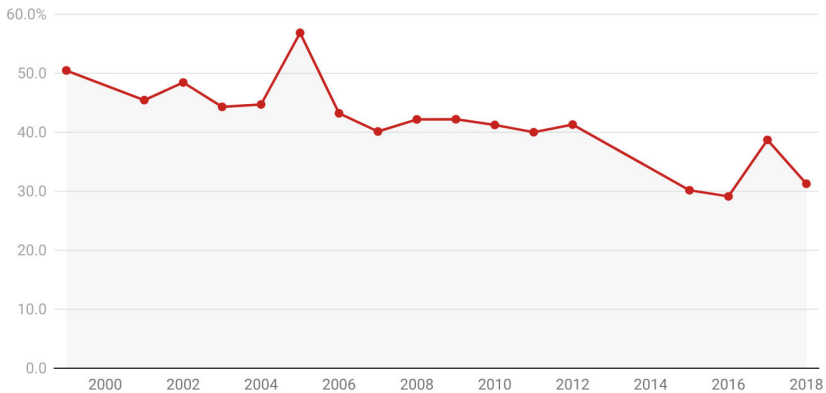
No data for 2000, 2013 or 2014

Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.12 Proportion of female STEM graduates in Kyrgyzstan, 1999–2018

[7] Longitudinal data on graduates by field of study is not available for Tajikistan or Uzbekistan.

The Role of Female Educators: Teachers and Researchers

This section continues the examination of gender-based differentiation, moving from fields of study to the workplace. With the book's focus on gender equality in education, this section highlights two job roles that are pivotal to the successful functioning of the education system: teachers and researchers. Teaching remains a predominantly female profession in the region, although, mirroring global trends (UNESCO IESALC, 2021), there are fewer female teachers at the tertiary level. A positive story emerges when examining researchers, with Central Asia enjoying the highest proportion of female researchers relative to other world regions. This section also breaks down the proportion of female researchers by field of research, providing another way to understand gender differences in the workplace and within employment sectors.

Female Teachers

Traditionally, teaching has been associated with nurturing and caregiving roles, and the popular belief that women are more nurturing than men has established women as the ideal candidates for the teaching profession (Eisenmann, 2017). Teaching is firmly embedded as a female profession in Central Asian societies and to this day remains predominantly female-led. In Central Asia, with the exception of Tajikistan, 9 out of 10 preschool and primary education teachers are women (UNESCO Institute for Statistics, 2023a). In Kazakhstan, Kyrgyzstan, and Uzbekistan, there have been no noticeable changes at the preschool education level, with rates remaining higher than 95% since 2000. In Kazakhstan, the number of female teachers in secondary schools has increased from 80.4% in 2000–01 to 86.1% in 2021–22 (Bureau of National Statistics, 2023a). Similarly, in Kyrgyzstan, the percentage of female teachers at this level increased by 9.4%, reaching 78.3% of the total in 2022 (UNESCO Institute for Statistics, 2023a).

From near gender parity among secondary school teachers in Uzbekistan in 2000 (56.6% female), the profession is now dominated by women, with two out of every three secondary school teachers being women (68.3%) (UNESCO Institute for Statistics, 2023a). According to available UIS data, in Tajikistan, female teachers make up 98.3% in pre-primary, 76% in primary school, further declining to 46% in secondary, and 37.3%
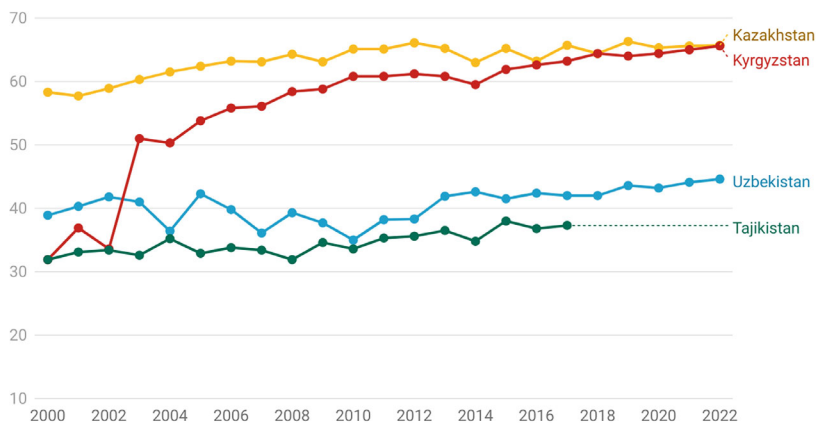
Data for Tajikistan is for 2000-2017

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Source: UNESCO Institute for Statistics; Bureau of National Statistics of the Agency for Strategic Planning and Reform of the Republic of Kazakhstan • Created with Datawrapper

Fig. 3.13 Female teachers as proportion of all teachers in tertiary education (%), 2000–2022

at tertiary education levels (UNESCO Institute for Statistics, 2023a). Despite this, the proportion of women in the teaching profession has increased over the past two decades, especially at the primary education level, rising from 59.1% in 2000 to 76% in 2017.

Unlike the primary and secondary school levels, women are less represented in tertiary education in Central Asia. Apart from Kazakhstan, female teachers constituted less than 40% of the total in the region in 2000 (see Fig. 3.13). In Kazakhstan, the percentage of female teachers in tertiary education has shown a generally stable trend, starting from 58.3% in 2000 and reaching 65.7% in 2022. The proportion of female teachers in Kyrgyzstan has doubled over the past 20 years, reaching 65.6% in 2022. In Tajikistan and Uzbekistan, female teachers are the minority in tertiary education, and the data indicate a modest increase since 2000, with their percentages not exceeding 37.3% (2017) and 44.6% (2022) respectively.

Female Researchers

Data on the participation of females and males by field of research should be understood within a global context where women are in the minority

(UNESCO Institute for Statistics, 2019). Based on the total number of researchers (full-time and part-time) employed in research and development in the public and private sectors, only 29.3% of researchers globally are female (see Fig. 3.14). This figure is lowest for South and West Asia (18.5%) and highest for Central Asia (48.2%). Within the countries of Central Asia, this ranges from gender parity to more unequal representation: 52.8% of researchers in Kazakhstan are female, 46.5% in Kyrgyzstan, 37.5% in Tajikistan, and 40.8% in Uzbekistan (UNESCO, 2021, pp. 122–123). Despite this variation, all four countries have well over the world average for the number of female researchers, which is a very positive finding. According to UNESCO, this may connect with the countries' recent past: 'the persistently high ratio of women researchers in many European and Asian countries is a legacy of the Soviet Union, which valued gender equality' (UNESCO, 2021, p. 117).

Within this context, the data for female researchers by field (see Fig. 3.15) demonstrates a mixed picture. Across the five fields of research used by UNESCO (agricultural sciences; engineering and technology; health and welfare; natural sciences; social sciences and humanities), there is no single field where gender parity has been achieved in all countries. The closest is health and welfare, with 49.1% (Kyrgyzstan), 54.3% (Uzbekistan), 61.4% (Tajikistan), and 65.3% (Kazakhstan) of female researchers. This aligns with the general outcome of higher education based on fields of study, where women mainly dominate in this field. In social sciences and humanities research, women are in the majority

Central Asia — 48.2%
Latin America and the Caribbean — 45.1%
Arab States — 41.5%
Central and Eastern Europe — 39.3%
North America and Western Europe — 32.7%
Sub-Saharan Africa — 31.8%
World — 29.3%
East Asia and the Pacific — 23.9%
South and West Asia — 18.5%
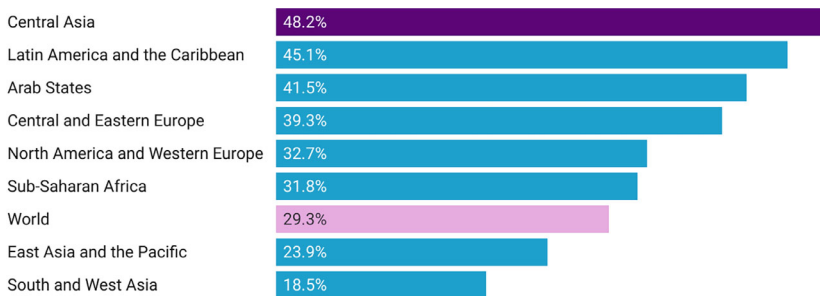
Based on data for 2016 or latest year available
Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: UNESCO Institute for Statistics • Created with Datawrapper

Fig. 3.14   Share of female researchers by world region

	Total	Agricultural sciences	Engineering and technology	Health and welfare	Natural sciences	Social sciences and humanities
Kazakhstan	52.8%	48.9%	44.0%	65.3%	53.4%	60.2%
Kyrgyzstan	46.5%	44.4%	33.3%	49.1%	44.9%	54.5%
Tajikistan	37.5%	27.4%	24.1%	61.4%	36.2%	31.9%
Uzbekistan	40.8%	27.0%	31.2%	54.3%	35.2%	47.5%
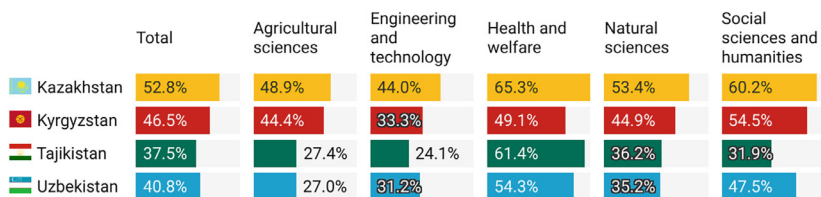
Measures headcount not FTE. Data for Kyrgyz Republic is for 2017.

Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: UNESCO Science Report (2021) Table 3.2 • Created with Datawrapper

Fig. 3.15 Female researchers as a share of total researchers by field (%), 2018

in Kazakhstan (60.2%) and Kyrgyzstan (54.5%) and gender parity is close in Uzbekistan (47.5%). Uniquely, Kazakhstan has also a female majority in the field of natural sciences, where 53.4% of researchers are female, mirroring the national average (52.8%). The field with fewest female researchers is engineering and technology, ranging from 24.1% in Tajikistan to 44% in Kazakhstan. Again, this mirrors the outcome of higher education where there are fewer female than male graduates in the corresponding fields (Engineering, Manufacturing and Construction, and ICT). In Tajikistan and Uzbekistan, female researchers are in the minority in all fields except health and welfare; in Kyrgyzstan, the only field with more female researchers is social sciences and humanities.

Translating Female Educational Achievements into Societal Leadership

In this section, we investigate the extent to which educational achievements by women in Central Asia are translating into societal leadership. In theoretical terms, the greater the number of highly educated women, the more gender-balanced society becomes, as women are better equipped to take up leadership roles. In practice, this is not the case—not in Central Asia and not in any other world region—due to macro-level structural sexism that entrenches sex-based discrimination into societal frameworks and results 'in fairly predictable disparities in social outcomes related to power, resources, and opportunities' (Javidan, 2021, p. 1). Female participation in the labour force in Kazakhstan is quite high (63.3%), although Kyrgyzstan, Tajikistan, and Uzbekistan exhibit notable gender gaps in

labour force participation, indicating disparities in economic engagement between genders. Female participation figures drop to 44.9% in Uzbekistan, 42.1% in Kyrgyzstan, and 30.2% in Tajikistan (UNDP, 2022). Of the three macro job sectors—services, agriculture, and industry—the majority of Central Asian women who work are in the services industry (73.8% in Kazakhstan, 67.3% in Kyrgyzstan, and 64.3% in Uzbekistan) and in Tajikistan, the majority of women work in agriculture (59.5%) (World Bank, 2022).

Choice of field of study (as explored above) and, subsequently, choice of occupation have significant consequences for earning potential, contributing to the gender pay gap which continues to exist despite some improvements over the past two decades (Ortiz-Ospina & Roser, 2019). In global financial terms, the pay gap is stark: according to the UN, women only make 77 cents for every dollar earned by men (UN Women, n.d.). This 77% figure is the same in Kyrgyzstan, although it varies by region, ranging from 62.5% in Talas region to 93.1% in Issyk Kul (United Nations Kyrgyz Republic, 2021). Furthermore, occupations considered to be more 'female' such as caregiving, early years teaching, and secretarial work, continue to be devalued, leading to lower prestige and more limited options (conscious or otherwise) for women to occupy or be seen to be belonging to societal power structures (Crawley, 2014). In settings such as the United States, these perceptions have become less biased over time but implicit and intersectional biases persist, perpetuating discrimination (Crawley, 2014). Similarly, in Central Asia, although Soviet-era legislation banning women from certain jobs was finally lifted in 2021 in Kazakhstan, outdated gender stereotypes remain, often in families, and women are still not treated as equals in the workplace (Almukhambetova & Kuzhabekova, 2021; Kamidola, 2021).

With these system-level barriers in mind, we examined data on female leaders in three important societal sectors: HEI leadership, business (private sector), and government to see whether general trends are also reflected in these areas.

HEI Leadership

As establishments at the pinnacle of the formal education system, Rectors (leaders of HEIs) occupy important and visible leadership roles. In Central Asia, Rectors of publicly funded HEIs have been historically appointed directly by the government. Although this practice is being

phased out in Kazakhstan and Uzbekistan, the connection between government and higher education remains close. This connection adds significance to the role of the Rector. This notwithstanding, data on Rectors based on gender has not, to our knowledge, ever been collected before. As such, for this chapter, we collected data from all 407 public and private HEIs[8] in the region and found that women are in a small minority in all countries (see Fig. 3.16), from just 5.3% of the total in both Tajikistan and Uzbekistan to 26.1% in Kazakhstan. This data demonstrates for the first time the sizeable distance that remains to achieve gender equality in Central Asian higher education, which is 'problematic both from a social justice and an organizational perspective given the increasing evidence that the more women executives an organization has, the better it performs' (UNESCO IESALC, 2021, p. 32). Although global data is not systematically collected, evidence from other regions suggests that around 15–20% of Rectors are female (UNESCO IESALC, 2021) and in this light, the figure from Kazakhstan suggests a more positive track from which other countries could learn.

Business Leadership

While there are several metrics to measure female leadership in the private sector, data for most Central Asian countries is lacking (e.g., data on employment in senior and middle management is only available for Kyrgyzstan). The most complete and also longitudinal data relates to firms with female top managers (see Fig. 3.17). This presents a very varied landscape within Central Asia, with Kazakhstan and Kyrgyzstan having considerably more female-led firms than in Tajikistan and Uzbekistan. In Kyrgyzstan, the number of firms with female top managers has increased by almost 10% during the decade under study, from 23% in 2009 to 32.9% in 2019. A small increase in Kazakhstan means that the current figure sits at 26%. Despite significant domestic reform since a change of President in 2016, Uzbekistan has only increased the number of female top managers by 1% for a total of 12.4%. While disappointingly small, this is almost double the figure from Tajikistan, where only 6.6% of firms have a female top manager. Worryingly, this number has decreased from 11.8% over

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[8] 115 in Kazakhstan, 65 in Kyrgyzstan (data was available for 64), 38 in Tajikistan (40 unique HEIs including two branch campuses that share the same Rector as the main campus) and 211 in Uzbekistan (data was available for 190).
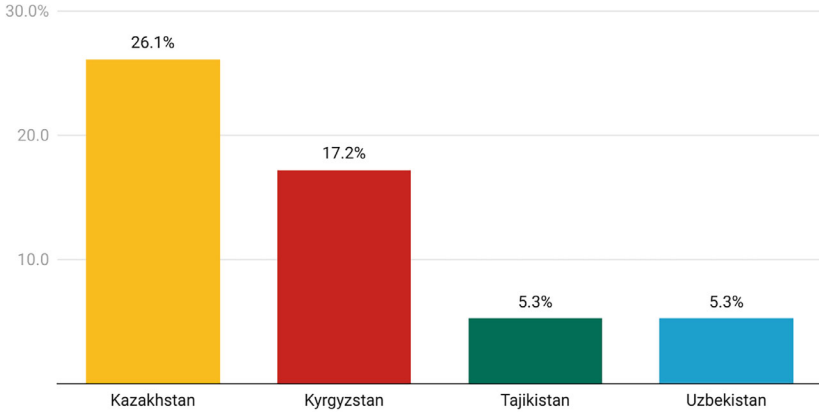
Data collected from websites of HEIs and other sources based on list of HEIs published by each government. Data collected in January 2024.

Chart: Emma Harden-Wolfson & Lyazzat Shakirova • Created with Datawrapper

Fig. 3.16   Proportion of female Rectors, 2024
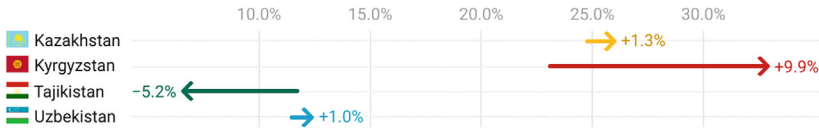
Firms with female top manager refers to the percentage of firms in the private sector who have females as top managers. Top manager refers to the highest ranking manager or CEO of the establishment. This person may be the owner if he/she works as the manager of the firm. The results are based on surveys of more than 100,000 private firms. First data point for Tajikistan and Uzbekistan is 2008.

Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: World Bank, Enterprise Surveys • Created with Datawrapper

Fig. 3.17   Firms with female top managers, 2009–19

the past decade. Evidently, gains in education are not felt equally in the private sector in Central Asia, least of all in Tajikistan.

Government Leadership

If the data on business leadership suggests material changes are much needed to improve the culture and opportunities for women, statistics from government leadership show some promise in terms of change over time. All four countries have seen increases in the proportion of seats

held by women in national parliaments since the start of the twenty-first century, although the current rates of between 20 and 35% are similar to that of business leadership (Fig. 3.18). The longer-term prospects for the representation of women may be improved as a result of gender quotas in three of the four countries. Kazakhstan introduced gender quotas in 2020 for the *Mazhilis* (House of Representatives, the lower of two houses), mandating parties to select at least 30% women; Kyrgyzstan has a similar 30% quota in its parliament, *Jogorku Kenesh* (Supreme Council), but only for part of the proportional representation system (International IDEA, 2022). Uzbekistan also has a 30% quota applicable to both houses of parliament (the *Oliy Majlis* or Supreme Assembly and the Senate) (International IDEA, 2022). Tajikistan does not have quotas and while participation in politics is ostensibly gender neutral, in fact, there are 'excessive requirements for women preventing them from political participation… [that do] not take into account their low economic and educational status compared to men' (Turakhanova, 2021, no page number).
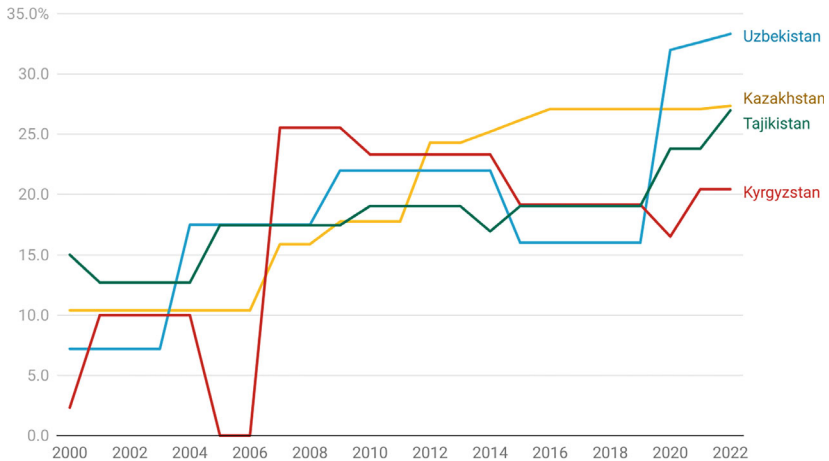
Women in parliaments are the percentage of parliamentary seats in a single or lower chamber held by women.
Chart: Emma Harden-Wolfson and Lyazzat Shakirova • Source: Inter-Parliamentary Union (IPU) • Created with Datawrapper

Fig. 3.18 Proportion of seats held by women in national parliaments, 2000–22

Conclusion

This chapter has presented a wealth of data on current and emerging issues in gender equality in education in Central Asia. Based primarily on data from UNESCO, the Gender Data Portal, the Gender Inequality Index, and national sources, the chapter included statistics on a wide range of indicators. Starting with the gendered educational landscape, the chapter also explored gender difference in fields of study, the role of female educators, and extended the investigation by examining whether educational gains are translating into societal leadership.

Kazakhstan is, by some measure, the most gender-equal country in the region and, in many respects, has stronger rates of educational participation and outcomes for all students. Both male and female students complete more years of education than the other countries in the region and, correspondingly, far fewer girls are out-of-school. Similarly, both female and male students are more likely to complete tertiary education than in the other countries. While Kyrgyzstan leads in female business leadership and Uzbekistan has more females in government leadership, Kazakhstan has an extremely high proportion of female HEI leaders—not only compared to the region, but in global perspective. The figure is far from being gender equal, but is a very promising emerging trend.

Kyrgyzstan presents a contrasting situation. On the one hand, it blends high (and increasing) levels of female participation, e.g., in tertiary education, teaching at school and tertiary levels, and business leadership. On the other hand, there are marked educational differences for females compared to males in urban and rural locations and the lowest rate of female participation in government leadership in the region. Despite the strength of the Soviet legacy in education and science, a more recent trend in Kyrgyzstan has been the reversal of gender parity in STEM, bringing the country more closely in line with global patterns of female under-representation.

Tajikistan has the highest level of gender inequality in education in Central Asia, which is reflected both in lower rates of female participation relative to the other countries in the region as well as lower rates of attainment for females compared to males in the country. With fewer than half of girls enrolling in upper secondary school, the knock-on effects are clearly visible, both in the number as well as the lower proportion of females than males in tertiary education. The exception of the GBAO region notwithstanding, the drop-off of females starting from

lower secondary and accelerating beyond that decreases opportunities for women to take up meaningful positions in society and could reinforce existing gender-based discrimination.

Uzbekistan emerges as a country that has made remarkable gains in gender equality in recent years, a testament to what is possible with concerted reform efforts. As a statistical contribution, this chapter cannot demonstrate whether the numeric gains for girls and women in Uzbekistan are being accompanied by structural change, which would be necessary for gender equality to become institutionalized. The astonishing growth in the size of the higher education system in Uzbekistan has led to a nearly five-fold increase in the number of female students since 2010, which is one of the stand-out findings of this chapter. In conjunction with this and other changes, the gender gap has been significantly reduced from almost 40% to under 10% in 2023.

These brief country summaries and comparisons serve to highlight some of the key issues for gender equality in education in Central Asia. While the chapter can be read as a standalone contribution and puts forward some statistics for the first time, we end by sounding a warning note. Data is not neutral: from the (possibly deliberate) lack of collection and/or availability of some indicators to the choice of measurements to be included (or excluded), statistics always reflect a series of decisions and processes that are human-led and therefore inevitably subjective. Furthermore, as noted above in the context of Uzbekistan, data does not capture the root causes or structural effects of gender inequality and can dislocate women's experiences by reducing complex lives to simple statistics (Fuentes & Cookson, 2020). This is not an argument against using data, but it is a call to be more attentive to the choices that are made even before statistics are published and to be critically conscious of the power that data can convey.

REFERENCES

ADC Memorial. (2020). *LGBTI+ in the region of Central Asia: Repressions, discrimination, exclusion.* https://adcmemorial.org/en/publications/lgbti-in-the-region-of-central-asia-repressions-discrimination-exclusion/

Alam, A. (2020, November 20). Mapping gender equality in STEM from school to work [UNICEF]. *UNICEF office of global insight & policy.* https://www.unicef.org/globalinsight/stories/mapping-gender-equality-stem-school-work

Almukhambetova, A., & Kuzhabekova, A. (2021). Negotiating conflicting discourses. Female students' experiences in STEM majors in an international university in Central Asia. *International Journal of Science Education*, *43*(4), 570–593. https://doi.org/10.1080/09500693.2021.1875150

Asian Development Bank. (2016). *Tajikistan: Country gender assessment*. https://www.adb.org/sites/default/files/institutional-document/185615/tajikistan-cga.pdf

Bureau of National Statistics. (2023a, May 26). *Численность педагогов общеобразовательных школ [Number of teachers in secondary schools]*. Official website of the Bureau of National Statistics of the Agency for Strategic Planning and Reform of the Republic of Kazakhstan. https://stat.gov.kz/ru/industries/social-statistics/stat-edu-science-inno/dynamic-tables/

Bureau of National Statistics. (2023b, December 25). *Высшие учебные заведения Республики Казахстан [Higher educational institutions of the Republic of Kazakhstans]*. Official website of the Bureau of National Statistics of the Agency for Strategic Planning and Reform of the Republic of Kazakhstan. https://stat.gov.kz/ru/industries/social-statistics/stat-edu-science-inno/spreadsheets/?year=2006&name=25583&period=&type=bulletin

Canadian Institutes of Health Research. (2014, January 10). *What is gender? What is sex?—CIHR*. Government of Canada. https://cihr-irsc.gc.ca/e/48642.html

Central Asian Bureau for Analytical Reporting. (2019, March 11). *Tajik Girls' Dilemma: Marriage or education?* https://cabar.asia/en/tajik-girls-dilemma-marriage-or-education

Chuyanova, E., & Zokirova, F. (2019, September 12). *Unaffordable education: Only one of 10 applicants can be admitted to Uzbek universities*. CABAR. https://cabar.asia/en/unaffordable-education-only-one-of-10-applicants-can-be-admitted-to-uzbek-universities

Crawley, D. (2014). Gender and perceptions of occupational prestige: Changes over 20 years. *SAGE Open, 4*(1), 2158244013518923. https://doi.org/10.1177/2158244013518923

Doby, L. (2018, July 6). *Girls' education in Kazakhstan*. https://borgenproject.org/girls-education-in-kazakhstan/

Eden, L., & Wagstaff, M. F. (2021). Evidence-based policymaking and the wicked problem of SDG 5 Gender Equality. *Journal of International Business Policy, 4*(1), 28–57. https://doi.org/10.1057/s42214-020-00054-w

Eisenmann, L. (2017, August 17). *Why are so many teachers women?* National women's history museum. https://www.womenshistory.org/articles/why-are-so-many-teachers-women

Fuentes, L., & Cookson, T. P. (2020). Counting gender (in)equality? A feminist geographical critique of the 'gender data revolution.' *Gender, Place &*

Culture, 27(6), 881–902. https://doi.org/10.1080/0966369X.2019.168 1371

International IDEA. (2022). *Gender quotas database*. International Institute for Democracy and Electoral Assistance. https://www.idea.int/data-tools/data/gender-quotas-database

Javidan, P. (2021). Structural sexism: Foundations, reproduction, and responses. In W. Leal Filho, A. M. Azul, L. Brandli, A. Lange Salvia, P. G. Özuyar, & T. Wall (Eds.), *Reduced inequalities* (pp. 1–14). Springer International Publishing. https://doi.org/10.1007/978-3-319-71060-0_90-1

Kamidola, A. (2021, December 13). Redefining 'women's work' in Kazakhstan. *openDemocracy*. https://www.opendemocracy.net/en/odr/redefi ning-womens-work-in-kazakhstan/

Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan. (2023). *Higher educational institutions Uzbekistan*. Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan. https://edu.uz/en/otm/index#gsc.tab=0

Odinaev, S. (2020). *Access to education. UNICEF Tajikistan*. https://www.unicef.org/tajikistan/access-education

Ortiz-Ospina, E., & Roser, M. (2019). Economic Inequality by Gender. *Our World in Data*. https://ourworldindata.org/economic-inequality-by-gender

President of the Republic of Uzbekistan. (2023, June 15). *Распоряжение Президента Республики Узбекистан. О параметрах государственного заказа по приему на учебу в государственные высшие образовательные учреждения в 2023/2024 учебном году [Order of the President of the Republic of Uzbekistan. On the parameters of the state order for admission to study at state higher educational institutions in the 2023/2024 academic year]*. https://lex.uz/ru/docs/6502536

Sabzalieva, E. (2016, July 8). Gender gaps in higher education across Central Asia. *University World News*. http://www.universityworldnews.com/article.php?story=20160707140807406

Turakhanova, D. (2021, May 16). Low women's political participation in Tajikistan: Will the anti-discrimination law be a solution? *The Foreign Policy Centre*. https://fpc.org.uk/low-womens-political-participation-in-tajikistan-will-the-anti-discrimination-law-be-a-solution/

UN Women. (n.d.). *Equal pay for work of equal value*. UN Women—Headquarters. Retrieved December 16, 2023, from https://www.unwomen.org/en/news/in-focus/csw61/equal-pay

UNDP. (2022). *Human development report 2021–2022* (p. 320). https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf

UNESCO. (2021). *UNESCO science report: The race against time for smarter development*. https://unesdoc.unesco.org/ark:/48223/pf0000377250

UNESCO. (n.d.). *Indicators* . https://www.education-inequalities.org/indicators

UNESCO IESALC. (2021). *Women in higher education: Has the female advantage put an end to gender inequalities?—UNESCO Digital Library* [UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC)]. UNESCO Digital Library. https://unesdoc.unesco.org/ark:/48223/pf0000377182

UNESCO Institute for Statistics. (2015). *International Standard Classification of Education. Fields of education and training 2013 (ISCED-F 2013)—Detailed field descriptions*. UIS. https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-fields-of-education-and-training-2013-detailed-field-descriptions-2015-en.pdf

UNESCO Institute for Statistics. (2019). *Women in science* (FS/2019/SCI/55). https://uis.unesco.org/sites/default/files/documents/fs55-women-in-science-2019-en.pdf

UNESCO Institute for Statistics. (2023a, September). *UIS Statistics*. http://data.uis.unesco.org/#

UNESCO Institute for Statistics. (2023b, September 4). *Sustainable development goal 4*. UNESCO Institute for Statistics. http://sdg4-data.uis.unesco.org/

United Nations Kyrgyz Republic. (2021, March 8). *Международный женский день: Цифры и факты о женщинах и мужчинах в Кыргызстане | United Nations in Kyrgyz Republic [International Women's Day: Figures and facts about women and men in Kyrgyzstan]*. https://kyrgyzstan.un.org/ru/115207-%D0%BC%D0%B5%D0%B6%D0%B4%D1%83%D0%BD%D0%B0%D1%80%D0%BE%D0%B4%D0%BD%D1%8B%D0%B9-%D0%B6%D0%B5%D0%BD%D1%81%D0%BA%D0%B8%D0%B9-%D0%B4%D0%B5%D0%BD%D1%8C-%D1%86%D0%B8%D1%84%D1%80%D1%8B-%D0%B8-%D1%84%D0%B0%D0%BA%D1%82%D1%8B-%D0%BE-%D0%B6%D0%B5%D0%BD%D1%89%D0%B8%D0%BD%D0%B0%D1%85-%D0%B8-%D0%BC%D1%83%D0%B6%D1%87%D0%B8%D0%BD%D0%B0%D1%85-%D0%B2-%D0%BA%D1%8B%D1%80%D0%B3%D1%8B%D0%B7%D1%81%D1%82%D0%B0%D0%BD%D0%B5

USSR State Statistics Agency. (1989). *Narodnoye obrazovaniye i kultura v SSSR: Statisticheskii sbornik [Public education and culture in the USSR: Statistical handbook]*. Finansi i Statistika.

World Bank. (2022). *Employment by sector (%)*. World Bank Gender Data Portal. https://genderdata.worldbank.org/indicators/sl-empl-zs/

Current Research on Gender in Education in the Region

The Intersection of Gender and National Identity in History Textbooks in Kazakhstan

Zhazira Bekzhanova and Naureen Durrani

Introduction

Mass compulsory schooling is a key institution utilized by the modern state to naturalize national identity (Gellner, 1983; Smith, 1991). Defined as a political community's vision and differentiation from other nations (Miller, 1995), national identity is inherently gendered (Yuval-Davis, 1997), especially in newly independent states where men are expected to represent modernity in the public sphere while women are confined to preserving cultural heritage in the spiritual or domestic sphere (Durrani & Nawani, 2021). The symbolic significance of women in shaping the cultural and spiritual components of post-colonial national identity further necessitates their regulation (Dunne et al., 2020).

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Given the significance of history textbooks in shaping national identity construction (Durrani et al., 2020), this chapter focuses on analyzing history textbooks in Kazakhstan, a country that prioritizes constructing national identity through schooling (MGIEP & UNESCO, 2019). As a country that exhibits positive gender equality indicators in the region (Ozawa et al., 2024; Tabaeva et al., 2021), Kazakhstan offers a critical case study for exploring the ways state discourses reciprocally construct gender and national identities through educational discourses.

As the most Russified of all Central Asian countries (Dave, 2007), independent Kazakhstan has placed great importance on constructing and consolidating national identity through compulsory education (MGIEP & UNESCO, 2019). To "construct a de-Sovietized-re-Kazakhified national identity", Kazakhstan initiated education policy reforms to promote nation-building (Kissane, 2005, p. 45). These reforms, which prioritize the titular ethnic group and the Kazakh language (Bekzhanova & Makoelle, 2022; Smagulova, 2008; Spehr & Kassenova, 2012), include a comprehensive "overhaul of the history curriculum" (Kissane, 2005, p. 50). The subject of the History of Kazakhstan is mandatory for all secondary schools in Kazakhstan, with students studying it from 5 to 11th grade attending two lessons per week (Decree of the Ministry of Enlightenment of the Republic of Kazakhstan, 2016). The subject is also included in the Unified National Test, which is crucial for graduation and university entrance. Furthermore, students in Kazakhstan undergo a state exam in the History of Kazakhstan as part of their academic assessment (Decree of the Ministry of Enlightenment of the Republic of Kazakhstan, 2016). While researchers have focused on the Kazakhization and de-Russification of the history curriculum or the gender analysis of the history textbooks (Bekzhanova, 2023), little is known about the impact of these changes on gender dynamics and national identity.

Kazakhstan has consistently demonstrated its commitment to gender equality since gaining independence. The country has also prioritized adherence to international standards and treaties on gender equality (UNESCO, 2020), positioning itself as a leader in the region by securing 62nd place in the Global Gender Gap Index (World Economic Forum, 2023). While schooling is accessible to both girls and boys, higher education in Kazakhstan sees a higher participation rate among women, albeit with a concentration in traditionally feminine disciplines (Ozawa et al., 2024).

Despite the generally positive environment for gender equality, efforts to promote national values and culture in Kazakhstan, similar to other Central Asian countries, have focused on reinforcing traditional gender roles and male privilege (Kandiyoti, 2007), and education policy and curriculum only make passing references to gender equality (MGIEP & UNESCO, 2019). Textbook research indicates the presence of gendered discourses that uphold existing norms, potentially perpetuating gender inequalities (Bekzhanova, 2023; Durrani et al., 2022; Palandjian et al., 2018). This raises questions about the role of gender identity in nation-building. Considering Kazakhstan's official commitment to gender equality, it is crucial to assess whether these perspectives are adequately represented in the school history textbooks. As children's national and gender identities are profoundly shaped during their school years (Durrani & Dunne, 2010), it is essential to explore whether voices advocating for gender equality are incorporated into history textbooks.

Conceptualizing Textbook Discourses, National Identity, and Gender

The curriculum is conceptualized as a legitimized text produced through state power, aimed at educating the desires and identities of the student (Popkewitz, 2000). While textbooks are not the sole influencers of students' identity formation, as officially sanctioned texts to which students are compulsorily exposed throughout their formative years, they crucially shape students' national and gender identities (Durrani, 2008). Within this context, school history holds particular significance (Blakkisrud & Abdykapar Kyzy, 2017; Carretero et al., 2013) as it "constructs the myths of origins" and establishes "geographical, ideological, and affective boundaries to distinguish the nation from its 'others'" (Durrani et al., 2020, p. 1624).

National identity, an imagined identity (Anderson, 1991), creates internal coherence by constructing a sense of "us" in opposition to "them" (Özkirimli, 2005). It represents loyalty and attachment to a particular community while positioning others as outsiders. However, while national identity seeks to foster equality within the community, it also imposes homogeneity and creates internal hierarchies (Yuval-Davis, 1997). Gender often serves as a fundamental marker in constructing these hierarchies by framing the representations of the nation around conceptions of masculinity and femininity (Mayer, 1999).

Similar to national identity, gender identity is a social construction that is naturalized through the repeated performance of gender norms within social regulation (Butler, 1990). This naturalization of gender identity conceals the social construction of gender and reinforces the binary understanding of man/woman, girl/boy, and masculinity/femininity, marginalizing non-binary identities as illegitimate and deviant. All societies create a hierarchy of masculinities and femininities, prescribing socially desirable ways of being a man or a woman, with hegemonic masculinity occupying the privileged position. Consequently, deviations from hegemonic masculinity and emphasized femininity are swiftly and severely regulated and sanctioned by social institutions, including schools, in order to maintain the existing gender order (Durrani et al., 2022).

Methodology

Study Aims and Research Questions

The study investigates the intersection between gender and nationhood within history textbooks in Kazakhstan. These textbooks are produced by publishers recommended by the Ministry of Enlightenment, such as Atamura and Mektep (Decree of the Ministry of Education and Science, 2020). Developed by teams of professional historians, the textbooks undergo review by historians and history teachers. Feedback from public discussions informs revisions, and the final drafts are submitted to the Republican Scientific and Practical Center for the Examination of the Content of Education of Kazakhstan for approval. The center's state commission decides on acceptance or rejection, with subsequent testing and evaluation by teachers and students (Dukeyev, 2021). However, their input is limited, as the textbooks have already been selected and reviewed. Ultimately, the Ministry of Enlightenment of the Republic of Kazakhstan recommends the approved textbooks.

The study examines these textbooks as reflections of the nation-building process, aiming to identify key actors, their occupations, gender, and the specific attributes for which they are praised and valued. It also explores the implications of these representations for gender equality and social cohesion in Kazakhstan. Two research questions guided this study:

1. Who are the national icons contributing to nation-building in Kazakhstan? This question seeks to identify the gender of these icons,

as well as the specific attributes for which they are praised. It aims to understand the roles assigned to each gender in nation-building processes.

2. Who represents the ideal Kazakhstani woman and man? This question aims to explore who is deemed more significant for the country and examines the expectations placed on students based on their gender.

Data Sources and Analysis

We analyzed seven history textbooks written in the Kazakh language that are used in grades 7 to 11 (Appendix 1). These textbooks were selected because we anticipated that they would play a key role in constructing national identity by emphasizing Kazakh symbols, icons, and historical narratives, as Kazakh is both the state language and the language of the titular group.

Our analysis involves a mixed-methods approach, utilizing quantitative analysis to address question 1 and qualitative methods to answer question 2. We analyze gender as three interrelated constructs—gender as a category, construction, and deconstruction (Knudsen, 2005). With gender as a category, quantitative analysis focusing on gender roles and gender stereotypes is used. Gender as construction uses qualitative methods to analyze femininities and masculinities as constructions produced by social institutions in a given context. Gender as deconstruction is qualitative and aims to destabilize gender constructions and discourses by "troubling" gender and studying it symbolically. By combining quantitative and qualitative approaches, our research provides a comprehensive understanding of how gender and national identity are represented in Kazakhstan's history textbooks.

To address our first research question, we analyzed the national icons depicted in the texts and illustrations. These icons are influential figures portrayed as instrumental contributors to the country's identity. We examined the gender distribution by tallying the characters mentioned in each grade's textbooks. We categorized these icons into four domains, counting each character only once in each textbook. If a national icon was associated with multiple domains, we allocated them to the domain with the most emphasis in the text. These four categories encompass:

1. Leadership: This domain includes political and military figures, as well as influential leaders in different positions.
2. Science: This domain focuses on scholars, scientists, and researchers who made notable contributions.
3. Art: This category comprises writers, poets, musicians, and artists who played significant roles in artistic pursuits.
4. Other: This category encompasses individuals in sports and business.

For our second research question, we conducted discourse analysis to explore how the social context and representations of the world are portrayed in texts and images (Fairclough, 2010). This analysis examines how Kazakhstan as a state and the Kazakhstani nation are imagined and constructed by political elites, particularly in the context of nation-building. We analyzed the contexts in the textbooks where ideal femininity and masculinity were portrayed and encouraged. This analysis included textual passages and visual images representing both ordinary individuals and prominent figures. Through this discourse analysis, we gained insights into the complex interplay of gender in the textbooks, revealing the construction, reinforcement, and occasional challenge or subversion of ideal femininity and masculinity.

Findings

We present our analysis under four key themes: the gendering of national icons, the perpetuation of hegemonic masculinities, the normalization of idealized femininities, and gender transgression.

The Gendering of National Icons: Male Dominance and Female Subordination

National narratives in history textbooks often feature national icons who embody exemplary qualities worthy of admiration (Durrani, 2008). When gender is analyzed as a category (Knudsen, 2005), it becomes evident that history textbooks in Kazakhstan primarily focus on national icons in three domains: leadership, science, and arts, while representation in business and sports remains limited.

A quantitative analysis of the national icons represented in textbooks reveals a clear dominance of men, both in textual descriptions (Table 4.1.) and visual illustrations (Table 4.2). Combining text and illustrations,

the study reveals that 679 male icons are portrayed in leadership roles compared to only 26 female icons, 331 male icons compared to 6 female icons in science, and 241 male icons compared to 19 female icons in arts.

Specifically, men are predominantly portrayed in leadership roles, while the domain of art exhibits the least male representation. Conversely, women are underrepresented across all domains, with minimal presence in leadership, art, and science, and no visibility in sports and business. Notably, there is a complete absence of female scientists in textbook visuals.

Tables 4.1 and 4.2 demonstrate that the grade 9 textbooks, both Part 1 and 2, published by Mektep, exhibit the least gender bias. These textbooks feature women in various domains except science in visual illustrations. Conversely, the least gender-inclusive textbooks are grades 7 and 11 published by Atamura, which rarely include women as national icons.

The hierarchical portrayal of domains in which national icons are depicted is noteworthy. The textbooks heavily emphasize political, social,

Table 4.1   Textual representation of national icons along the gender binary

| | Domains | | | | | | | |
| | Leadership | | Science | | Art | | Other | |
	men	women	men	women	men	women	men	women
Grade 7	111	1	55	0	4	0	0	2
Grade 8	103	4	52	1	67	2	4	0
Grade 9, Part 1	69	9	21	2	50	6	1	0
Grade 9, Part 2	123	3	31	0	40	5	1	0
Grade 10	96	2	29	0	36	3	1	0
Grade 11, Part 1 1111	36	0	30	0	5	1	6	0
Grade 11, Part 2	35	0	60	3	13	0	3	0
Total	573	19	278	6	215	17	16	2

Note "Other" domain included sports and business

Table 4.2 Visual representation of national icons along the gender binary

	Domains							
	Leadership		Science		Art		Other	
	men	women	men	women	men	women	men	women
Grade 7	9	0	7	0	0	0	0	2
Grade 8	9	0	7	0	2	1	0	0
Grade 9, Part 1	35	4	7	0	6	0	0	0
Grade 9, Part 2	11	3	2	0	5	1	0	0
Grade 10	27	0	8	0	7	0	0	0
Grade 11, Part 1	2	0	3	0	1	0	0	0
Grade 11, Part 2	13	0	19	0	5	0	1	0
Total	106	7	53	0	26	2	0	2

and military leadership in nation-building, while the arts and science domains appear to play a supportive role. Wars and conflicts are central to establishing the dominance of military, and political and social leadership, with men depicted as the primary figures responsible for defending the nation's geographical, political, and ideological boundaries. Examples include the Great Patriotic War (1941–1945) and the Zheltoqsan event (1986), which highlight male icons like Kairat Ryskulbekov (1966–1988), Bauyrzhan Momyshuly (1910–1982), and Alikhan Bokeikhan (1866–1937) as central figures in political conflicts, rebellions, and societal transformations. Furthermore, the textbooks specifically highlight prominent worker leaders during the Soviet era, with two women, K. Donenbayeva and Z. Tabyldinova, among the ten featured in the 9th grade textbooks (Part 2, p. 49 and Part 1, p. 116). Their presence in the narrative may reflect the gender equality policy of the time, which promoted women's equal participation in the workforce. However, the textbooks do not explicitly refer to this policy.

Art is presented as a subordinate domain to political and military leadership. Writers and artists are celebrated for their creations that depict the motherland, the nation, and political figures. One notable example is Bukhar Zhyrau (1668–1771), a renowned national poet and singer who gained fame as an advisor to the esteemed national leader Abylai Khan (1711–1781). Bukhar Zhyrau is praised for his wisdom and courage in expressing progressive values:

Bukhar Zhyrau was one of the wise judges during Abylai's reign. (...) In his works, he openly and boldly spoke of Abylai's drawbacks and praised him as a progressive political figure. (8th grade, p. 45)

Even as artists, male icons receive recognition for their contributions to nationalist struggles and causes. For instance, B. Zalesskiy (1796–1877), a deported artist, is commended for his artwork dedicated to the landscapes of Kazakhstan:

The artist (...) produced a wonderful painting called Daily life of the Kyrgyz (Kazakh) steppe. (11th grade, part 1, p. 99)

Interestingly, women in the domain of art are generally not linked to politics and nationhood in the textbooks, as they are merely listed among famous artists, with the exception of singer M. Mukhamedkyzy (born in 1969), who is recognized as a successful representative of the state. However, the textbook only provides details of her performance without expressing direct admiration or using positive adjectives for her, unlike male artists.

Maira Muhammedkyzy, who immigrated from China, sang in world-famous opera houses such as "La Scala", "Grand Opera". (11th grade, Part 1, p. 123)

Similar to art, science, both natural and social, appears as a supporting domain for politics and patriotism. Social scientists are portrayed as individuals who have studied and documented the nation's life and politics of specific periods in Kazakhstan's history.

Among the historical and ethnographic works on the nomadic civilization of the Kazakhs, we can mention the works of S. Zimanov on the social construction of the Kazakhs in the first half of the 19th century. (10th grade, p. 15)

The vast majority of prominent social scientists in textbooks are men. The only women represented in this category include A. M. Pankratova (a historian, 11th grade, Part 2, p. 132), and the Asfendiyarova sisters, Gulsym and Mariyam (doctors) (11th grade, Part 2, p. 119). Their works and contributions are briefly mentioned in a list alongside male scientists, without any further detail provided. Additionally, no portraits of

women scientists are included in any of the textbooks. In comparison, the Asfendiyarova sisters' brother Sanzhar, a doctor, has a portrait (11th grade, Part 2, p. 118).

In the post-Soviet context, the progress of women in education and science is not explicitly highlighted in the text but can be observed through the images. For instance, an image in the 9th grade textbook (Part 2, p. 212) showcases more female Bolashak scholars, recipients of the prestigious state educational scholarship for studying abroad, than male scholars. However, it is surprising that only male scientists from Maths and Space sciences are praised in the text (p. 213), despite the existence of many successful female scientists, such as Dana Akilbekova (a physicist), Kunsulu Zakariya (a researcher in biological safety), and Assiya Ermukhambetova (a chemist).

The analysis presented in this section reveals the minimal representation of women in history textbooks. The Kazakh national identity primarily revolves around male figures in political, social, and military leadership, safeguarding the nation's territorial and ideological boundaries. Icons in art and science domains are celebrated for their supportive role to national leaders. Even when women are included, their contributions are briefly mentioned without much detail. The historical narratives in textbooks can, thus, reinforce male superiority and entrench ideal femininities and masculinities.

In the following sections, we explore how textbooks construct dominant masculinities and emphasized femininities in the nation-building project in Kazakhstan, as well as how they metaphorically and subtly reinforce gender stereotypes.

Hegemonic Masculinity and Nationhood

Echoing the findings of the quantitative analysis, our qualitative analysis reveals that texts and images consistently position men as central figures in the process of nation-building, taking on various roles, such as political and military leaders, scientists, workers, artists, and singers. Textbooks frequently employ positive adjectives to praise the achievements of male professionals. For example, Abai Kunanbaiuly (1845–1904) is described as a prominent thinker, educator, great poet, and founder of Kazakh written literature. Similarly, the contributions of other renowned writers like A. Baitursynov (1872–1937) and Y. Altynsarin (1841–1889) to the Kazakh language and national traditions are also emphasized.

However, the core activity associated with men in nation-building is their involvement in warfare and their ability to overcome and conquer adversaries, reflecting the perpetuation of hegemonic masculinity. The textbooks narrate history in a way that implies that every man, both in ancient times and in the present, is obligated to join the army: "Each male was included in the army" (7th grade, p. 208). Men are portrayed as protectors of the nation, requiring physical strength, leadership skills, bravery to challenge the status quo, and a willingness to make sacrifices of both lives and resources.

A national military leader, A. Imanov (1873–1919), appears first as a portrait and then "in action" while probably heading to the battlefield with his follower warriors ('A.Imanov's soldiers, 9th grade, part 1, p. 37).

A noticeable language bias is evident in the description of heroism and patriotism. The term "*ержүрек*", which translates to "bravery" and "courage", carries a masculine connotation as it literally means "male's heart". Consequently, it implies bravery and courage in a specifically masculine manner. Many national icons are described using this adjective:

> In the late 3rd century BC, the courageous commander Mode assumed leadership over the nomadic Hun tribes (Hunnu) residing in the Great Plain. (10th grade, p. 54)

Textbook discourses perpetuate the naturalized connection between "masculinity" and "protecting and leading the motherland" by consistently depicting valorized heroes engaged in combat and as saviors of the nation. Courage and leadership are predominantly associated with men, reinforcing the historical male privilege to be leaders within a patriarchal societal framework. This patriarchal duty of care toward subordinates and the latter's obedience is further affirmed through the metaphor of the family in the descriptions of state building during the fourteenth and fifteenth centuries.

> As a ruler, the Khan was obliged to care for his subordinates and troops as if they were his own children. And they were expected to regard him as their father. (7th grade, p. 146)

The history textbooks reinforce and normalize masculine violence, particularly in the context of nation-building. They depict wars as the primary method of defending the nation's territory, implying that the

ability to defeat the enemy by any means is the ultimate display of hegemonic masculinity. The textbooks also feature numerous graphic scenes from history, including Kazakh national icons. For instance, Fig. 4.1 shows Kazakh warriors holding Kalmyks hostage after a victorious battle, presented as a source of pride. However, it is crucial to acknowledge that hostage-taking cannot be morally justified. This underscores the normalization of masculine violence when it is perceived as serving the purpose of protecting the land and the nation.

Furthermore, the texts consistently associate warriors exclusively with men. This is exemplified in the excerpt below, where only the "sons" of Kazakhstan are praised for their participation in the Great Patriotic War (1941–1945), despite the fact that over 9500 women soldiers from Kazakhstan participated in the war (Saktaganova, 2021):

Fig. 4.1 Hostaged Kalmyks (8th grade, p. 39)

The sons of the Kazakh people are at the forefront of the soldiers fighting for their home country. (9th grade, Part 1, p. 184)

Men's superiority is established by emphasizing the physical strength and power of the male icons. Furthermore, textbook illustrations consistently depict male leaders in a stereotypically masculine manner, characterized by features such as beards, mustaches, and a prototypical athletic body shape (such as images of A.Imanov's soldiers, 9th grade, part 1, p.37 and "Hostaged Kalmyks", 8th grade, p. 39).

The texts highlight the significance of male relatives (fathers or grandfathers) when discussing heroes and famous individuals. There is an emphasis on the importance of inheriting the occupations and roles of these male relatives, as evident in the following excerpt:

After Joshi's death, Batu was recognized as his father's heir. [Chinggis] Khan said to his grandson Batu: "Accept your father's power and go where he wanted you to go". (7th grade, p. 115)

In summary, our analysis reveals that men are positioned as protectors of the nation, possessing physical prowess, leadership abilities, bravery, and a willingness to sacrifice lives and resources. Consequently, men are recognized as warriors, leaders, decision-makers, and the inheritors and successors of familial values. They occupy the top position within the national hierarchy. However, it is important to acknowledge that women also play a significant role in the discourse of nation-building, a topic that we explore next.

Idealized Femininities and Nation-Building

Women remain largely absent from the key arenas where Kazakh national identity is performed, i.e. warfare, conflicts, and sacrificing one's life in the line of duty. If wars and conflicts play a central role in shaping the notion of Kazakh nationhood, women are predominantly portrayed as victims of male violence. This is evident in the frequent juxtaposition of women with children, highlighting their equal vulnerability and helplessness:

Punishment squads (...) took away Kazakh women and children to enslave them (8th grade, p. 99).

Women play a crucial role in enabling the performance of protector masculinity by Kazakh men through their vulnerability: *"They [Kazakh soldiers] waged a war of slaughter to save women, children, and the elderly from the pursuit of the enemy"* (8th grade, p. 10).

Additionally, women are depicted as closely associated with children and the home, perpetuating gender stereotypes that position women as homemakers. Within the context of nation-building in the textbooks, women are portrayed as symbols of reproduction, both biologically and metaphorically. The first woman introduced in the 7th grade is Umay ana (Mother Umay), a deity responsible for protecting families and children (p. 48). Images of ordinary women often depict them as mothers and nurturers holding a child ('Craddling', 10th grade, p. 208).

The language used in the texts personifies the homeland as a mother, reinforcing the symbolic role of women in discussions of nationhood: *"Andronians [ancestors of Kazakhs] (…) associate funeral rites with the concept of returning to the womb of Mother Earth"* (10th grade, p. 64).

Women also serve a symbolic role as preservers of culture and traditions. Textbook images depict women adorned in national clothing and exhibiting prototypical Kazakh facial features, as shown in the 10th grade textbook ('Weavers', p. 202). The focus is mainly on older women, whose power in upholding traditions is emphasized. Both the text and images depict them passing down traditional knowledge and skills to the younger generation, specifically their granddaughters.

Textbooks often associate women with nature. In discourses of nationhood, women are depicted as an integral part of the motherland, with the landscapes of Kazakhstan serving as the backdrop for this representation ('Weavers', 10th grade, p. 202).

The textbooks also mention traditional family relationships. In the 11th grade textbook (Part 2), a woman's obligations to her husband's family and the importance of respect and assimilation are emphasized. These traditions reinforce the messages of a secondary role for women in the family and the necessity to obey and conform to their husbands. The bearer, preserver, and main reproducer of these traditions is the woman, particularly the young bride.

> Young brides did not mention the name of their husbands' close relatives as a sign of special respect for the husband. She respected her husband's father and mother and called them 'ata' [father-in-law] and 'yene' [mother-in-law] (11th grade, Part 2, p. 83)

Brides tried not to be noticed by their grandfathers and brothers-in-law. (11th grade, Part 2, p. 83)

These ancient traditions may require clarification for contemporary girls, especially regarding the unequal expectations of respect between spouses and their respective families. These messages contribute to the perception of women occupying a secondary role in the family, which in turn exacerbates gender inequality in public domains such as leadership, art, and science.

The analysis reveals that women are framed within idealized femininities, depicting them as vulnerable and in need of male protection. They are also portrayed as the biological reproducers of the nation and the preservers of national traditions. Furthermore, women are associated with nature, the home, and children. Despite perpetuating these gender stereotypes, the textbooks do occasionally present commendable efforts to "trouble" idealized femininities in national discourses, which is a positive development. We present these moments of transgression of gender norms in the next section.

"Troubling" Gender Norms

The textbooks challenge traditional gender stereotypes by featuring exceptional women who could become successful political and military leaders, such as queens and military leaders Tomyris (lived in 570–520s BCE) and Zarina (seventh century BCE—sixth century BCE), as well as soldiers in the Great Patriotic War (1941–1945) A. Moldagulova (1925–1944), M. Mametova (1922–1943) and K. Dospanova (1922–2008). The 8th-grade textbook also highlights Kazakh female warriors who fought in the Kazakh-Dzhungar wars.

Aytolkyn, Abylai Sultan's daughter, Aibike, Bulanbay Batyr's daughter, and others fought heroically against the enemy. Gaukhar, the wife of Kabanbai batyr, led the squad. She participated in all major battles. (8th grade, p. 20)

In an extended paragraph, the three women—Moldagulova, Mametova, and Dospanova—are praised for their bravery and are specifically admired as "brave Kazakh girls and young women" who actively participated in the wars. While depicting women in non-traditional roles, such as combat, which is associated with men, may intend to break gender

stereotypes, it might reinforce gender norms and perpetuate the idea that women need to adopt traditionally masculine roles to be considered equal. It could also inadvertently normalize or glamorize violence, potentially overshadowing other important aspects of women's contributions to society.

In contrast, the textbooks do not portray any "feminine" men. Prominent male figures are not associated with qualities like sensitivity, gentleness, or vulnerability. This suggests that challenging stereotypes by embracing femininity are not considered acceptable within the discourse of nation-building, further reinforcing the notion that masculinity is the only accepted norm for nation-builders.

Gender equality is not given a dedicated chapter or paragraph in any textbooks except grade 9. This omission is unfortunate as it could shed light on important issues related to women's rights and their marginalization. Only a few images depict the gender equality agenda of the Soviet era, such as the one in the 9th grade textbook ('A lesson in the Soviet school', part 2, p. 70), which shows girls' complete enrollment in secondary education.

In Grade 9, the history textbooks highlight four advocates for women's rights, including three men and one woman. Among the male advocates are Zh. Shayakhmetov (1902–1966), who established the Women's Pedagogical Institute (9th grade, Part 2, p. 61), as well as A. Baitursynuly (1872–1937) and M. Dulatuly (1885–1935), whose newspaper addressed women's equality issues (Grade 9, Part 1, p. 30, p. 51). The female icon is Nazipa Kulzhanova (1887–1934), an activist and the first Kazakh female journalist who focused on the destiny of Kazakh women (Grade 9, Part 1, p. 47). However, this representation does not accurately reflect history, as other notable female activists such as Alma Orazbayeva (1898–1948), Akkagaz Doszhanova (1893–1932), and Nagima Arykova (1902–1956) actively pursued women's emancipation and gender equality agendas. By "troubling" gender in textbooks, we can better understand the significant advancements in education and employment that occurred during the Soviet era.

In summary, textbooks occasionally feature exceptional women who defied gender stereotypes and became successful military leaders. However, this portrayal may inadvertently reinforce the idea that women must adopt traditionally masculine roles to be considered equal. The textbooks also lack representation of "feminine" men, further emphasizing masculinity as the norm for nation-builders. Gender equality is not

adequately addressed, with women's rights advocates primarily depicted as men, despite the existence of notable female activists throughout history.

Conclusions

This study explored the reciprocal construction of national identity and gender in Kazakhstan through the analysis of history textbooks used in Kazakh medium schools. The research employed a two-stage analysis, combining quantitative and qualitative methods, to explore the representation of national icons and the portrayal of ideal Kazakhstani women and men in nation-building narratives.

The quantitative analysis uncovered a notable gender imbalance, with men being predominantly represented as national icons in all domains, including leadership, science, and arts. Among these domains, science emerged as the most discriminatory toward women, while arts displayed relatively less discrimination. Interestingly, the two textbooks published by Mektep for the 9th grade demonstrated the least gender bias, while the textbooks published by Atamura for grades 7 and 11 were found to be the least gender inclusive.

Textbooks construct the imagined nation of Kazakhstan through narrating stories of war and conflicts, with the portrayal of different masculinities and femininities woven into the narratives. Dominant masculinities portray men as warriors, political leaders, and military figures. Men are portrayed as key contributors in nation-building, holding positions of power in politics, warfare, invention, decision-making, and the arts. They are seen as inheritors of wisdom, power, talent, and wealth, passing these traits to male successors. Thus, the superiority of men in national identity is established through their frequent inclusion as well as their association with power and leadership.

On the other hand, idealized femininities depict women as victims of wars initiated by men, positioning them as vulnerable and in need of protection. Their role in nation-building revolves around nurturing the nation through teaching traditions, preserving culture, giving birth to the next generation, and transmitting cultural knowledge.

While there are positive exceptions that depict women as warriors, leaders, scientists, and artists, such portrayal is rare. The valorized female icons are often praised for demonstrating masculine prowess and dominating others, with political leaders and warriors being the most celebrated. Although female icons have a relatively greater representation in

the domain of arts than in science, their recognition and admiration in this field are limited. As a result, the ideal Kazakhstani woman is often depicted as strong and possessing stereotypically masculine traits. The unintended effect of such portrayal might be the further perpetuation of masculine power and the glorification of war rather than the subversion of gender stereotypes. By highlighting the masculinized representations of female icons, we are neither challenging the historical accuracy of the narration nor arguing for the exclusive portrayal of women in feminine roles. Instead, we argue that how the female icons are incorporated within nation-building narratives fails to offer an alternative vision to the patriarchal imagination of the nation, a phenomenon also observed in history textbooks of independent Kyrgyzstan (Blakkisrud & Abdykapar Kyzy, 2017). In contrast to masculinized women icons, there are no prominent men praised for stereotypically "feminine" characteristics or practices such as vulnerability, weakness, starvation, victimization, and nurturing or care in the domestic sphere.

The nation-building discourse within the history textbooks portrays the Kazakhstani nation as a patriarchal society centered around wars and conflicts. This emphasis on masculine violence, as highlighted by Bekzhanova (2023), has significant implications for the normalization of violence. Moreover, the textbooks not only justify but also praise the violence perpetrated by prominent Kazakh men, which hampers students' understanding of peacebuilding and social cohesion. Such a limited perspective on national and gender identities is unsuitable for contemporary times, especially as the Kazakhstani government strives to position the country among the top advanced nations. The inadequate representation of women across various domains serves as a significant obstacle to achieving this goal.

The study offers multi-faceted implications for policy and practice. Firstly, there is a need to address the gender imbalance in the representation of national icons in textbooks by developing inclusive curriculum guidelines for authors and reviewers. Secondly, it is important to challenge traditional gender roles and stereotypes and promote a nuanced understanding of gender identities. Thirdly, the normalization of violence in nation-building narratives should be replaced with an emphasis on peaceful conflict resolution. Lastly, recognizing the crucial role of teachers in promoting gender equality, peacebuilding, and social cohesion (Durrani & Halai, 2018), teachers' capacities in gender-responsive practices need to be supported.

Appendix 1 History Textbooks Included in the Analysis

Dzhandossova, Z. 2019. Қазақстан тарихы. Оқулық, 10 [History of Kazakhstan. Textbook. Grade 10]. Almaty: Mektep.

Kabyldinov, Z., Kaliev, Zh., and Beisembayeva, A. 2018. Қазақстан тарихы. Оқулық 8(7) [History of Kazakhstan. Textbook 8(7), Grade 7]. Almaty: Atamura.

Kabyldinov, Z., Sandybayeva, A., and Lebayev, F. 2019. Қазақстан тарихы. Оқулық. 1-бөлім, 11 [History of Kazakhstan. Textbook. Part 1. Grade 11]. Almaty: Atamura.

Kabyldinov, Z., Sandybayeva, A., and Lebayev, F. 2019. Қазақстан тарихы. Оқулық. 2-бөлім, 11 [History of Kazakhstan. Textbook. Part 2. Grade 11]. Almaty: Atamura.

Kabyldinov, Z., Shaimerdenova, M., Kurkeev E. 2019. Қазақстан тарихы. Оқулық 9 (8) [History of Kazakhstan 9(8), Grade 8]. Almaty: Atamura.

Oskembayev, K., Saktaganova, Z., Zuyeva, L., and Muktaruly, G. 2019. Қазақстан тарихы. 8–9. Оқулық. 1-бөлім (XX ғ. басы – 1945 ж.) [History of Kazakhstan. 8–9, Grade 9). Textbook. Part 1 (beginning of the twentieth century – 1945)]. Almaty: Mektep.

Oskembayev, K., Saktaganova, and Muktaruly, G. 2019. Қазақстан тарихы. 8–9. Оқулық. 2-бөлім (1945 жылдан бүгінгі күнге дейін) [History of Kazakhstan. 8–9, Grade 9. Textbook. Part 2 (from 1945 until present)]. Almaty: Mektep.

References

Anderson, B. (1991). *Imagined communities: Reflections on the origins and spread of nationalism*. Verso.

Blakkisrud, H., & Abdykapar Kyzy, N. A. (2017). Female heroes in a man's world: The Construction of female heroes in Kyrgyzstan's symbolic nation-building. *Democratizes, 25*(2), 113–135.

Bekzhanova, Z. (2023). Uncovering gender, language, and intersected asymmetries in history textbooks. In N. Durrani & H. Thibault (Eds.), *The political economy of education in Central Asia. The Steppe and beyond: Studies on Central Asia*. Palgrave Macmillan. https://doi.org/10.1007/978-981-99-8517-3_7

Bekzhanova, Z., & Makoelle, T. M. (2022). Latinization of the Kazakh alphabet: Implications for education, inclusion, and social cohesion in Kazakhstan, *SAGE Open*, 1–15. https://journals.sagepub.com/doi/pdf/10.1177/21582440221138820

Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.

Carretero, M., Rodríguez-Moneo, M., & Asensio, M. (2013). History education and the construction of a national identity. In M. Carretero, M. Asensio, & M. Rodríguez-Moneo (Eds.), *History education and the construction of national identities* (pp. 1–14). IAP.

Dave, B. (2007). Kazakhstan—ethnicity, language and power. *Routledge*. https://doi.org/10.4324/9780203014899

Decree of the Ministry of Enlightenment of the Republic of Kazakhstan. (2016). https://zakon.uchet.kz/rus/docs/V1600013923

Decree of the Ministry of Education and Science of the Republic of Kazakhstan. (2020). https://adilet.zan.kz/rus/docs/V2000020708#z15

Dukeyev, B. (2021). Kazakhstan in World War II: Authors and publishers of post-1991 history textbooks. *Central Asian Affairs*, *8*(3), 251–272. https://doi.org/10.30965/22142290-12340004

Dunne, M., Fincham, K., Crossouard, B., & Durrani, N. (2020). Gender symbolism and the expression of post-colonial national and religious identities. *Social Identities, 26*(3), 376–387. https://doi.org/10.1080/13504630.2020.1765765

Durrani, N. (2008). Schooling the 'other': The representation of gender and national identities in Pakistani curriculum texts. *Compare: A Journal of Comparative and International Education*, *38*(5), 595–610. https://doi.org/10.1080/03057920802351374

Durrani, N., CohenMiller, A., Kataeva, Z., Bekzhanova, Z., Seitkhadyrova, A., & Badanova, A. (2022). 'The fearful khan and the delightful beauties': The construction of gender in secondary school textbooks in Kazakhstan. *International Journal of Educational Development, 88*. https://doi.org/10.1016/j.ijedudev.2021.102508

Durrani, N., & Dunne, M. (2010). Curriculum and national identity: Exploring the links between religion and nation in Pakistan. *Journal of Curriculum Studies, 42*(2), 215–240. https://doi.org/10.1080/00220270903312208

Durrani, N., & Halai, A. (2018). Dynamics of gender justice, conflict and social cohesion: Analyzing educational reforms in Pakistan. *International Journal*

of Educational Development, 61, 27–39. https://doi.org/10.1016/j.ijedudev.2017.11.010

Durrani, N., & Nawani, D. (2021). Knowledge and Curriculum Landscapes in South Asia: An Introduction. In P. M. Sarangapani & R. Pappu (Eds.), *Handbook of education systems in South Asia* (pp. 1589–1619). Springer Singapore. https://doi.org/10.1007/978-981-15-0032-9_53

Durrani, N., Kaderi, A. S., & Anand, K. (2020). National identity and the history curriculum: Nation making in the shadow of partition. In P. M. Sarangapani & R. Pappu (Eds.), *Handbook of education systems in South Asia* (pp. 1621–1646). Springer Singapore. https://doi.org/10.1007/978-981-15-0032-9_41

Fairclough, N. (2010). *Critical discourse analysis: The critical study of language*. Longman.

Gellner, E. (1983). *Nations and nationalisms*. Basil Blackwell.

Kandiyoti, D. (2007). The politics of gender and the Soviet paradox: Neither colonized, nor modern? *Central Asian Survey, 26*(4), 601–623. https://doi.org/10.1080/02634930802018521

Kissane, C. (2005). History education in transit: Where to for Kazakhstan? *Comparative Education, 41*(1), 45–69. https://doi.org/10.1080/03050060500073249

Knudsen, S. V. (2005). Dancing with and without gender - reflections on gender, textbooks and textbook research. Has past passed. In Horsley, M., Knudsen, S. V., & Selander, S. (Eds.), "*Has past passed ?": Textbooks and educational media for the 21st century* (pp. 70–87). Stockholm Institute of Education Press.

Mayer, T. (1999). Gender ironies of nationalism: Setting the stage. In M. Tamar (Ed.), *Gender ironies of nationalism: Sexing the Nation* (pp. 1–24). Routledge.

Miller, D. (1995). *On nationality*. Clarendon.

MGIEP, & UNESCO. (2019). *Rethinking schooling for the 21st century: The state of education for peace, sustainable development and global citizenship in Asia* (2nd ed.). Mahatma Gandhi Institute of Education for Peace and Sustainable Development.

Özkirimli, U. (2005). *Contemporary debates on nationalism: A critical engagement*. Palgrave Macmillan.

Ozawa, V., Durrani, N., & Thibault, H. (2024). The political economy of education in Central Asia: Exploring the fault lines of social cohesion. *Globalization, Societies and Education*. https://doi.org/10.1080/14767724.2024.2330361. (Ahead of print)

Palandjian, G., Silova, I., Mun, O., & Zholdoshalieva, R. (2018). Nation and gender in Post-socialist education transformations: Comparing early literacy

textbooks in Armenia, Kazakhstan, Kyrgyzstan and Latvia. *Comparing Post-Socialist Transformations Purposes, Policies, and Practices in Education*, 167–192. https://doi.org/10.15730/books.104

Popkewitz, T. S. (2000). Reform as the social administration of the child: Globalization of knowledge and power. In N. C. Burbules & Torres, Carlos Alberto (Eds.), *Globalization and education* (pp. 157–186). Routledge.

Saktaganova, Z. G. (2021). K voprosu ob uchastii zhenschin Kazakhstana na frontakh velikoi otechestvennoi voiny [To the question of participation of Kazakhstani women in the fronts of the Great Patriotic War]. *Istoricheskiy kuryer, 3*(17), 32–40. https://cyberleninka.ru/article/n/k-voprosu-ob-uch astii-zhenschin-kazahstana-na-frontah-velikoy-otechestvennoy-voyny

Smagulova, J. (2008). Language policies of Kazakhisation and their influence on language attitudes and use. *International Journal of Bilingual Education and Bilingualism, 11*(3–4), 440–475. https://doi.org/10.1080/136700508021 48798

Smith, A. D. (1991). *National identity*. Penguin.

Spehr, S., & Kassenova, N. (2012). Kazakhstan: Constructing identity in a post-Soviet society. *Asian Ethnicity, 13*(2), 135–151. https://doi.org/10.1080/14631369.2012.638802

Tabaeva, A., Ozawa, V., Durrani, N., & Thibault, H. (2021). *The political economy of society and education in Central Asia: a scoping literature review.* The PEER Network. https://peernetworkgcrf.org/wp-content/upl oads/2021/06/Scoping-Review_Final_23-June-2021.pdf

UNESCO. (2020). *A new generation: 25 years of efforts for gender equality in education*. Gender Report of the Global Education Monitoring Report. Accessed June 05, 2021.https://en.unesco.org/gem-report/2020genderre port

World Economic Forum. (2023). *Global gender gap report 2023: Insight report June 2023.* World Economic Forum. https://www.weforum.org/publicati ons/global-gender-gap-report-2023/

Yuval-Davis, N. (1997). *Gender and nation*. Sage.

The Impact of Marriage and Marriage Expectations on Girls' Education in Tajikistan

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Introduction

Tajikistan is one of the countries in post-Soviet Central Asia where gender influences children's educational experiences. Gender was a defining educational attainment variable in Tajikistan, even during the Soviet

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times. However, it seems that the role of gender has increased after Tajik-istan became independent in 1991. In the aftermath of the breakup of the Soviet Union, the country experienced a prolonged civil war (1992–1997), which significantly affected educational participation of female students. As early as 2001, several years past the country's achievement of independence, it was documented that girls dropped out of school at higher numbers than boys beginning after the primary grades and that the gap increased each year thereafter (Falkingham, 2001; Janigan, 2020). This is a significant change from the pattern of the Soviet period when the gap between girls' and boys' attainment was consistently decreasing. Girls' enrollment increased from 2 percent of all students in 1927 to 47 percent in specialized secondary education and 41 percent in institutions of higher learning by 1989 (DeYoung et al., 2018; IWPR, 2005).

Previous research on Tajikistan indicates that the breakup of the Soviet Union led to the reemergence of patriarchal traditions and re-traditionalization of the Tajik society (Harris, 2004; Silova & Abdushukurova, 2009). The gender dynamics in Tajikistan are also influenced by structural and systemic reforms, particularly economic, as the country transitions from communism to capitalism and from a centrally planned economy to a market-driven one (Waljee, 2008). In addition, Waljee (2008) argues that understanding the connection between gender and education requires considering the influence of societal transition on evolving gender dynamics across various aspects of community life beyond education alone. Furthermore, it is essential to consider how communities adapt to externally imposed changes in their lifestyles and how they navigate ongoing social changes, including those of religious, political, or economic nature (Waljee, 2008). Consequently, gender roles and relationships develop predominantly within the context of soci-etal upheaval, marked by shifting cultural values, beliefs, and practices and a pressing need to comprehend and adapt to drastically altered circumstances (Waljee, 2008).

Thus, past research on the role of gender in educational attainment in the context of Tajikistan has pointed to a variety of factors that affect girls' dropout rates. In early studies, family poverty was the primary factor

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limiting girls' education, as described by parents (Baschieri & Falkingham, 2001; Janigan, 2012; Ramanaik et al., 2018). Factors like accessibility, affordability, and safety for boys and girls stem from recent transition-related changes and contribute to parental decisions regarding children's schooling in these evolving times and conditions (Waljee, 2008). The shifting gender norms also played a role as parents diverted the limited resources to boys' education. Parents often reported that boys' education was more important as they would be the breadwinners in their future families (Whitsel, 2009). Also implicit in this understanding was that the boys would be future supporters of the parents, and girls would leave the home when married. However, cultural norms and expectations varied by community and region within the country, as some regions, such as Badakhshan and Sughd, had norms of girls completing education, which encouraged girls' school participation (Whitsel, 2009). Finally, an important role was attributed to nationwide economic and policy environments, such as the availability of a higher education scholarship for rural girls, referred to as a "quota" position, that influenced girls' educational decisions and choices (Whitsel, 2009).

Most of the studies conducted in the past on the educational experiences of girls in Tajikistan were commissioned by international organizations. Because these studies sought to provide system-wide recommendations for the government of the country to provide a general overview of various factors, such as family poverty, school-level factors, and national policies. Meanwhile, some more context-specific factors were not explored. One such factor, which has been pointed to by prior research (Harris, 2021) is marriage and marital expectations. In the context of Tajikistan, motherhood is seen as the crowning achievement for women, and marriage is the key avenue in which to achieve this status (Harris, 2021). Therefore, cultural norms related to marriage highly influence girls' education.

The purpose of this study is to fill the gap in existing research by a focused in-depth exploration of the role of marriage and societal marital expectations in educational decision-making and girls' experiences. The study answers the following research question: How do societal marital expectations affect girls' educational experiences in Tajikistan? The chapter begins with an overview of the literature on the impact of marital expectations on educational attainment followed by the study's methodology. Next, the chapter presents the findings of the undertaken research study followed by a discussion and a conclusion.

Literature Review

The analysis in the study was informed by the nested model of factors suggested by Whitsel (2009, 2017) for understanding the educational choices and attainment of children in Tajikistan as well as by the results of the focused literature review of the prior studies on the role of marriage in girl's educational experiences.

Conceptual Framework

Whitsel (2009, 2017) suggested a model, including family, community, and national factors combined with the role of girls' agency to analyze the educational experiences of women in Tajikistan (Whitsel, 2009, 2017). Family factors such as resources and structure are at the core of the model. Families are the key decision-makers concerning children's education, and their available resources shape how children can participate in schooling. The community in which parents are based includes the quality of the school, work opportunities, and general resources to support the families. Because of the diversity of cultural norms in rural vs urban communities, in addition to regional differences, culture is placed here at the community level. The national context of the overall economic situation, plus the policies in place, also influence family decisions. The model also factors in a child's agency in the process of pushing against the influence of family, community, and national-level variables. There are examples of parents considering their child's desire and/or talent for school study that demonstrate that children can push back against the prevailing family, community, and national-level pressures (Whitsel, 2009, 2017) (Fig. 5.1).

Prior Research on the Role of Marriage in Girls' Educational Experiences

In Tajikistan motherhood is considered the primary responsibility of women, whereas marriage is the gateway to motherhood (Thapa, 2012). This explains the primary concern of parents with the preparation of their daughters for married life, emphasizing care work, household skills, obedience to males and elders, and chastity (Harris, 2004; Thapa, 2012), which is common in patriarchal societies (Banerjee, 2011). Below, we review the literature related to marriage and its role in the educational attainment of girls in Tajikistan and similar contexts. This overview will
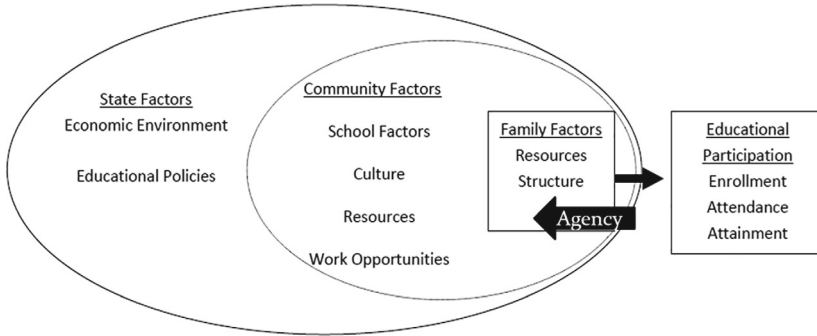
Fig. 5.1 Whitsel's nested model of factors contributing to educational participation

provide some ideas for interpretation of the results in the subsequent sections of this chapter.

As mentioned earlier, the prior research identifies several factors influencing girls' dropout rates. Poverty and economic hardships become a reason for families to discontinue the education of children (Baschieri & Falkingham, 2009). Economic instability and limited financial resources constrain families' ability to invest in their children's education, leading to disparities in educational attainment in Tajikistan (Baschieri & Falkingham, 2009). For example, in Bangladesh, low-income families marry their daughters earlier, hoping they will have better lives in their in-laws' families (Schuler et al., 2006). Additionally, women are not considered successful in their professional lives if they have been unsuccessful in managing the domestic front (Devi & Singh, 2015; Sonowal, 2013). Hence, early childbirth may interfere with a girl's educational attainment, prohibiting some girls from continuing with higher education and graduating from high school. Indeed, the literature review on the subject has demonstrated that "girls of marginalized families are mostly deprived of education, and their parents would rather pay more attention to marrying off their daughters as early as possible because of varieties of factors linked to socio-cultural gendered norms" (NIPORT, 2005; Baden et al., 1994; Baden, 1996, as cited in Sarkar et al., 2014, p. 350).

In transitional societies like Tajikistan, marriage market has a significant influence on the education of girls in Tajikistan. While it gradually changes in urban areas, Tajikistan practices mostly arranged marriages,

whereas parents and relatives choose spouses for young people. The process emphasizes traditional norms, which imply male superiority in the family in patriarchal societies. The marriage market of Tajikistan prefers the husband to be more educated than the wife. Unsurprisingly, Whitsel (2009) found that some parents were keeping girls from school so they did not become overeducated not to limit their chances in the marriage market. This had inevitably contributed to the declining girls' enrollment in and attainment of secondary and higher education.

Like Haridarshan (2015), who focused on gender and education in India, Harris (2006) pointed out that Tajik girls with a high level of education or financial independence are perceived as challenging the norm of becoming subordinate members of their families. They found that this motivated some parents to discourage their daughters' educational aspirations. This was particularly true for rural residents (UNESCO, 2011). Many rural girls who went to cities for higher education later faced issues getting married and finding employment in the constrained labor market, thus failing to benefit from their educational pursuits. Another marriage-related consideration that may encourage some families to prohibit education for their daughters is chastity as a requirement for marriage in patriarchal societies. Studies in India by Ramanaik et al. (2018) found that girls' participation in school is perceived as tarnishing their reputation, especially when girls are seen in public places during their studies. Similar attitudes might be in place in Tajikistan, which might influence the willingness of parents to allow girls to be educated.

Furthermore, family is not the only mechanism in which marriage exerts pressure on girls' educational aspirations. The community also has an effect. For example, gossip concerning girls and their behavior is the key mechanism by which girls' activities are monitored in rural areas. For example, Gluckman (1963) identifies gossip as a "culturally controlled game with important social functions" (p. 312). It also serves as a form of social control in both patriarchal and non-patriarchal societies (Black, 1984; Fischer, 2018; Giardini & Conte, 2012; Smuts, 1995), where negative gossip is able to ruin a girl's chance in the marriage market and, therefore, to have power over girls' educational aspirations, especially, when a girl envisions her education in the city (Janigan, 2012; Thapa, 2012).

Due to the social nature of the expectations about marriage, the decision about educational enrollment and continuation is rarely made by girls themselves in patriarchal contexts. According to Brock and Cammish

(1997), males are the main characters in deciding whether to send their daughters to school or not. Similarly, Thapa (2012), in her study "Community Perspective on girls' dropout in Tajikistan," found that male family members have the most significant say in the female members' decisions about education. She states that because fathers and brothers are occupied outside of the household sphere, they are more aware of the community's perspectives and social expectations about girls (Thapa, 2012). Thus, in a male-dominated society, the girl child (daughter, sister) sees these decisions as a normal part of her life.

Furthermore, Brock and Cammish (1997) reported that influential males outside the family, such as religious and political leaders, may have a huge impact on the issue of girls' education (Brock & Cammish, 1997). Religious leaders are particularly influential in parental decision-making. After the collapse of the Soviet Union and the resurgence of Islamic tradition in Tajikistan, women and girls started wearing *hijabs (a scarf, a veil)*. Hijabs rapidly emerged as a form and an expression of religious devotion and a symbol of modesty according to religious gender roles (Nozimova, 2018). Thus, consistent with this prior research in other countries, Thapa (2012) states that religion, with major support from the established patriarchy, has an affecting influence on the Tajik society. The hijab, which the females wear to honor their faith, helps them maintain family honor. By wearing hijab, the girls also conform to societal norms.

Nevertheless, the prior research also demonstrates that women in Tajikistan are not submissive; they find ways to resist the prevalent gender discourses and community and family control (Harris, 2004). Referring to Judith Butler (1997), Harris notes that Tajik women and men are forced to conform to gender order and 'perform' their gender where necessary and able to exercise their agency (Harris, 2004).

Methods

The data used in this study came from a larger project that aimed to compare barriers to education for women of school and university age in the early post-independence period and more recently. The target population was 10 women from different post-independence "generations," purposive sampling (Creswell & Poth, 2016) was used to target women who completed education and those who dropped out of school. Because of the personal nature of the interviews, the lead author designed

the study following Rubin and Rubin (2011) conversational partnership approach.

For this chapter, we have analyzed data from the resulting eighteen in-depth interviews collected by the lead author in 2020, focusing on the factors related to marriage. The interviews were conducted through phone interviews through different encrypted communication applications such as WhatsApp and Viber, which allowed the lead author to gather data from Tajikistan while in the USA during the COVID-19 pandemic. Phone interviews asked open-ended questions following Rubin and Rubin's (2011) main questions, follow-up, and probes model. Questions were asked about the participants' involvement at school, the issues they faced or currently face that make it difficult to go to school, and what influenced their dropping out of school (for those who had dropped out).

Three criteria were taken into consideration when recruiting participants, including the period of study, educational attainment, and the region of residence. The original intention was to study change over time; therefore, participants included women who attended schools during the early postwar years (1995–2000) (N = 6) and women currently studying at a school or university (N = 12). Participants ranged in educational attainment from completing only six years of secondary education to post-graduate studies. The recruited females were from Dushanbe city, regions of republican subordination (Varzob, Vahdat, and Rudaki regions), city districts of Dushanbe (Shohmansur and Sino regions), from Khatlon province (Temurmalik region), and Gorno-Badakhshan Mountainous Province (Darvoz region).

The participants were recruited by a female research assistant in Tajikistan. The recruitment was conducted in two phases. The first phase included snowball sampling of females with whom the recruiter was familiar. The second phase was a mixture of snowball and purposeful sampling of women in various age ranges, regions, and educational attainment levels. The interviewer also asked the participants to refer the researcher to other females who had the required characteristics and were able to participate.

The interviews were audio recorded. As the interviews were in the Tajik language, the lead author transcribed and translated them into English with the subsequent collaborative analysis and writing. Coding began after the transcription and translation of the interview excerpts about the participants' educational experiences had been completed.

An inductive approach influenced by Charmaz's (2006) grounded theory analysis was utilized during coding. It was completed in two stages. The first stage consisted of dividing the data set into smaller units and labeling the units with codes. Taking into account the characteristics of the divided units and paragraphs, the lead author wrote memos describing the general meaning of the paragraphs that were the initial level for developing topics that covered the units. The sentences and sometimes the whole paragraphs that had similar context were coded and given the same label. In the second stage, the researchers combined the labeled codes with identical meanings into broader categories and subcategories. The focus of this study was the influence of marriage-related factors. The marriage codes included everything that referred to marriage of girls that could affect their educational attainment. The key themes emerging from the analysis are summarized below with sample quotes from the transcripts.

Findings

The model described above mentioned multiple layers of influence on girls' educational participation. Families make decisions based on resources available and are influenced by a context where community level and national-level factors are at work. However, girls do have agency in the process to advocate in a limited way for their own educational preferences. The results of the influence of marital considerations in our study reveal that most of the controlling factors play out at the community level or as a result of the interaction of the family and community level considerations.

In general, marriage seems to play an important role in educational decision-making of families and girls. According to previous studies, attaining a successful marriage is considered highly important for a girl. Education plays an instrumental role in achieving this most important goal in a girl's life. A girl is prepared for competition in the marriage market since early childhood, and education is considered valuable only to the extent that it can help attract a desirable match without contradicting societal norms about the level of education of a wife in comparison with her husband. The pressure to get married is exerted mostly by the community but is then echoed at the family level. At both levels, primary decision-making is gendered, with senior and powerful

males frequently dominating the process of decision-making about the educational pathways of a girl.

Marriage Market Considerations and Parental Decisions About Their Daughters' Education

Our results reveal that marital considerations play an important role in the educational decision-making of girls and families. However, the demands of the marriage market are different in rural and city areas, and this differentiation influences the way educational decisions are made. In rural areas, being overeducated decreases the market value of a future bride, and families prevent daughters from pursuing too much education. Even when girls are allowed to continue with college or university education in the city, they frequently drop out if they marry a groom from a rural area.

The situation is gradually changing in urban areas, especially in Dushanbe. Being educated in cities may increase the marital value of a bride and may improve their chances of getting married to a more educated and well-off husband. In words of one of the participants from Dushanbe:

> Nowadays most young men prefer to marry an educated girl. I noticed many young men in Dushanbe look for an educated girl to marry (Participant 6; 35 years).

At the same time, regardless of the place of residence, some professions are valued more in the market. Many prospective in-laws value brides with education in a medical field or education. For example, participant 2 said the in-laws preferred a daughter-in-law who could help the family as a nurse. The daughters-in-law with medical degrees are even allowed to work outside the home in the nearby clinics to help their spouse make money. Moreover, some in-laws support their daughters-in-law's decision to pursue education in medicine. In words of our participants:

> I know one of our relatives who had a nurse degree got married, and she was allowed by her marriage family to work in the nearby local clinic. Not all the families in Tajikistan look for educated girls as their future daughters-in-law, but it is getting better than in past years. (Participant 2; 22years, Vahdat)

Another participant added:

> Only one of my sons is married, and his wife does not have an education higher than ninth grade. She is a housewife, but I want her to enter medical college and receive medical education. (Participant 9; 43 years, Sino)

Thus, the marriage market dictates not only girls' educational attainment but also the future majors of their study, which are considered feminine.

Gossip as a Form of Social Control Limiting Girls' Educational Opportunities

One of the main mechanisms by which societies control gender norms concerning family relations, marriage, education, and work is gossip. As girls are considered a family honor, community gossips are used to force conformity to social norms (Harris, 2004). If a girl does not comply with societal gender norm expectations, gossip may ruin her reputation. Parental awareness about the power of gossip over the marital chances of their daughters pushes them to limit their daughters' presence in public places, including in public schools and universities. Participant 11, who is 18 years old, described the gossip among adults and their role in girls' education opportunities as follows:

> In our neighborhood, people say bad things about girls and gossip about the young girls. Therefore, my father didn't want me to go outside often. He always said that he didn't want to hear any gossip about me. I talked to him and said that I would not do anything bad, go to school, and get back home. But he said that he doesn't want me to go to school. This is because men in their groups in our neighborhood said bad things about girls. (Participant 11; 18 years, Rudaki)

The gossip can change the parents' decision on whether or not to allow the girl to receive higher education or even complete upper secondary school due to the girl appearing too physically mature in the eyes of society. To avoid the gossip from neighbors, the girls even avoid showing up outside their homes. Participant 7 described her experience of commuting to school as follows:

There was gossip about girls, but I did not go out often. I only went to school or college and was unaware of what they usually said about me or girls. Also, some girls' parents were against going out; therefore, they did not go out. I usually went out with my group mates from college but not with anyone from my neighborhood. (Participant 7; 21years, Shohmansur)

Gossip seems to be more important in controlling girls' educational opportunities in rural areas. Participant 4, who is 45 years old, noted that at the time when she had to go to college, she was not allowed to because in the community where she lived, people said disgraceful words as if the girl from the village would go astray if far from home and she stated that as follows:

The people gossip about the girls in the rural areas; therefore, my mom did not let me go to university and complete my education. They said that girls from rural areas cannot live in the city properly and may do something that may tarnish their own and their families' reputations. The village girls were not supposed to live in the city by themselves, and my mom was concerned about my honor and purity. (Participant 4; 45years, Sino)

Thus, gossip is used as a means of female control, especially when men in the Tajik society apply it. Gossip exerts social pressure on a female child and her entire family (Harris, 2004).

Women's Limited Decision-Making Power Regarding Their Education

In Tajikistan, young couples usually start their marriage by living with the husband's family. In such a traditional family, the oldest male member is the decision-maker. The oldest male member decides the future of younger family members and controls the mobility of female family members, protecting their honor and female chastity. The husband's father is the main decision-maker, and the sons are the secondary decision-makers. Thus, it is often the husband's father who will decide for the daughter-in-law. Only when a married son separates his household from his parents' family he becomes the initial decision-maker. He decides on the future of his own children and wife, including the future concerning education. The quote below from participant 4, who is 45 years old, demonstrates the dynamics of navigating multi-generational decision structures. The participant lived in a large family with her husband. Although he did not have much to do around the house, she

was not allowed to receive an education due to the traditional point of view of her father-in-law, the decision-maker of the family:

> The world around the house has nothing to do with my educational opportunities or lack of such. We were four daughters-in-law in that family. Nevertheless, my father-in-law (the head of the family) did not allow me to receive education or to go out. Meanwhile, my husband had a university degree… I started to work only after we became independent and moved to the city…They had such an understanding or view that the family's daughter-in-law should avoid public places and appearing on the street. He and other heads of the family did not like their daughters-in-law to appear often in the street. It is like a traditional view that they followed…It is always like this: when one comes to a new family, the head of the family, usually in-laws, will decide what the new daughter-in-law will do. After the young families build their houses and live separately from their marriage family, the husbands take responsibility for deciding for their wife and family. …When we separated our household and lived with my husband and children, my husband allowed me to work. (Participant 4; 45 years, Sino)

It is important to notice that there seems to be an interplay between work availability in the community and cultural norms of honor and chastity in determining whether she would be allowed to pursue education. The desire for chastity in young women has wide-reaching effects. Parents frequently limit a girl's mobility to keep her safe because rumors of her behavior may hurt her reputation and chances in the marriage market. On a related note, the fear of not being able to control their daughter's behavior if sent to college far from her family makes the parents focus on marrying her off as soon as she reaches puberty and leaving the task of educating her to the marriage family. However, girls are rarely sent to college after getting married.

> My father's friend's daughter got divorced right after her wedding. She was blamed for not having kept her virginity and was returned home. My father was afraid that if he would not marry me off early, something like that would happen to me, which would put him to shame. So, he quickly found me a candidate when I turned 20 and got me married. Now I am married and have two children. I didn't try to continue my education anymore after marriage. I gave up. Before my parents allowed me everything and didn't limit me from anything, but they started to limit me from freedom after that event with my father's friend's daughter. It

was hard for my father because when that girl was brought back home, his friend was so ashamed that he had a heart attack and died. Prior to this unfortunate event, my father had always told me to study and to become a lawyer, but he changed his mind at once after the incident. (Participant 16; 23 years, Sino)

These interplay of factors such as shame, family honor, and early marriages force young girls not to continue their educational endeavors. Their gender performativity is dictated by powerful gender order and existing gender norms in Tajikistan.

Early Childbearing and Its Effect on Girls' Education

One element Whitsel's model of factors influencing girls' educational attainment does not account for is that family influences occur not only in parental decision-making. As explained in the section above, in later years of education, males make decisions in the husband's parents' family. In addition, girls often marry early, start their families, and become mothers before they graduate from secondary school or a university. This means that negative influences on educational attainment may come from the girl's family obligations.

For example, participant 7, who married at 17, mentioned that she had intended to pursue higher education but had to abandon the hope because she had been caring for her newborn. She noted about her education that:

I was 17 years old when I got married. I took "vocational-technical" courses after ninth grade, I got married at age 17 and had my daughter at age 18. Marriage age is 18, but I knew my husband before we married. My husband was born in 1989, and he was older than me. He was 25 or 26 years old. He said that he already reached the age to get married, so I agreed. I wanted to continue my education at university, but I could not do it because I was already busy with my child. (Participant 7; 21years, Shohmansur)

The next example is similar and demonstrates that even with the support of a family elder, the pressure of raising young children may still interfere with a girl's educational opportunities. Participant 7, who is 21, was married and already had two children at the time of the interview. She

mentioned that she had received only vocational-technical school education after ninth grade. However, due to having young children, she had to postpone her university education even though her mother-in-law favored her receiving an education. She described her situation in the following way:

> My children are still young. They are three and two years old. I think I will not work in the field of my vocational-technical specialization. My mother-in-law wants me to continue, and she says I have to enter university to receive a related degree next year. (Participant 7; 21years, Shohmansur)

Another complexity of family influence, which the model suggested by Whitsel does not properly capture, is related to the continued influence of parental family even after a girl is married and starts her own family. Grown-up children are expected to help their sick and elderly parents in Tajikistan, and this may have repercussions on educational attainment if a girl faces the responsibility at the age when she should be pursuing high school or university education. One such situation was described by a married participant who had to take care of her aging mother, who had raised her daughter alone. Participant 16 described the situation in the quote below as follows:

> I knew a girl who was my neighbor, and she worked with me. She got married and continued her education after the wedding. She always said that it was difficult for her in her marriage family's home, and she did not know if she would finish university because it was her last year of university. She got married, and her morning sickness started. She decided to drop out of school, but her mom did not let her because she was raised by her mom alone, and her mom wanted her to have an education. (Participant 16; 23years, Sino)

Girls' Agency in Educational Decision-Making

There are hints in the interviews that nowadays girls also have some agency in the decisions. When reflecting on how times have changed, participant 5 is 19 years old and from the capital city, Dushanbe. Contrary to the narrative above about the influence of patriarchal decision-making, she mentioned that most girls have the capacity to decide for themselves whether to continue their education or get married:

In the past, I think the girls were forced to get married early after 9th grade
[incomplete secondary education], but now it is not like that. Most of them
decide what is better for them to do. Nowadays, most girls enter universities.
and continue their education. (Participant 5; 19 years, Rudaki)

In the quotation below, she also stated that girls defer to their parents.

Suppose I wanted to study, but my parents did not allow me to make it to 11th grade or enter university. In that case, I think I would learn any skills to try to work, and if my parents told me to get married, I would agree because I listen to my parents no matter what they say. Fewer and fewer people listen to their parents and parents' decisions nowadays, but yes, most people in Tajikistan follow what their parents want them to do even if they are more than 18 years old, especially girls. (Participant 5; 19 years, Rudaki)

This observation suggests a gradual change in societal norms where some young individuals are beginning to assert more autonomy. This shift points to evolving forms of agency among young girls, challenging traditional expectations even as they continue to navigate the demands of familial and societal pressures.

Discussion

Drawing on Whitsel (2009, 2016) model, this chapter explored how societal marital expectations affect girls' educational opportunities in Tajikistan. The study's findings reveal that families serve as primary decision-makers about their daughters' educational pursuits, preventing their daughters from receiving education to preserve chastity and honor of the family in the community as a prerequisite for marriage, as in other patriarchal societies (Ramanaik et al., 2018). Our findings emphasize the differences between communities as definitions of behaviors that affect honor and chastity differ in communities. For example, in villages, educated or financially independent girls are seen as deviating from the traditional expectations and cultural norms as was found in India (Ramanaik et al., 2018). Furthermore, community pressures in the form of gossip force parents to marry off their daughters early. Gossip

is a powerful tool for social control (Black, 1984; Fischer, 2018; Giardini & Conte, 2012; Harris, 2004; Smuts, 1995) and restricts women's educational opportunities by reinforcing traditional gender roles.

A positive change in community social norms in urban areas highlights a gap between girls' educational opportunities. In the marriage market multiple parents sought educated daughter-in-laws, especially in the fields of medicine. This contrasts Whitsel's (2009) finding that mothers limit girls' education for the sake of the marriage market.

Individual's agency proves to be an important factor as shown in our model Whitsel (2009, 2016) because of the limited ability for any decision-making among girls after marriage. What is missed in the model is the influence of in-laws as many girls do not continue their education after marriage in their husbands' families. In-laws, especially males of the family, decide the women's future educational pursuits, often restricting them from continuing their education. This supports research about the role of patriarchal decision-making in women's lives (Brock & Cammish, 1997; Harriss, 2004; Janigan, 2012; Thapa, 2012). In addition, having children after marriage significantly affects the educational participation of women in the country. However, despite these constraints and consistent with Whitsel model, the findings reveal that young women are able to exercise their agency, negotiating within these boundaries set by their families and society.

Conclusion

The study's findings reveal ways that marriage and marriage expectations are at play at the individual, family, community, and national-level and impact girls' education in various intersecting ways. However, the study was limited in size, and due to COVID-19, a narrow field of participants was collected. Future work could build on this study by expanding the size and scope of the work.

Several measures need to be taken to address the multifaceted challenges impacting girls' education in Tajikistan. Development and implementation of specific policies could include support for girls' education at all stages, even after the marriage. These policies could involve specific programs, including establishing accessible childcare facilities to enable young mothers to continue their education. Community engagement is also essential, with the launch of initiatives and interventions aimed at changing traditional perceptions around girls' education and marriage. In

addition, considering the role of community leaders in Tajikistan is essential and involving them in programs promoting the benefits of educating girls and challenging the existing gender norms. Empowerment programs for women could equip girls and women with decision-making skills, financial independence, and reproductive health knowledge, balancing educational pursuits with family responsibilities. In Tajikistan, as in other post-Soviet contexts, addressing these issues requires a nuanced approach to avoid backlash, concurrently promoting greater autonomy and educational opportunities for young women, enabling them to exercise their agency fully.

References

Baschieri, A., & Falkingham, J. (2009). Staying in school: Assessing the role of access, availability, and economic opportunities—The case of Tajikistan. *Population, Space and Place, 15*(3), 205–224.

Banerjee, R. (2011). *Tackling gender disparity in primary and secondary education and the empowerment of women*. Retrieved online from http://www.ifuw.org/seminars/2007/banerjee.pdf

Black, D. (1984). *Towards a general theory of social control*. Academic Press.

Brock, C., & Cammish, N. (1997). *Factors affecting female participation in education in seven developing countries* (Education Research Paper No. 09, 1993, 96 p.). University of Oxford and Hull.

Butler, J. (1997). *Excitable speech: A politics of the performative*. Routledge.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Devi, S. R., & Singh, L. K. (2015). Women's role in agriculture and allied fields in Manipur. *Indian Journal of Hill Farming*, *28*(2).

DeYoung, J. A., Kataeva, Z., & Jonbekova, D., (2018). Higher education in Tajikistan: Institutional landscape and key policy developments. In J. Huisman, A. Smolentseva, & I. Froumin, (Eds.), *25 years of transformations of higher education systems in post-Soviet countries: Reform and continuity*. (pp. 363–385). Palgrave.

Falkingham, J. (2001). *Programs department women and gender relations in Tajikistan*. Country Briefing Paper. Asian Development Bank, Programs Dept. East, and Office of Environment and Social Development.

Fischer, C. (2018). Gender and the politics of shame: A twenty-first-century feminist shame theory. *Hypatia, 33*(3), 371–383. https://doi.org/10.1111/hypa.12431

Giardini, F., & Conte, R. (2012). Gossip for social control in natural and artificial societies. *SIMULATION, 88*(1), 18–32. https://doi.org/10.1177/003754 9711406912

Haridarshan, P. (2015). The impact of differing maternal expectations on the academic achievements of primary school children in Urban Bangalore, South: A comparison between boys and girls: The impact of differing maternal expectations on the academic achievements of primary school children in urban Bangalore. *South Support for Learning, 30*(3), 192–204.

Harris, C. (2004). *Control and subversion: Gender relations in Tajikistan*. Pluto Press.

Harris, C. (2021). The changing identity of women in Tajikistan in. *Gender and Identity Construction: Women of Central Asia, the Caucasus and Turkey, 68*, 205.

Institute for War and Peace Reporting (IWPR), (2005). *Tajik girls disappearing from classrooms Tajikistan*. Retrieved from https://reliefweb.int/report/tajiki stan/tajik-girls-disappearing-classrooms

Janigan, K. (2012). *Factors affecting girls' education in Tajikistan: What difference did the Girls' education project make?*. University of Toronto.

Janigan, K. (2020). Efforts to overcome barriers to girls' secondary schooling in rural tajikistan. *Globalization on the Margins: Education and Post-Socialist Transformations in Central Asia*, 229.

Nozimova, S. (2018). Hijab in a changing Tajik society. In Laurelle, M. (Ed). *Being Muslim in Central Asia: Practices, policies, and identities* (pp. 258–279). Brill. https://doi.org/10.1163/9789004357242_013

Ramanaik, S., Collumbien, M., Prakash, R., Howard-Merrill, L., Thalinja, R., Javalkar, P., & Bhattacharjee, P. (2018). Education, poverty and "purity" in the context of adolescent girls' secondary school retention and dropout: A qualitative study from Karnataka, southern India. *PLoS ONE, 13*(9), 1–22.

Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data*. Sage.

Sarkar, R., Reza, M., & Hossain, E. (2014). Sociocultural traditions of girls' educational attainment experiences from rural Bangladesh. *Antrocom Online Journal of Anthropology,10*(2). Retrieved from http://www.antrocom.net/upl oad/sub/antrocom/100214/10-Antrocom.pdf

Schuler, S. R., Bates, L. M., Islam, F., & Islam, Kh. (2006). The timing of marriage and childbearing among rural families in Bangladesh: Choosing between competing risks. *Social Science & Medicine, 62*, 2826–2837.

Silova, I., & Abdushukurova, T. (2009). Global norms and local politics: Uses and abuses of education gender quotas in Tajikistan. *Globalisation, Societies and Education, 7*(3), 357–376. https://doi.org/10.1080/147677209031 66376

Smuts, B. (1995). The evolutionary origins of patriarchy. *Human Nature, 6*(1), 1–32. PMID: 24202828. https://doi.org/10.1007/BF02734133

Sonowal, M. K. (2013). Impact of education in women empowerment: A case study of SC and ST women of Sonitpur District, Assam. *International Journal of Computer Applications in Engineering Sciences, 3*, 27.

Thapa, M. (2012). *Community perspectives on girls' dropout in Tajikistan.* North Dakota State University.

UNESCO (2011). Building for a better future: Education for an independent South Sudan. Paris. *web-UNICEF-Youth-Report-Tajikistan-2011-Eng.pdf*. (n.d.). Retrieved from https://www.unicef.org/tajikistan/web-UNICEF-Youth-Report-Tajikistan-2011-Eng.pdf

Waljee, A. (2008). Gendered education, marketization, and Islam in Tajikistan. In S. Fennell & M. Arnot (Eds.), *Gender, education and equality in a global context. Conceptual frameworks and policy perspectives* (pp. 87–101). Routledge.

Whitsel, C. M. (2009). *Growing inequality: Post-Soviet transition and educational participation in Tajikistan.* Doctoral dissertation, Indiana University.

Whitsel, C. M. (2017). Missing pieces: Factors affecting girls' school attendance in Tajikistan (Eds.), *Educational policies in Pakistan, Afghanistan, and Tajikistan: contested terrain in the 21st century* (pp. 1–14). Lexington Books.

Who Are the Persistently out of Education and Jobless? Identifying the Socio-Demographic Factors Affecting NEET Women in Kazakhstan

Dinara Alimkhanova

INTRODUCTION

Recently, young people across the world have encountered more socio-economic challenges compared to the previous generations (Aassve et al., 2013; Scarpetta et al., 2010). The labour market ambiguity, skills mismatch, poor health conditions, and education-related barriers continue to produce more young people in precarious circumstances (Eurofound, 2012). Globally, youth precarity was mainly tracked through markers such as unemployed, disabled, or out of school. However, a new concept of "NEET" that emerged on the agenda of British policy-makers back in the 90s has helped many countries to identify individuals

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in precarious situations (Furlong, 2006; Social Exclusion Unit, 1999). NEET stands for "not in education, employment and training" and is used to measure the degree of vulnerability among youth (Furlong, 2006, p. 554). NEETs include two major sub-categories: unemployed youth and inactive NEETs. While the former refers to those who are seeking jobs, the latter represents a very diverse group including family carers, those who take a gap year, who are on temporary disability, missing school, school dropouts, and many others. This particular group is not static and varies across country contexts. For example, while Austrian, Danish, and German NEETs mainly represent those who have family responsibilities and health issues, countries such as Greece, Ireland, Italy, and Spain mainly include unemployed and discouraged young people who gave up searching for a job (Zudina, 2022). Another important thing for consideration is the age range, which may vary depending on the context needs. For example, while the UK considers 16–18-year-olds to track school-to-work transition (Russell et al., 2011), Japan counts 15–35-year-old youth (Yong & Kaneko, 2016).

Globally, more than 282 million youth were NEET in 2020 (ILO, 2022). In addition, recent data show an increase in the global NEET rate (21.8% in 2019; 23.3% in 2020), with young women being twice as likely to fall into the at-risk category compared to men (ILO, 2022) (Fig. 6.1). This tendency was even worse for Arab, South Asian, and North African youth, where almost every second woman is neither working nor in education among 15–24-year-old youth (ILO, 2022; Taldau IAS, 2023).

While the gender gap in the 15–24 age range was not significant, similar to international trends, Kazakhstani young women aged 15–28, have faced twice the challenge of securing employment or staying engaged in education (Fig. 6.2) (Taldau IAS, 2023).

The national averages mask regional disparities in NEET rates. The share of NEET women (15–28-year-old) was even higher in Mangystau (women—11,4%, men—3,4%), Akmola (women—12%, men—4,4%), and Karagandy (women—15%, men—4,8%) regions in 2021 (Taldau IAS, 2023). While no study directly addresses why women are more exposed to out-of-education and employment settings, the LFS and some other supplementary data may explain possible reasons why women tend to be more excluded in Kazakhstan.

Despite the general decline in the NEET rate in Kazakhstan over the past decade (from 8% in 2012 to 6,5% in 2022), women have consistently shown a twofold higher likelihood of falling into the NEET category,
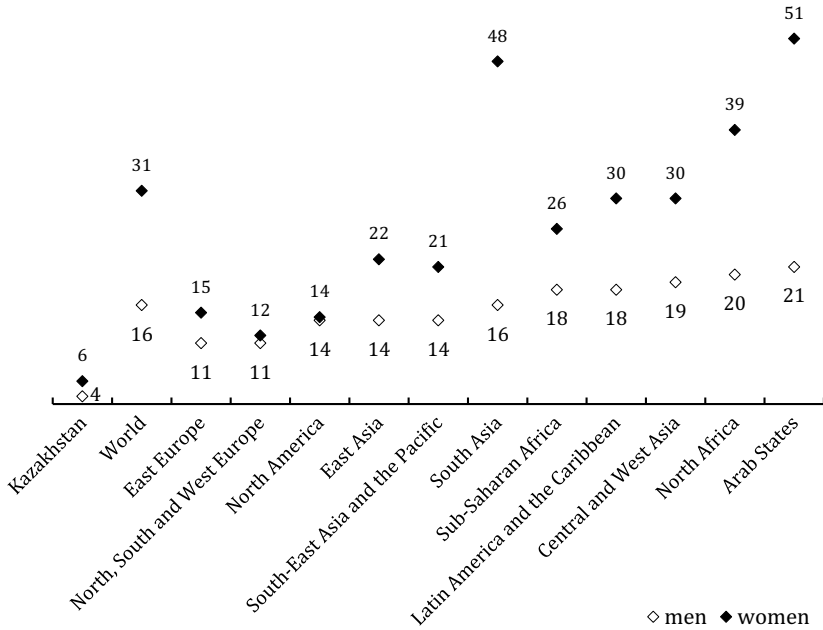
Fig. 6.1 Share of NEET youth (15–24) by gender, world, sub-regions, and Kazakhstan, 2020, %

indicating that they tend to be more out of education and employment settings (women—8,9%; men—4,2% in 2022) (Taldau IAS, 2023) and suggesting that women face greater challenges in pursuing work or study compared to men.

The reasons behind this trend are diverse: some women cannot work and study due to health problems or caring responsibilities, while others do not receive a sufficient level of education to continue with postsecondary studies, are pushed to work due to family economic situation or are not allowed to work due to patriarchal societal expectations (Haj-Yahya et al., 2018).

An increasing share of NEET is problematic for a country. When the issue of youth isolation is neglected, it leads to adverse individual, social, and economic issues. In particular, exposure to insecure and low-quality
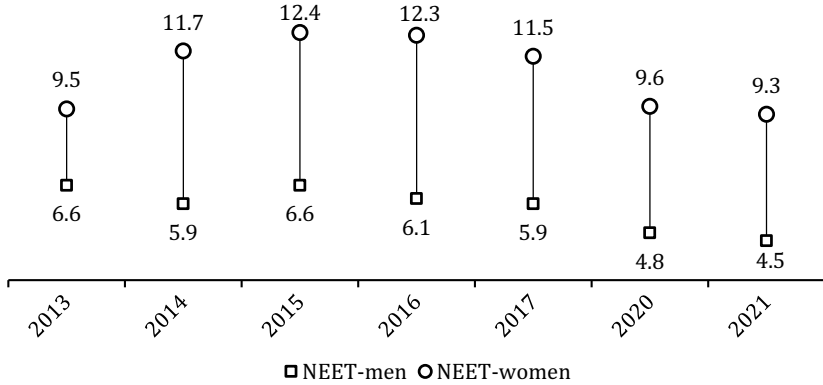
Fig. 6.2 The share of 15–28-year-old NEET women and NEET men in Kazakhstan, 2013–2021, %

employment, health problems, criminality, or youth offending which, in turn, may persist into adult lives (Alfieri et al., 2015; Bardak et al., 2015; Bynner & Parsons, 2002; Eurofound, 2012; Social Exclusion Unit, 1999). Being a NEET is also associated with social and political alienation that results in their radicalization and many sad cases already have verified it in different parts of the world (Eurofound, 2012). However, a higher share of NEET, especially among women, is problematic because it may further worsen their social and economic inclusion in society (Maguire, 2017). Given the dire consequences of an overrepresentation of women among NEET youth, it is important to address the problem at the level of public policy. A better understanding of the drivers behind the higher representation of NEET among women will help decision-makers develop better policy solutions to move women to the labour market and education settings as well as make their voices heard.

While many studies on NEET women are primarily conducted in developed countries (Eurofound, 2012; Maguire, 2015, 2017; Quintano, et al., 2018; Social Exclusion Unit, 1999; Tamesberger & Bacher, 2014; Zuccotti & O'Reilly, 2019), there is often an absence of data that accurately describes the characteristics of NEET women in developing contexts. While several studies (Ashimkhanova et al., 2017; Alimkhanova, 2017, 2018; Khussainova et al., 2022, 2023) attempted to investigate

the situation of NEET youth in Kazakhstan, none of them explored the gender perspective, especially by using the Labour Force Survey (LFS) data. Therefore, the current research aims to fill this gap by investigating the factors that increase the likelihood of women becoming NEET in Kazakhstan and seeks to answer the following research question:

1. Which social and demographic risk factors are associated with young women becoming NEET in Kazakhstan?

By making use of the nationwide statistical database, the LFS, this chapter will identify social and demographic factors that affect women on their way to becoming NEET in Kazakhstan. The chapter begins by reviewing and discussing the international and national literature on NEET women. The second section describes the data and methods, followed by the presentation of the results of secondary data analysis in the fourth section. The chapter concludes with a discussion and conclusion.

Literature Review

The term NEET first emerged in the United Kingdom in the late 90s when British policymakers started investigating why 16–18-year-olds started leaving the education system more and became prone to unemployment (Social Exclusion Unit, 1999). Since then, the term has become attractive to policymakers and spread beyond to spot the youth at risk circumstances. The term has sparked significant scholarly debate because countries started to create definitions to identify their NEET groups, resulting in a complex understanding of the term. Ultimately, the definition of NEET youth was proposed by the European Commission on 27 April 2010 (Eurofound, 2012) and the final method of computation was accepted by the International Labour Organization (ILO) in 2013 (ILO, 2013) which is now being used across the world.

Today, the NEET youth presents young people (15–24 or 15–29) who have not worked and were not engaged in education or training in the past four weeks (Elder, 2015). The NEET category represents youths who are not working and studying. Every country collects NEET data through the LFS. The overwhelming consensus in scientific articles is that the NEET population includes the unemployed and inactive (Bardak

et al., 2015). The difference between the two is distinguished by the fact that unemployed seek a job, while inactive NEET youth do not seek any opportunities because (1) they might lose hope to find one (discouraged youth), (2) they want to be involved but are constrained by particular responsibilities (child or elderly care), (3) do not know where and how to search the information or (4) some do it by choice (travelling, gap year, childcare etc.).

Prior Research on Factors Behind Women's Arrival to the NEET Status

Although the reasons behind being NEET are diverse and vary across contexts, gender stands out as the most significant factor that contributes to the NEET rate. Globally, women were twice as likely to be NEET than young men in 2020 (ILO, 2022) and they persistently appear in the inactive category (Tamesberger & Bacher, 2014; Zudina, 2022). Women seem to encounter more structural challenges to sustain in the labour market and education settings, which contribute to their greater presence among NEET youth (Haj-Yahya et al., 2018). The literature reveals the following factors that have the greatest impact on women as they transition into NEET status.

Gender. Gender has consistently emerged as the primary determinant significantly influencing women's transition to NEET status in previous studies (Alvarado et al., 2020; Eurofound, 2012; Harun et al., 2020; Kovrova et al., 2013; Özdemir et al., 2023; Tamesberger & Bacher, 2014). The probability of being NEET is positively associated with being female and having children in Italy (Odoardi et al., 2023). The LFS findings in Malaysia show that two-thirds (65%) of all NEETs were women (Harun et al., 2020). A survey data in the UK also showed that young women comprised 70% of those who are inactive NEET between the ages of 16 and –24 (Maguire, 2015). The higher NEET rate among young women is often attributed to parenthood or pregnancy, and a greater propensity to be engaged in caring responsibilities, including caring for children, individuals with disabilities, or elderly family members. Also, carrying household chores, especially after marriage, pertains to women's responsibility. In many cultures, men are expected to be actively involved in the labour market and remain as breadwinners (Zudina, 2022). As a result, the majority of women tend to dedicate the initial years of their marriage to family, childcare, and household work (Alvarado et al., 2020;

Harun et al., 2020; Nordenmark et al., 2015; Özdemir et al., 2023) remaining inactive (neither working nor seeking jobs). More often, this inactivity advances with age and turns out to be chronic.

In addition, in countries where early marriages tend to happen more often, women show higher detachment from employment or education due to family care responsibilities, homemaking, large family size, and caring for relatives (Lüküslü & Çelik, 2021). In Uganda, early marriage was the most significant predictor for women to become NEETs (ILO, 2017, as cited in Kiss et al., 2021). In the context of post-Soviet countries, recent LFS results for Russia showed that marriage was a significant factor for NEET women and was concentrated among 24-year-olds, which is also linked to the traditional gender division of labour (Zudina, 2022).

Age. The risk of becoming NEET increases with age (Alvarado et al., 2020; Bardak et al., 2015). The reason why the NEET rate in the 15–19 age group is less than in elder groups is due to the majority of youth being engaged in educational activities (Özdemir et al., 2023). With ageing, the NEET rate also increases and it becomes greater due to a growing share of NEET women in particular age groups of 20–24, 25–29, or 30–35 (Özdemir et al., 2023).

Location. The factor of location varies across country contexts. While some previous studies confirm that women who live in rural areas are significantly more prone to become NEET (Kovrova et al., 2013; Zudina, 2022), living in a rural settlement did not significantly affect women in Tajikistan and Indonesia (Kovrova et al., 2013; Mirov, 2020).

Marital status. Overall, marital status did not appear to be a significant factor across many studies, although it showed a completely different picture between genders. Survey analysis revealed that the probability of being NEET increases for married women but has no significant effect on the overall NEET rate in Italy. Similar findings were observed in Turkey, Eastern Europe and Central Asian countries (Mauro & Mitra, 2020; Özdemir et al., 2023). Apart from being married, divorced or widowed positions significantly and positively aggravated poverty (Nugroho et al., 2023) which is one of the prerequisites that leads to a NEET situation. Single parents had much lower incomes which was also often associated with low education that limited access to decent jobs. Therefore, being a widowed or divorced parent could further circulate poverty risk to their children's life cycle (Nugroho et al., 2023), which may potentially lead to their social exclusion.

Household size and having children. A study suggests that household size positively links to the probability of being a NEET (Malo et al., 2023). Having siblings significantly affected being NEET but the significance was even higher for women in Tajikistan (Mirov, 2020). Findings from the British Cohort Study also revealed that women who grew up in large families are less likely to be employed (Menta & Lepinteur, 2021), which, certainly, can be their own choices but also may increase the chances of socio-economic alienation of those who have no or limited options. In addition, the probability of being NEET has been positively associated with being female and having children (Kovrova et al., 2013; Odoardi et al., 2023). Similarly, a long-term NEET tendency among Italian women was due to having children and carrying family duties, although the choice was not necessarily voluntary (Contini et al., 2019). This means that household size for NEET youth was larger than non-NEET and women with children are more prone to become inactive.

Educational level. More often, NEET is associated with low educational attainment, particularly in secondary and vocational education. Studies confirmed that a lower educational level leads to becoming a NEET for both men and women (Mirov, 2020; Özdemir et al., 2023). However, on the one hand, since women have shown higher chances of becoming NEET, some studies show that a higher share of NEET women is associated with the fact that they tend to be undereducated as compared to men (Lüküslü & Çelik, 2021) which leads to the women's lower professional skills (Hegewisch & Gornick, 2011). In addition, the low education level of family members, poor school conditions, and the poor relationship between their parents and schools were the main reasons for girls dropping out of school and subsequent NEET status (Lüküslü & Çelik, 2021). In this regard, low parental education and their disconnection from their daughters' school life were the most significant reasons why the girls failed to continue their schools. Female high school dropouts often were discouraged because family members were not able to assist, for example, in completing homework or were unable to provide guidance. Also, women are highly affected by reference groups and mainly by mothers (Haj-Yahya et al., 2018). Poor study conditions were found to be an important factor for girls' disengagement from schools and subsequent NEET status. For example, Turkish girls felt unsafe due to the tradition of boys bringing weapons (knives, sharp objects) to schools. Arab women faced violence from Arab men at the

university level since they counteracted societal norms about the presence of women in higher education (Haj-Yahya et al., 2018). On the other hand, NEET status among women is not necessarily associated with a low educational level. For example, women represented higher (12,4%) compared to men (5,4%) among NEETs with tertiary education in Malaysia for the age group 15–30 (Harun et al., 2020). This means that high educational attainment does not always guarantee women's economic activity.

Based on the review of the existing literature, the following diagram can summarize that demographic and social factors that have been the most influential determinants of becoming a NEET for women in Kazakhstan (Fig. 6.3).

In terms of demographic characteristics, the likelihood of becoming NEET significantly grows between the age 25 and 29 which is often driven by the large share of women who leave the labour market due to marriage (Buheji, 2019). Therefore, the demographic features are often associated with predictors such as gender, age, and marital status in studies. While a type of living residence is also considered to be important, it differently affects young people in various contexts (Kovrova et al., 2013; Mirov, 2020; Zudina, 2022). A set of social factors associated with low educational level, large household size, and having children are significant obstacles for women to join educational settings and the labour market (Kovrova et al., 2013; Lüküslü & Çelik, 2021; Mirov,
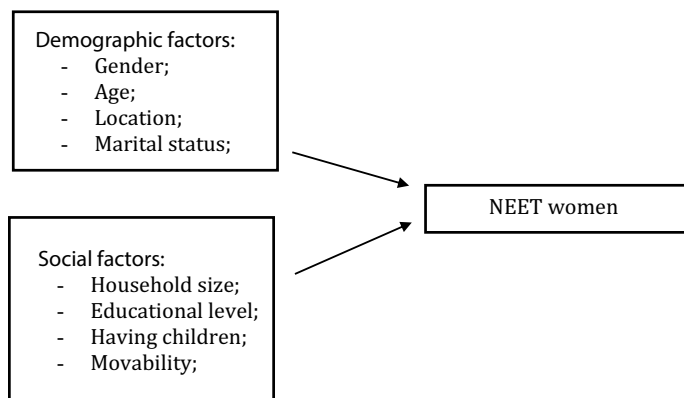
Fig. 6.3 Factors associated with female youth's transition to NEET status

2020; Zudina, 2022). While moving trajectories have not been explicitly explored in literature, the current study will present the findings from the LFS.

Methodology

This study used a quantitative approach to answer the research questions. Particularly, microdata from the LFS for the past decade (2012–2022) was used to provide a descriptive statistical analysis of the share of women and men who have a status of NEET and examine the determinants that showed the likelihood of young women falling into this category. The dataset did not include data from 2013 and 2014 due to data errors in the LFS.

The target population in this study are young people aged 15–28 in Kazakhstan. To analyse the situation in the population we used the data obtained from LFS, a household survey, which is distributed monthly across all regions of Kazakhstan by the Statistics Bureau. The sample size for the LFS constituted 4,5% (or 218,000 households in 2018) of the total number of households in Kazakhstan. The survey uses a two-stage stratified cluster sampling where a researcher first identifies clusters, obtains names of individuals within those clusters, and then samples within them (Creswell & Creswell, 2018). The first unit of the LFS is residential buildings (individual houses, apartment buildings). The second unit of the survey is households (persons aged 15 and over who live in them) (Bureau of national statistics, 2016).

The NEET indicator is calculated through survey data as the percentage of the youth population who are not employed and not involved in any type of education or training. Figure 6.4 was created by the European Training Foundation (Bardak et al., 2015) and illustrates how the NEET indicator is extracted from the survey.

The calculation of the "NEET share of youth" indicator is given in the methodological documents of the ILO "Indicators of Decent Work". "Concepts and Definitions" are made according to the formula (Bureau of national statistics, 2023a, 2023b):

$$NEET(\%) = \frac{(UE + NEA) - NEAedu}{EA + NEA} * 100\%$$

Population aged **15-24** (or 15-29)

Active population (or Labour Force)

Inactive population

Employed
- Working for pay *or* profit, *or*
- Family workers, *or*
- Temporarily absent from work *(ILO definition)*

Unemployed
- Without work, *and*
- Available for work, *and*
- Actively seeking for work *(ILO definition)*

Have received education or training in the four weeks preceding the survey/*OR* they are currently receiving education or training

Have not received any education or training in the four weeks preceding the survey/*OR* they are not currently receiving any education or training

Have received education or training in the four weeks preceding the survey/*OR* they are currently receiving education or training

Have not received any education or training in the four weeks preceding the survey/*OR* they are not currently receiving any education or training

NEETs

Fig. 6.4 The calculation of a NEET indicator according to the European Training Foundation

UE (unemployed) – unemployed people at the age of 15–28;
NEA (not employed actively) – the number of people aged 15–28 who are not part of the labour force;
NEAedu (not employed actively due to being in education or due to studying) – the number of people aged 15–28 who are not part of the labour force due to full-time study reasons;
EA (employed actively) – number of labour force aged 15–28.

Accordingly, at the final stage, the survey captures persons between the ages of 15–28 who meet the following conditions (Elder, 2015):

a. They are not employed (i.e., they are unemployed or inactive according to the concepts and definitions of ILO; and
b. They have not received any education or training (normally the four weeks preceding the survey)

The current study employs a descriptive analysis, which includes an identification of the main factors that increase the likelihood of women

becoming NEET in Kazakhstan. To answer the research question, variables such as (1) gender, (2) age, (3) location, (4) educational attainment, (5) marital status, (6) number of people living in a household, (7) having children and (8) movability are analysed in particular.

The findings of the current study cannot be generalized to the whole population since weighting was not applied in the database.

Findings

Descriptive statistics was analysed to examine eight factors, which predicted the likelihood for women to fall into the NEET category. Particularly, percentage statistics were used to observe general trends in NEET dynamics and characteristics in Kazakhstan over the past decade.

Demographic Predictors

Gender and age
Table 6.1 illustrates the NEET rate broken down by gender and age distribution, including those who are between 15–19, 20–24 and 25–28. Overall, despite the NEET rate decreasing for both genders in the past decade, women showed less integration into work and education compared to men (from 9.9 to 9.1%), and this is highly consistent with other research findings. While the descriptive analysis did not reveal a substantial shift in the overall rate, women consistently had a rate that was twice as high as men. For example, in 2012, while NEET men accounted for 5.8%, NEET women comprised 9.9%.

When comparing the NEET rate for different age cohorts, a trend emerges where the rate tends to increase with age for both genders. The youngest age group (15–19 years old) has the lowest rate because the majority of young individuals are still in school. We can observe that the NEET rate for both genders rises sharply in the older groups (20–24 and 25–28). An overall increment in the latter two age groups might be explained by a transiting period when young people are either starting or finishing their tertiary education or by difficult school-to-work transitions. However, a particularly sharp increase among women potentially takes place due to the start of family and childcare responsibilities. Also, there is a certain societal pressure on young women to marry (usually till 25 years old) and to become a mother on time along with being responsible for household work (Almukhambetova & Kuzhabekova, 2020). The

Table 6.1 Share of NEET youth (15–28) by gender and age, 2012–2022, %

Year	By Gender		By Age					
			15–19		20–24		25–28	
	male	female	male	female	male	female	male	female
2012	5.8	9.9	3.7	2.8	4.8	9.1	8.7	16.7
2015	5.5	11.8	2.9	3.5	6.6	12.9	6.5	17.5
2016	6.6	13.1	3.7	4.3	7.6	14.3	7.8	18.6
2017	6.0	11.8	3.0	3.4	7.2	12.0	7.0	17.7
2018	6.0	10.0	3.9	3.5	6.7	10.4	7.0	14.6
2019	4.9	9.6	2.0	3.3	5.1	8.7	6.7	15.3
2020	5.6	10.8	2.7	2.8	6.3	10.4	6.9	17.2
2021	4.8	9.7	2.6	2.7	5.5	9.6	5.7	15.7
2022	4.4	9.1	2.4	2.4	4.9	9.3	5.6	15.1

data for 2022 demonstrates that 94% of all births (at the age 15–29) pertained to women who are 20–29 years old (Bureau of National Statistics, 2023a, 2023b), which predicts that women have been dedicating their time primarily to child and family care. This also corresponds with the dominance of the male breadwinner model in society. Therefore, the high NEET rates in the two latter age groups are due to the large proportion of females who become inactive or unemployed after the age of 20.

Location
The impact of urban or rural residency varied for young women worldwide, with similar findings observed in the Kazakhstani context as well.

The NEET rate for women fluctuated both for urban and rural residents over the past ten years (Table 6.2). Only in the past two years, NEET women seem to be slightly more concentrated in rural areas, whereas rural men consistently show higher rates among NEETs. Higher concentration in rural areas can be related to the limited access to educational institutions for young women upon their secondary school completion. To continue to higher or vocational education, recent school graduates can only travel to cities or attend rural vocational schools that often lack sufficient facilities, proper practicum, and good quality.

Table 6.2 Share of NEET youth (15–28) by location, 2012–2022, %

Year	Urban		Rural	
	male	female	male	female
2012	5.6	10.7	6.1	8.8
2015	5.4	12.3	5.6	11.4
2016	5.6	12.4	7.1	13.5
2017	5.2	12.0	6.5	11.6
2018	5.5	10.2	6.4	9.9
2019	4.7	9.4	5.0	9.9
2020	5.1	10.8	6.0	10.8
2021	4.3	9.5	5.1	9.9
2022	3.7	8.7	4.9	9.4

Marital Status

Marriage has been one of the most significant factors that put young women at risk of inactivity or unemployment.

By marital status, single NEETs do not show a wide gender gap. However, married women show at least three times more likelihood to fall into the NEET category in Kazakhstan (Table 6.3). This observation can be explained by the fact that young women often take care of children at home after giving birth. In addition, compared to men, divorced women and widows more often become detached from the labour force and educational activities. This finding is consistent with the international literature which reveals that having children and a low educational level constrain women from joining decent jobs.

Social Predictors

A set of social factors such as low educational level, large household size, and having children significantly impeded women from joining education and the labour market (Kovrova et al., 2013; Lüküslü & Çelik, 2021; Mirov, 2020; Zudina, 2022).

Household size

When household size increases by several members, young women are more likely not to join education and the labour market (Table 6.4). An extended household size is even worse for women when they live with

Table 6.3 Share of NEET youth (15–28) by marital status, 2012–2022, %

Year	Single		Married		Divorced		Widow(er)	
	male	female	male	female	male	female	male	female
2012	5.9	5.3	5.5	20.5	6.7	7.8	0.0	12.7
2015	5.9	6.0	4.6	20.1	5.8	12.6	5.4	13.6
2016	7.0	7.1	5.4	21.4	7.0	12.0	14.8	14.6
2017	6.5	5.8	4.5	19.4	7.8	12.1	11.0	12.9
2018	6.3	5.6	5.2	15.6	7.9	9.6	14.1	10.7
2019	5.0	5.3	4.4	15.1	7.1	10.7	8.0	14.1
2020	5.9	6.1	4.6	17.3	7.7	11.3	5.3	15.5
2021	5.0	4.8	4.1	15.9	5.5	9.6	11.0	11.5
2022	4.6	4.6	3.7	15.1	9.4	8.4	5.6	10.1

Table 6.4 Share of NEET youth (15–28) by household size, 2012–2022, %

Year	1–3 people		4–6 people		7 ≤ people	
	male	Female	Male	female	male	female
2012	4.2	11.4	10.5	31.9	16.4	11.1
2015	4.3	9.8	4.0	18.9	–	16.7
2016	4.9	9.5	4.7	17.9	15.2	20.0
2017	3.8	9.4	5.6	20.2	3.1	19.7
2018	4.0	9.3	5.3	16.0	10.8	25.4
2019	3.1	7.4	4.2	14.1	5.6	19.4
2020	3.8	8.6	4.1	17.9	2.7	25.0
2021	3.8	8.3	3.0	14.1	2.6	12.2
2022	3.0	7.1	3.3	13.6	3.4	13.5

more than four people. Therefore, large household sizes seem to raise the likelihood of women being at risk of inactivity or unemployment.

Educational Level
A low educational level is one of the greatest factors that often contribute to NEET status worldwide.

In general, NEET women are highly concentrated among the upper secondary and vocational education levels (Table 6.5). Particularly, a stagnating trend was observed for NEET women who attained vocational and

Table 6.5 Share of NEET youth (15–28) by educational level, 2012–2022, %

Year	Primary		Secondary		Upper secondary		Initial vocational		Vocational		Higher education		Graduate level	
	male	female	male	female	male	female	male	female	male	female	male	female	male	female
2012	4.7	3.9	4.2	3.1	6.7	11.4	6.0	**11.7**	5.9	**12.5**	5.1	11.7	0.0	0.0
2015	6.3	5.1	3.0	3.6	7.1	14.4	5.2	**9.8**	5.6	**16.1**	4.7	11.4	2.4	5.3
2016	8.8	6.3	4.1	5.0	8.5	16.8	6.3	**13.3**	7.1	**17.4**	5.2	11.4	0.0	10.2
2017	7.2	5.3	3.7	3.8	7.2	14.6	5.2	**11.0**	6.9	**16.4**	5.2	10.7	10.8	15.8
2018	6.2	6.0	3.9	3.7	7.4	11.2	5.9	**12.0**	6.4	**12.8**	4.8	9.6	0.0	7.0
2019	5.7	3.6	2.1	2.4	5.1	9.6	4.7	**11.2**	5.6	**13.7**	5.1	9.8	4.5	5.6
2020	–	–	3.5	2.5	5.2	7.8	6.9	**19.4**	6.4	**14.5**	5.2	11.3	7.0	6.3
2021	–	–	1.8	1.5	4.9	6.9	4.6	**15.2**	5.5	**13.3**	4.0	9.8	2.2	11.6
2022	5.9	5.5	2.4	1.9	4.5	6.4	–	–	4.6	**12.2**	4.3	10.5	3.3	10.0

initial vocational education,[1] while this was not the case for men. This means that women with upper secondary or vocational education backgrounds are more likely to become NEET. The study also found that the number of highly educated NEET women has increased in the past decade. This means that high educational levels may not always secure women from socio-economic isolation.

Having Children
Having children was one of the significant obstacles women faced in joining the labour market or further education, while it was not the case for men in many countries.

Since 2017, the LFS started tracking the presence of children between the ages of 0 to 3 among participants. This data shows that females having children demonstrate a five times higher rate of presence among NEET compared to men (Table 6.6). This again confirms that more often, women have to assume childcare responsibilities since they are not regarded as potential breadwinners and are seen by society as being responsible for homemaking and caring for the family. Another reason could be linked to poor access to childcare services especially if residing in a rural area or due to extremely high prices in private kindergartens.

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[1] Initial vocational education trains the most in-demand technical and professionals (cooks, hairdressers, plumbers etc.), whereas vocational schools train middle-ranking professionals (teachers, nurses, industry specialists etc.).

Table 6.6 Share of NEET youth (15–28) by having children at the age of 0 to 3, 2017–2022, %

Year	Have children from 0 to 3		Do not have children from 0 to 3	
	male	female	male	Female
2017	5.5	25.3	6.8	9.1
2018	4.4	23.5	6.2	8.0
2019	5.4	18.9	6.1	7.4
2020	4.1	19.0	5.0	7.3
2021	4.9	22.3	5.7	8.0
2022	3.6	20.6	4.9	5.7

Movability Features

Although not much was found regarding the movability track of NEET youth in the literature, the LFS had questions about rearranging a living residence, which would be important to observe in Kazakhstan for the past ten years.

Female participants who changed living residences seem to face slightly higher challenges compared to women who lived from birth in a specified area (Table 6.7). This might be linked to the fact that once women get married, they move to a spouse's site (even if from the same region or city), therefore, resulting in less employability and educational participation in a new area.

Particularly, when rearranging the location of residence, female NEETs seem to be more concentrated in the areas where their destinations are villages (Table 6.8). Therefore, living in remote areas might increase the chances of joblessness due to poor access or unavailability. Conversely, women who migrated to larger cities seem to increase the likelihood of finding a job or educational opportunity.

Discussion and Conclusion

This study is the first analysis of young women aged 15–28 who are neither employed nor engaged in any type of education or training in Kazakhstan. It intended to investigate the risk factors that increase the likelihood of women becoming NEET in Kazakhstan through descriptive analysis. Many of this study's findings are consistent with the findings of

Table 6.7 Share of NEET youth (15–28) by rearranging a living residence, 2012–2022, %

Year	Live from birth		Do not live from birth	
	male	female	male	female
2012	6.1	9.6	3.7	11.7
2015	5.8	11.7	4.2	12.2
2016	6.8	13.3	5.3	12.3
2017	6.2	11.5	4.7	13.0
2018	6.2	9.9	4.6	10.8
2019	4.9	9.6	4.2	10.1
2020	5.7	10.6	4.8	12.2
2021	4.9	9.5	3.6	11.3
2022	4.5	9.0	3.5	9.6

international literature and support that demographic and social factors have been key to women's position in the labour market and educational settings (Abayasekara & Gunasekara, 2019; Alvarado et al., 2020; Lüküslü & Çelik, 2021; Mirov, 2020; Zudina, 2022). In particular, the study revealed that if a young person is (1) a female, (2) a married woman with children, (2) between 20 to 28-year-olds, (3) resides in/moved to a rural area, (4) lives with more than four people, then the person is more prone to become NEET. It also stresses that the overall NEET rate in Kazakhstan is high due to the high number of NEET women at the age of 15–28 particularly.

Demographically, the study results showed that young women exhibit at least twice the likelihood of becoming NEET, aligning consistently with the results from other studies (Eurofound, 2012; ILO, 2022). This is mainly explained by the social and cultural norms of taking care of children and household chores. Also, the risk of becoming a NEET dramatically increases for women due to skills being outdated by the age of thirty as a result of their family making and further childcare responsibilities. This, in turn, creates a tough transition to the labour market limiting their options.

A set of social factors also seem to contribute to falling into a NEET group for women. The most consistent finding with existing literature was low educational attainment (Mirov, 2020; Özdemir et al., 2023). In Kazakhstan, women with vocational education backgrounds seem more to be out of education and the labour force. Therefore, this points

Table 6.8 Share of NEET women (15–28) by movability in the past ten years, 2012–2022, %

Year	Permanently resided in the specified place	Moved from the city to the village within the same region	Moved from a rural area to a city within the same region	Moved from city to city within the region	Moved from village to village within the region	Moved from the city to the village from another region	Moved from a rural area to a city from another region	Moved from city to city within the Republic of Kazakhstan	Moved from village to village within Republic of Kazakhstan	Moved from another country under the Oralman immigration quota	Moved from another country as a labor migrant	Moved from another country for family reunification
2012	10.4	22.5	12.8	–	–	14.7	4.8	–	–	8.0	21.9	–
2015	9.5	16.8	10.6	12.4	13.5	13.5	9.6	10.6	9.3	18.4	5.4	24.2
2016	10.0	13.8	9.3	17.7	15.2	15.6	13.9	8.0	22.0	22.2	42.9	20.7
2017	8.4	18.7	9.5	18.9	13.9	27.0	13.8	14.0	21.8	9.7	5.9	20.8
2018	10.2	11.9	5.3	16.9	11.4	18.6	9.0	9.1	18.5	12.9	15.8	22.0
2019	9.6	13.0	5.6	13.6	10.9	12.6	6.2	9.3	22.4	11.2	17.2	21.2
2020	9.8	18.8	8.9	16.4	15.9	20.7	9.2	8.6	17.0	10.8	35.7	10.7
2021	9.0	18.0	5.9	12.6	15.9	18.5	6.2	9.7	18.5	9.9	40.0	38.5
2022	9.6	14.2	6.8	10.8	10.4	14.7	7.5	8.5	21.2	14.9	16.7	4.2

to the need to improve the relevance and quality of vocational education as well as secure a smooth transition to the labour market. Apart from that, having an extended number of family members in a household and having toddlers raise the likelihood of becoming NEET among women (Lüküslü & Çelik, 2021; Mirov, 2020). Therefore, since, culturally, women are seen as homemakers and caregivers (Almukhambetova & Kuzhabekova, 2020; Lüküslü & Çelik, 2021), they tend to have less participation in the labour force and cannot often dedicate time to continue their education. Whilst the significance of living in an urban versus rural location varies across the literature (Erdoğan et al., 2017; Susanli, 2016), in Kazakhstan, more women who end up living in a rural area show higher exposure to disengagement.

Since women have been more prone to be out of the labour force and not to continue their educational path, policy measures should be designed with a special focus on women to guarantee their full integration into the labour market regardless of their family circumstances (such as giving birth or having children). In particular, good quality re-engagement programmes, including work taster or skills development programmes, should be purposefully designed for women with flexibility. Moreover, since having children seems to be one of the impediments for women, gender-based policies that support childcare should be implemented to mitigate the dominant patriarchal values. Finally, it is recommended to include more variables in the LFS that would help to capture (1) the socio-economic status of participants, (2) reasons for not being in education or employment sectors with a specific focus on women (3) whether women voluntarily choose to carry household and family responsibilities, and (4) ethnicity.

This study has numerous limitations. First, this study solely presents a descriptive analysis and, thus, does not estimate the relationship between factors and being NEET. Therefore, future implications for this study imply the need to conduct regression analysis to identify what specific factors have a significant contribution to the status of NEET women in Kazakhstan. Also, the study needs to be observed across regions, especially in the regions with high unemployment rates and those following traditional family values. Future research also needs to identify effective mechanisms taking into account differential outcomes for young men and women.

References

Aassve, A., Cottini, E., & Vitali, A. (2013). Youth prospects in a time of economic recession. *Demographic Research, 29*, 949–962. https://www.jstor.org/stable/26348180

Abayasekara, A., & Gunasekara, N. (2019). Determinants of youth not in education, employment or training: Evidence from Sri Lanka. *Review of Development Economics, 23*(4), 1840–1862. https://doi.org/10.1111/rode.12615

Alfieri, S., Sironi, E., Marta, E., Rosina, A., & Marzana, D. (2015). Young Italian NEETs (Not in Employment, Education, or Training) and the influence of their family background. *Europe's Journal of Psychology*, *11*(2), 311. https://doi.org/10.5964/ejop.v11i2.901

Alimkhanova, D. (2017). *Молодежь NEET в Западно-казахстанской и Карагандинской областях: механизмы интеграции в образование* [NEET youth in West Kazakhstan and Karaganda regions: Mechanisms for integration into education]. Public policy program for young researchers (p. 33). Soros Foundation in Kazakhstan. https://shorturl.at/gnNP4

Alimkhanova, D. (2018). Understanding the rising NEET phenomenon in southern Kazakhstan. *Central Asia Program Fellows Paper 206*, 1–18. https://centralasiaprogram.org/wp-content/uploads/2018/06/Alimkhanova-CAP-Fellows-Paper-June-2018.pdf

Almukhambetova, A., & Kuzhabekova, A. (2020). Factors affecting the decision of female students to enrol in undergraduate science, technology, engineering and mathematics majors in Kazakhstan. *International Journal of Science Education, 42*(6), 934–954. https://doi.org/10.1080/09500693.2020.1742948

Ashimkhanova et al. (2017). *Guidelines for working with youth in the NEET category*.

Alvarado, A., Conde, B., Novella, R., & Repetto, A. (2020). NEETs in Latin America and the Caribbean: Skills, aspirations, and information. *Journal of International Development, 32*(8), 1273–1307. https://doi.org/10.1002/jid.3503

Bardak, U., Maseda, M. R., & Rosso, F. (2015). Young people not in employment, education or training (NEET): An overview in ETF partner countries. *European Training Foundation*. https://www.etf.europa.eu/en/publications-and-resources/publications/young-people-not-employment-education-or-training-neet

Buheji, M. (2019). Discovering pathways for eliminating NEET and youth future type of poverty. *International Journal of Human Resource Studies, 9*(3), 320–340. https://doi.org/10.5296/ijhrs.v9i3.15257

Bureau of national statistics (2016). *Methodology for constructing a sample of households for a population employment survey*. https://stat.gov.kz/en/met hodology/25846/

Bureau of national statistics. (2023). *Youth of Kazakhstan* (Annual report).

Bureau of national statistics (2023, February 21). *NEET youth in Kazakhstan*. Received upon personal communication.

Bynner, J., & Parsons, S. (2002). Social exclusion and the transition from school to work: The case of young people not in education, employment, or training (NEET). *Journal of Vocational Behavior, 60*(2), 289–309. https://doi.org/10.1006/jvbe.2001.1868

Contini, D., Filandri, M., & Pacelli, L. (2019). Persistency in the NEET state: A longitudinal analysis. *Journal of Youth Studies, 22*(7), 959–980. https://doi.org/10.1080/13676261.2018.1562161

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications. https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf

Elder, S. (2015, January). *What does NEETs mean and why is the concept so easily misinterpreted*? Work4Youth Technical Note. ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_343153.pdf

Erdoğan, E., Yentürk, N., Akyüz, A. A., Kurtaran, Y., Yurttagüler, L., Dursun, K., & Oy, B. (2017). Being a NEET in Turkey: Determinants and consequences. *Power*, 2. https://shorturl.at/eflEF

Eurofound (2012). *NEETs—Young people not in employment, education or training: Characteristics, costs and policy responses in Europe*. Office of the European Union. https://www.eurofound.europa.eu/sites/default/files/ef_files/pubdocs/2012/54/en/1/EF1254EN.pdf

Furlong, A. (2006). Not a very NEET solution: Representing problematic labour market transitions among early school-leavers. *Work, Employment and Society, 20*(3), 553–569. https://doi.org/10.1177/0950017006067001

Haj-Yahya, N. H., Schnell, I., & Khattab, N. (2018). The exclusion of young Arab women from work, education and training in Israel. *Quality & Quantity, 52*(1), 157–173. https://doi.org/10.1007/s11135-016-0456-5

Harun, M. S., Ali, N. M., & Khan, N. L. M. A. (2020, June 15–19). *The determinants of Malaysian's youth not in employment, education or training* (Conference Paper). Asia–Pacific Statistics Week. https://www.unescap.org/sites/default/files/APS2020/65_The_Determinants_of_Malaysian_Youth_not_in_Employment_Education_or_Training.pdf

Hegewisch, A., & Gornick, J. C. (2011). The impact of work-family policies on women's employment: A review of research from OECD countries. *Community, Work & Family, 14*(2), 119–138. https://doi.org/10.1080/13668803.2011.571395

International Labour Organization (ILO) (2013). *Decent work indicators: guidelines for producers and users of statistical and legal framework indicators*. ILO manual, second version. International Labour Office. https://webapps.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf

International Labour Organisation (ILO) (2017). *Uganda SWTS Country Brief*. Work4Youth. ILO. https://www.ilo.org/media/436191/download

International Labour Organization (ILO) (2022). *Global employment trends for youth 2022: Investing in transforming futures for young people*. International Labour Organization. https://www.ilo.org/global/publications/books/WCMS_853321/lang--en/index.htm

Khussainova, Z. S., Gazizova, M. R., & Vechkinzova, Y. A. (2022). NEET-youth in Kazakhstan: features of regional differentiation. *Bulletin of the Karaganda University Economy series*, *107*(3), 86–94. https://doi.org/10.31489/2022ec3/86-94

Khussainova, Z., Gazizova, M., Abauova, G., Zhartay, Z., & Raikhanova, G. (2023). Problems of generating productive employment in the youth labor market as a dominant risk reduction factor for the NEET youth segment in Kazakhstan. *Economies, 11*(4), 116. https://doi.org/10.3390/economies11040116

Kiss, L., Fotheringhame, D., & Quinlan-Davidson, M. (2021). Latin American young NEETs: Brazil as a case study for systemic risks of youth social exclusion. *Journal of Youth Studies, 1*(25). https://doi.org/10.1080/13676261.2021.1965107

Kovrova, I., Lyon, S., & Rosati, F. C. (2013, March). *NEET youth dynamics in Indonesia and Brazil: A cohort analysis* (Understanding Children's Work Programme Working Paper Series, pp. 1–22).

Lüküslü, D., & Çelik, K. (2021). Gendering the NEET category: Young NEET women in Turkey. *Turkish Studies, 23*(2), 200–222. https://doi.org/10.1080/14683849.2021.1882861

Malo, M. Á., Mussida, C., Cueto, B., & Baussola, M. (2023). Being a NEET before and after the Great recession: Persistence by gender in Southern Europe. *Socio-Economic Review, 21*(1), 319–339. https://doi.org/10.1093/ser/mwab043

Maguire, S. (2015). NEET, unemployed, inactive or unknown–why does it matter? *Educational Research, 57*(2), 121–132. https://doi.org/10.1080/00131881.2015.1030850

Maguire, S. (2017). A spotlight in young women who are defined as NEET and economically inactive. *Cuadernos De Investigación En Juventud, 11*(3), 3–11.

Mauro, J. A., & S. Mitra (2020). Youth idleness in Eastern Europe and Central Asia before and after the 2009 Crisis. *Applied Economics, 52*(15). https://doi.org/10.1080/00036846.2019.1677848

Menta, G., & Lepinteur, A. (2021). Boys don't cry (or do the dishes): Family size and the housework gender gap. *Journal of Economic Behavior & Organization, 186*, 164–188. https://doi.org/10.1016/j.jebo.2021.03.035

Mirov, L. (2020). *NEET-молодежь Таджикистана: роль образования и семья* [NEET youth of Tajikistan: the role of education and the family]. *Инновации и инвестиции, 9*, 60–65. http://innovazia.ru/archive/?ELEMENT_ID=27022

Nordenmark, M., Gådin, K. G., Selander, J., Sjödin, J., & Sellström, E. (2015). Self-rated health among young Europeans not in employment, education or training—with a focus on the conventionally unemployed and the disengaged. *Society, Health & Vulnerability, 6*(1), 25824. https://doi.org/10.3402/vgi.v6.25824

Nugroho, W. S., Afifah, E. N., & Perdana, A. R. A. (2023). Single parent effect on children's well-being and educational attainment (Evidence from Indonesia). *Research Square*, PREPRINT (Version 1). https://doi.org/10.21203/rs.3.rs-2458209/v1

Odoardi, I., D'Ingiullo, D., & Quaglione, D. (2023). Gender disparities between young and adult NEETs: Do we need a more refined policy approach? *Applied Economics, 55*(56), 6685–6699. https://doi.org/10.1080/00036846.2022.2161991

Özdemir, M. O., OZCAN, K. M., & ÜÇDOĞRUK, Ş. (2023). Youth not in employment, education, or training (NEET) in Turkey: A regional analysis. *Ege Academic Review, 23*(3), 409–426. https://doi.org/10.21121/eab.1178984

Quintano, C., Mazzocchi, P., & Rocca, A. (2018). The determinants of Italian NEETs and the effects of the economic crisis. *Genus, 74*(1), 1–24. https://doi.org/10.1186/s41118-018-0031-0

Russell, L., Simmons, R., & Thompson, R. (2011). Conceptualising the lives of NEET young people: Structuration theory and 'disengagement.' *Education, Knowledge and Economy, 5*(3), 89–106. https://doi.org/10.1080/17496896.2012.662010

Scarpetta, S., Sonnet, A., & Manfredi, T. (2010). *Rising youth unemployment during the crisis: How to prevent negative long-term consequences on a generation?* (OECD Social, Employment and Migration Working Papers, No. 106). https://doi.org/10.1787/5kmh79zb2mmv-en

Social Exclusion Unit (SEU) (1999). *Bridging the gap: New opportunities for 16–18 year-olds not in education employment or training*. The Stationery Office. http://dera.ioe.ac.uk/id/eprint/15119

Susanli, Z. B. (2016). Understanding the NEET in Turkey. *Eurasian Journal of Economics and Finance, 4*(2), 42–57.

Taldau information-analytic system (IAS) (2023, February 6). *NEET rate (15–28 age old)*. Agency of the Republic of Kazakhstan for strategic planning and

reforms of the national bureau of statistics, information and analytical system. https://taldau.stat.gov.kz/kk/NewIndex/GetIndex/20612393?keyword=

Tamesberger, D., & Bacher, J. (2014). NEET youth in Austria: A typology including socio-demography, labour market behaviour and permanence. *Journal of Youth Studies, 17*(9), 1239–1259. https://doi.org/10.1080/136 76261.2014.901492

Yong, R., & Kaneko, Y. (2016). Hikikomori, a phenomenon of social withdrawal and isolation in young adults marked by an anomic response to coping difficulties: A qualitative study exploring individual experiences from first- and second-person perspectives. *Open Journal of Preventive Medicine, 6*, 1–20. https://doi.org/10.4236/ojpm.2016.61001

Zuccotti, C. V., & O'Reilly, J. (2019). Ethnicity, gender and household effects on becoming NEET: An intersectional analysis. *Work, Employment and Society, 33*(3), 351–373. https://doi.org/10.1177/0950017017738945

Zudina, A. (2022). What makes youth become NEET? Evidence from Russia. *Journal of Youth Studies, 25*(5), 636–649. https://doi.org/10.1080/136 76261.2021.1923673

Gender Inequality and Higher Education in Tajikistan: Exploring Barriers and Affirmative Actions

Zumrad Kataeva

Introduction

Gender inequality has been identified as one of the primary obstacles to achieving Sustainable Development Goals (SDG). As a newly independent state Tajikistan has committed to international policies on gender equality, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Law of the Republic of Tajikistan "On State Guarantees of Equal Rights of Men and Women and Equal Opportunities for their Implementation" (Law about the state guarantees of equality of men and women and equal opportunities of their realization, 2005), the Presidential Decree "On Measures to Enhance the Role of Women in Society," the State Program on "Main Directions of the State Policy to Ensure Equal Rights and Opportunities for Men and Women in the Republic of Tajikistan for 2001–2010" (Government

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of the Republic of Tajikistan, 2001), the National Strategy "National strategy of activization of role of women in the Republic of Tajikistan for 2011–2020 (Government of the Republic of Tajikistan, 2010)," and the Law on the Prevention of Domestic Violence and the State Program for the Prevention of Domestic Violence jointly established the main policy framework outlining the status of women in the country. Additionally, the Committee for Women's and Family Affairs has been established to implement state policy on the protection of women's rights.

Gender relationships in Tajikistan were significantly influenced by the prolonged civil war (1992–1997), which claimed the lives of tens of thousands of people and displaced hundreds of thousands more. It also destroyed the economy and much of the educational infrastructure in Tajikistan. Throughout and following the civil war, there was a nearly 15 percent decrease in girls' school attendance, with over 20 percent of girls in Tajikistan discontinuing their education upon reaching the age of 15 (Falkingham, 2000; Falkingham & Baschieri, 2004; Ministry of Education of Tajikistan [MoE], 1997). Since then, the country has made significant progress in achieving equal access to primary education and demonstrated concerted efforts to extend access to secondary education (World Bank, 2021). Tajikistan made significant efforts in the establishment of schools in remote villages and the creation of policies to access higher education for both women and men from rural areas (Asian Development Bank [ADB], 2016; Government of the Republic of Tajikistan, 2012; World Bank, 2021, 2023a). The country also demonstrates a high literacy rate of 95 percent (Agency on Statistics under the President of the Republic of Tajikistan [TAJSTAT], 2022).

However, despite implementing gender equality policies, Tajikistan still ranks lowest in Central Asia on the Gender Gap Index (World Economic Forum, 2022). Women in Tajikistan continue to face numerous challenges, such as domestic violence (ADB, 2016; European Union & United Nations [EU & UN], 2023; Sharipova & Fabian, 2010), early marriage pressures (Bakhtibekova, 2014; World Bank, 2021), limited economic opportunities, and constrained decision-making power in private and public spheres, and have worse access to economic resources. They encounter obstacles in accessing economic resources and family support due to the reinforcement of traditional values and gender stereotypes (Akiner, 1997; Falkingham, 2000; Harris, 2006; O'Brien, 2020; United Nations Economic Commission for Europe [UNECE], 2015).

Some problems are particularly notable in the country. Domestic violence remains a prevalent problem in Tajikistan, with spousal abuse, both physical and emotional, impacting around one-third of marriages in Tajikistan (ADB, 2016; EU & UN, 2023). In addition, gender inequality is reinforced by high labor migration (Janigan, 2020; Thibault, 2018; World Bank, 2021). Women are increasingly assuming responsibility for managing households in addition to domestic responsibilities (ADB, 2016). Despite the overall high literacy rates, women earned only 60 percent of men, with female-dominated education sectors offering lower wages compared to male-dominated fields of economics, industry, construction, and transport (World Bank, 2022). In education, female enrollment in secondary school and higher education is significantly lower compared to their male counterparts (MoE, 2023; World Bank, 2023a). Notwithstanding the increase in enrollment in the post-war period at the secondary level, drop-out rates among girls remain, with only 64 percent of girls transitioning from lower to upper secondary, as opposed to 86 percent of boys (MoE, 2023).

A significant gender gap is evident in Tajikistan's youth employment, with a substantial difference of nearly 42 percent between males and females in Not in Employment, Education, or Training (NEET) status (World Bank, 2021, 2023a). In higher education, women's enrollment is drastically lower than their male counterparts, with less than 40 percent of female students enrolled in higher education institutions (MoE, 2023). Importantly, only 7 percent of female students are enrolled in science, technology, engineering, and mathematics (STEM) majors.

To address the pressing gender inequality in higher education, the government introduced a special quota called "The Presidential Quota," granting exemptions to girls from remote areas from university entrance exams (MoE, 1997). Although this initiative facilitated the enrollment and successful graduation of many girls (MoE, 2023), it struggled to overcome economic challenges and religious and patriarchal traditions impacting women's daily lives and opportunities. Particularly, the quota predominantly directed women toward pedagogical and medical institutions, two professions that have been traditionally feminized since Soviet times in both Tajikistan and Central Asia, with minimal representation of women in STEM fields (ADB, 2016; Kataeva, 2022; Silova & Abdushukurova, 2009; World Bank, 2021).

In general, despite the importance of the problem, empirical studies specifically focusing on women's access and persistence in higher education in Tajikistan are limited. This chapter seeks to map the present situation with the experiences of women in higher education by reviewing existing literature and statistics from policy documents, available statistical data, reports by international organizations, research articles, media sources, and an interview with an alumna of the presidential quota program. While this study attempts to offer valuable insights into the experiences of girls in accessing and persisting in higher education, it is important to acknowledge its limitations, particularly regarding the reliance on a single interview. It is worth noting that the original research intended to conduct multiple interviews; however, despite concerted efforts to recruit participants, challenges were encountered in accessing individuals who met the criteria. Nevertheless, the interviewee provided rich and detailed information about her experience in participating in the quota program. Thus, it was determined that the inclusion of the single interview would greatly contribute to the aim of the paper, which focuses on investigating the barriers for girls in accessing and persisting in higher education in Tajikistan and exploring the effects of affirmative action measures adopted by the country.

The chapter begins with an overview of the contextual landscape and gender relationships in Tajikistan, followed by an analysis of gender representation in education and the factors impeding access and persistence in higher education. The chapter concludes with a summary of the outcomes and challenges in implementing the presidential quota in Tajikistan, along with a few concluding thoughts.

Gender Relationships in Tajikistan in Soviet and Early Post-Independence Eras

The dynamics of gender relations in Tajikistan are shaped by a complex interplay of historical influences from the pre-Soviet and Soviet eras, contemporary market ideologies, and the resurgence of traditional stereotypes and patriarchal norms within Central Asian societies (Janigan, 2020; Kandiyoti, 2007; Silova & Abdushukurova, 2009; Waljee, 2008).

Prior to independence, the Soviet policy on gender centered on efforts to "civilize" Central Asia, with educational policies designed to reshape gender roles and mold the new socialist citizen in alignment with economic, political, and cultural interests (DeYoung & Constantine,

2009; DeYoung, 2012; Northrop, 2004). The Soviet ideology emphasized the importance of women in nation-building, actively discouraging traditional cultural and religious practices that wielded significant influence over gender relations in Tajikistan and the broader Central Asian region (Harris, 2006; Kandiyoti, 2007; Northrop, 2004). Soviet ideologies deemed these traditional customs as "backward," considering them counterrevolutionary and restrictive to women's mobility and access to resources (Falkingham, 2000; Kandiyoti, 2007; Northrop, 2004). In the initial years of Soviet rule, resistance from both men and women was prevalent against the imposed changes seeking to discard cultural traditions and life of communities. The redefinition of women's roles in Central Asia was significantly influenced by education (DeYoung & Constantine, 2009). Despite achieving widespread literacy and high employment rates, the preponderance of high fertility rates among Central Asian women persisted, and there was a relatively unchanged distribution of domestic labor (Kandiyoti, 2007).

During the first years of independence, Tajikistan experienced a civil war (1992–1997) that significantly affected the well-being of both men and women (O'Brien, 2020). Unemployment continues to be a major problem. Due to the high unemployment, the population of Tajikistan, predominantly men, migrate as seasonal and unskilled workers to Russia, remitting significant portions of their wages back home. To this day, these remittances account for half (51 percent) of Tajikistan's gross domestic product (GDP), underscoring the country's vital dependence on Russia (World Bank, 2023b). Moreover, the collapse of the economy during the civil war had a profound impact on industries with a substantial female workforce, including textiles, manufacturing, and agriculture, leading to women being among the first to face unemployment (ADB, 2016; Falkingham, 2000; International Monetary Fund [IMF], 2010; World Bank, 2017). Additionally, sectors predominantly employing women, like health and education, have experienced a higher rate of unpaid wages.

The collapse of governmental support has intensified the poverty levels among women and families. In addition, the drastic reduction of governmental support has triggered an immediate decline in the health, well-being, and education sectors, along with the loss of vital childcare and maternal benefits (Tadjbakhsh, 1998). Furthermore, certain Soviet institutional policies previously fostering gender equality, such as the gender-based quota system, were abolished in the initial period of independence (Falkingham, 2000). This reversal has intensified the challenges

faced by women in terms of their economic, political, and social participation throughout the early post-Soviet period (Silova & Abdushukurova, 2009).

During the first decades of independence, the newly independent Central Asian states embarked on extensive nationalizing initiatives. These initiatives included language policies, revised national histories aimed at solidifying the dominance of their respective titular nations, and the introduction of new symbolisms for succeeding regimes (Blakkisrud & Nozimova, 2010; Kandiyoti, 2007; Nozimova, 2022). Calls for the reinstatement of traditional values and families were also integral to these efforts. Similar to other post-colonial countries, the national project in Tajikistan turned into an inherently gendered construct (Yuval-Davis, 1993). Nozimova (2022) argues that in Tajikistan, the concept of nationhood has taken a particularly gendered nature where the key decisions about the physical aspect, choices of dressing, responsibilities, and the boundaries defining women's roles both in public and private spheres are pivotal markers and instruments for various competing ideological forces. Within the state-promoted vision, women embody the Tajik nation by undertaking three crucial tasks that consistently reproduce and symbolize the nation by carrying, nurturing, and embodying the Tajik nation-state (Nozimova, 2022). Issues related to female bodies, particularly in terms of reproduction, have had significant political influence up to now (Nozimova, 2022). For instance, the state has redefined International Women's Day, traditionally observed on March 8, as Mother's Day, as an attempt to depart from the political significance the day had during Soviet times and turn it into a cultural celebration of femininity (Nozimova, 2022).

In addition, the present discourses extensively focus on men as national leaders and women and girls as subjects for motherhood (Nozimova, 2022). Furthermore, as in other Central Asian countries, female national attire is regarded as a fundamental element of the national culture (Kudaibergenova, 2020; Nozimova, 2022). This dress code serves as a tangible symbol, delineating the distinction between those who are considered part of the nation and those who are not. According to the state official rhetoric, the traditional female attire is a material cultural item that consistently reinforces the connection to the asserted historical heritage and contributes to the myth of a shared origin (Nozimova, 2022). The control over women's dressing is pursued through a "Book of Recommendations" established by the Ministry of Culture. This guide features photographs showcasing outfits suitable for Tajik women of

all ages, offering specific advice on attire for various occasions such as work, public holidays, weddings, and weekends. This influence extends to educational institutions, where large posters and images display examples of acceptable attire for girls and boys, outlining the prescribed dress code for female and male students. Female teachers and faculty members are also subject to a "dress code" monitored by women's committees in schools and universities (Kataeva & DeYoung, 2017; Kataeva, 2022; Nozimova, 2022).

The well-being of women in Tajikistan is also influenced by a high rate of labor migration. Thibault (2018) argues that while migration brings additional challenges for women, it may also bring advantages to them. The absence of husbands can bring about positive outcomes, such as relief from certain responsibilities, protection from domestic abuse, and increased autonomy in decision-making, including the management of household finances. Migration for employment has also given rise to the prevalence of polygyny in Tajikistan. Despite its illegality, polygyny has become widespread in the country in recent years (Thibault, 2018). Rather than solely characterizing polygyny as a manifestation of patriarchy, Thibault (2018) argues that it should be seen as a means for both men and women to navigate and, at times, even challenge the traditional patriarchal norms governing the institution of marriage in Tajikistan.

Labor migration has also led to the early exposure of gender stereotyping among young boys and girls in Tajikistan. According to Nazridod et al. (2021), children who are "left behind," i.e., whose parents migrated to Russia, are subjected to gendered division by their relatives and caregivers. Their research revealed that usually, boys are allowed to dedicate their leisure hours to social media and take part in activities or sports with their male peers, but girls contend with a feeling of being overwhelmed by household chores assigned by caregivers. While the educational advancement of both girls and boys has been positively impacted by the migration of their parents, resulting in advantages for both genders (see Gatskova et al., 2017), there exists a notable disparity in the distribution of household responsibilities. Girls bear a significantly greater burden of such duties compared to boys, creating a distinct contrast in gender relationships (Nazridod et al., 2021).

In general, the complex interplay of historical and contemporary influences significantly impacts the situation of women in Tajikistan, particularly in education and higher education. This interplay shapes various

aspects of women's educational experiences, including access, enrollment rates, retention, and opportunities for advancement. The following section aims to provide an overview of current gender-related educational data, shedding light on the challenges and progress made in ensuring equitable access and opportunities for women in Tajikistan's educational system.

A Brief Overview of Gender and Education Data

Despite recent positive trends indicating a more equitable education landscape in Tajikistan, challenges persist in achieving complete gender parity. Notably, the country has made significant strides in attaining females in gross basic education enrollment, which grew from 90 percent in 2014 to 95 percent in 2017 (World Bank, 2021). However, disparities are evident as female enrollment in preschool, secondary, and higher education continues to lag behind their male counterparts. The World Bank (2021) notes that unexpectedly, in the past few years, the enrollment rates of girls in rural areas have slightly surpassed the number of girls in urban schools. For instance, 49 percent of students in Grade 5 to 9 in rural classrooms were females, against 46 percent of female students in urban schools (World Bank, 2021). Similarly, in Grades 10 and 11, 45 percent of students were females in rural schools and 45 percent in urban areas. This positive dynamic may be attributed to efforts by local authorities and women's non-governmental organizations to address the issue of out-of-school girls in rural areas (World Bank, 2021).

In higher education, overall enrollment rates for both women and men have increased, signifying a positive trajectory in enhancing educational opportunities for all. In the 2022/2023 academic year, women constituted around 40 percent of students in higher professional and higher education and only approximately 20 percent of students in PhD programs (MoE, 2023). Although there has been progress since 2008, with an 8.5 percentage point reduction in the gender enrollment gap in secondary education and a 6.3 percentage point reduction in higher education, challenges remain (World Bank, 2021, 2023a).

In addition to the low enrollment, the gender disparity in the choice of study areas among female secondary vocational education students in Tajikistan is alarming, contributing to occupational segregation, particularly in traditionally low-paid sectors of the economy. For instance, female

secondary vocational education students are overwhelmingly concentrated in health care (64 percent) and education (28 percent) (MoE, 2023). In higher education, female students are mostly concentrated in pedagogical (55 percent) and medical (46 percent) institutions and less in technical (3 percent) and technological (24 percent) specializations (MoE, 2023). Moreover, female students received quotas for pursuing less popular and typically lower-paid professions traditionally associated with femininity, such as medical and teaching professions. In contrast, fewer quotas were allocated to women for studying more popular and higher-paid professions like law, economics, business, and international relations (Chorshanbiyev, 2022).

The overall percentage of women in science, technology, engineering, and mathematics fields in HEIs in Tajikistan stands at 7 percent of the total student population (MoE, 2023). This gender segregation is evident in the overall enrollment patterns across various program types in higher education institutions. The alarming situation with this occupational segregation was noted in the 2017 Demographic and Health Survey (DHS), which reveals that women with higher education are three times more likely to be currently employed compared to those with no education or only primary education (54 percent vs.18 percent) (World Bank, 2021). Against this backdrop, Silova and Abdushukurova (2009) note that while the government of Tajikistan has embraced the rhetoric of global gender equality norms, this rhetoric has been reinterpreted at the local level to align with political and cultural interests, leaning toward increasingly patriarchal values during the implementation stage.

Exploring Barriers to Girls' Access and Persistence in Higher Education

The gender disparity in secondary and tertiary education in Tajikistan is a complex outcome shaped by various interrelated factors such as economic challenges, insufficient infrastructure and long commutes to schools, structural and institutional barriers, as well as cultural and gender norms that constrain women from advancing in higher education. In addition, as highlighted by Waljee (2008), it is important to consider the relationship between gender and education in post-Soviet countries within the broader context of transition. Waljee (2008) suggests that analyzing the relationship between gender and education requires considering the impact of transitional changes on gender dynamics in various

aspects of community life beyond education. She argues that it's essential to understand how communities react to imposed changes and adapt to ongoing social transformations, whether these are religious, political, or economic (Waljee, 2008).

As the rate of poverty increased after the collapse of the Soviet Union and the civil war, the reports by international organizations and empirical studies first highlight economic factors that prevent girls from completing secondary school and enrolling in higher education (Whitsel, 2009; IMF, 2010). For instance, a study conducted by the United Nations Children's Fund (UNICEF) (2020) indicates that families with limited resources are more inclined to make financial sacrifices for their son's education, often prioritizing savings for their daughters' weddings over school fees. The growing expenses for educational needs act as a barrier, echoing a prevalent perception of the economic returns accompanying schooling (Silova & Abdushukurova, 2009; Whitsel, 2009). In families facing financial limitations, boys are often favored for educational expenditures, while girls may be required to stay at home to care for siblings and contribute to household activities. Despite efforts by some disadvantaged families to enroll all children in schools, girls may still be pulled out of education to take on household duties and look after younger siblings (Whitsel, 2009; World Bank, 2021).

In addition, insufficient infrastructure and long commuting distances further contribute to lower enrollment rates in rural areas (ADB, 2016; Stromquist, 2015; World Bank, 2021). Girls may encounter obstacles to attending school due to issues like lacking appropriate winter attire. Poor-quality education facilities and insufficient resources undermine the perceived value of education, reducing incentives for families to invest in their daughters' schooling. Moreover, cultural norms restrict girls from walking alone after puberty. In communities without nearby schools, families may resist sending their daughters to study in distant cities due to concerns about their safety (UNICEF, 2020).

Silova and Abdushukurova (2009) note that structural and institutional barriers hinder the advancement of young females in pursuing higher education. One notable obstacle is the sharp decline in the proportion of girls continuing their education after the ninth grade, which is due to the reduction in the length of compulsory education. In 1993, the Education Law extended the total duration of secondary education to 11 years but reduced compulsory education to nine years. Prior to this revision,

just over half of all upper-secondary students were girls. After the adoption of the new law, the proportion of girls decreased to less than 40 percent. With upper-secondary education becoming optional, a substantial number of girls exited the school system. This legal change allowed for increased family and community influence over decisions regarding the personal, academic, and professional paths of young females (Silova & Abdushukurova, 2009). In addition, after advancing to upper secondary and higher education institutions, young women may face challenges stemming from the low quality of education in upper secondary schools, particularly in rural areas. The difficulties of the transformation period have led to a decline in the quality of education in mainstream schools nationwide, with rural schools bearing the brunt of this decline (Silova & Abdushukurova, 2009; UNICEF, 2011). The low education quality of schools resulted in the failure of many girls in university entrance examinations and further challenges they had in continuing and persisting in higher education institutions.

Despite the economic and cultural factors, the World Bank (2021), citing the recent Life-in-Transition Survey conducted in 2016, notes valuable societal perspectives on education, with 87 percent of respondents considering the importance for their daughters to attain a university education. This data emphasizes the existence of aspirations for higher education among the population, highlighting the necessity for targeted efforts to address existing gender gaps and ensure that these aspirations translate into tangible opportunities for women in Tajikistan.

Challenges in Higher Education and the Implementation of the Quota Project

As mentioned earlier, the Government of Tajikistan took proactive steps to address the declining situation of women by adopting the "National Plan of Action to Improve the Situation of Women in the Republic of Tajikistan for the period of 1998–2005" in 1998. Subsequently, they formulated the "State Program Main Directions of State Policies for Ensuring Equal Rights and Opportunities for Men and Women in Tajikistan for 2001–2010" in 2001. This State Program prioritized education and suggested various initiatives, including the development of a program supporting girls from rural areas through the establishment of quotas for higher education institutions, and the provision of stipends and financial aid to promote girls' education. According to the statistics of 2023 (MoE,

2023), 12000 (twelve thousand) girls graduated from higher education institutions based on the quota program. Over time, the program was modified to include boys from rural areas as well; however, numerous studies address concerns with the implementation (ADB, 2016; Silova & Abdushukurova, 2009; World Bank, 2021, 2023a).

Challenges in the implementation of the quota program relate to the overall aspects highlighted above, such as economic, cultural, structural, and political contexts (Silova & Abdushukurova, 2009). Despite the intended purpose of quotas to address gender disparities by providing scholarships to young women from rural areas, the implementation of higher education quotas has faced delays due to the insufficient commitment from the state to allocate adequate financial resources and establish appropriate implementation mechanisms (Khushkadamova, 2009, 2020; Silova & Abdushukurova, 2009). Specifically, the financial assistance offered to girls attending universities under presidential quotas is so minimal that it can barely cover essential expenses for higher education, including purchasing books and meeting accommodation and food costs. For example, the interviewed alumna of the presidential quota program shared that girls who studied under the quota were provided breakfast and dinner only in the first years of their studies, and her stipend was too low to stay in the university: "*I got a monthly stipend that equaled my weekly spending while being on a low-budget student life. I would travel far home each weekend and take food and money for the week from my family.*" She also had to spend her money commuting from and to the university: "*I remember getting a free student pass; however, trolleybuses were discontinued, and, gradually, there were fewer buses and more private passenger vans (marshrutkas).*" As a result, families of quota recipients continue to bear the financial responsibility for their daughters to successfully complete higher education studies and return to their home regions (Silova & Abdushukurova, 2009) and this responsibility increases as the girls advance through higher education. This shift of financial responsibility to economically challenged families is likely to further hinder young women's access to higher education, as many families cannot afford to pay for their daughters to stay in universities, which are usually located in urban areas of Tajikistan. This also reinforces the cultural perception of investing in boys rather than girls:

> Many families in our community struggled financially, and if they could afford to pay for college for only one child, they would not flip a coin.

> Boys were always worth investing in. It is because in our tradition, the son lives with his parents, even after marrying and having his own family. He has to take care of his parents when they get old. Girls are seen as "guests" who would leave their parental home and are not worth their effort (Personal interview).

Cultural and religious influences often intersect with financial struggles, deepening challenges in girls' access to education. A notable barrier to the implementation of gender quotas in Tajikistan's higher education arises from the growing influence of patriarchal culture and deeply rooted traditional stereotypes, which confine women's roles predominantly to motherhood and household responsibilities. Young women increasingly face societal expectations to prioritize marriage over education, with early marriages becoming more prevalent and female enrollment in upper secondary education gradually declining. As the interviewee mentioned,

> In our small town, finishing secondary school for a girl was an achievement in itself. Our neighbor's daughter was pulled out of school after finishing her elementary education. Her father said it was sufficient for her since all she had to know was how to write her name and do simple math. Her parents' reasoning was that they were worried about the possibility that her actions would dishonor their family. Then she got married at the age of 17.

In addition, university admissions based on quotas also resulted in some students dropping out of higher education institutions simply because they struggled to meet program requirements due to poor prior knowledge and skills and inability to study further. Consequently, female students from rural areas admitted to higher education institutions based on the quota face difficulties in pursuing their studies (Silova & Abdushukurova, 2009):

> Some quota students were struggling with their studies, but the professors would turn a blind eye and give them grades that would allow them to move from one semester to another. These girls were probably the only ones who agreed to go to university from their small town or village but didn't have the background knowledge in their major, which made studying harder (Personal Interview).

More recently, a media source also reported that the presidential quota program might be misused by local district authorities, where they are possibly recommending students from their own acquaintances, causing unfairness in the distribution of quotas (Radioi Ozodi, 2015). According to Radioi Ozodi (2015), some talented students from underprivileged backgrounds and rural areas are not able to obtain quotas. However, in turn, local authorities complain that most students who gain admissions do not return to their hometowns to continue working there, violating one of the conditions of the quota program. This was also mentioned in the interview with the alumna:

> As I mentioned above, I was nominated by my teachers and was the best in our district for the major I was applying. However, there were two other students who wanted to get the same spot, and both of them had good connections in the district government. Knowing this and afraid I might not get the quota, I went to the District Mayor's office, saying it would not be fair if I didn't get the spot, listing my achievements as proof of my merit. The Mayor said fairness was not about whether you were best at your major but whether you would return and work in the town you had been nominated from, which was the main purpose of the presidential quota. (Personal Interview)

Furthermore, some higher education institutions lack suitable living conditions, discouraging girls from rural areas from pursuing higher education in urban parts of the country (Silova & Abdushukurova, 2009).

Despite all the challenges of the implementation of the program, the interviewee found this initiative beneficial. First, she mentioned that the program prepared extracurricular activities where girls were exposed to gender equality training prepared for the participants. This contributed to the empowerment of the girls enrolled in the program:

> There was a summer camp titled "Women and new mentality", organized by an NGO. The summer camp was designed for rural women, especially presidential quota students. This was the first time I was in a summer camp in my life. It provided training on gender equality, personal hygiene, women's rights, women's health, etc. The topic of gender equality was an eye-opener for me. I had a feeling that our tradition treated women unfairly but I would be silenced in my environment whenever I spoke up about it. I thought I was being a bad Tajik woman for not respecting

my tradition. During that summer camp, I realized it was the other way around - my tradition did not respect me because I was a woman.

Second, she appreciated all the opportunities the program had for the girls, such as interactions with professors and peers, extracurricular activities, and engagement in different student organizations:

I am confident my parents would not find money for me to go to college. I was lucky there was a presidential quota available for me…I know many girls who would not have gone to university if not for the presidential quota. I hope this project continues for a long time.

Overall, the interviewee was very satisfied with her experience during her studies, which allowed her to change her life, as she said. She insists that the government should showcase success stories of quota recipients because she believes that "*This might change the minds of traditional and strict parents, who do not allow their daughters get a college degree.*"

Concluding Thoughts

Gender inequality has been a concern for Tajikistan since independence. Numerous policies have been adopted along with establishing the governmental Committee on Women's Affairs; however, as the World Bank (2021) notes, the Committee has faced challenges in executing its responsibilities effectively, as highlighted by the CEDAW committee and the international community. Ongoing constraints in human and financial resources have hampered the Committee's ability to fully realize its objectives, emphasizing the need for sustained support to strengthen the institutional capacity for gender equality in Tajikistan (UNECE, 2015; World Bank, 2021).

Notwithstanding the notable improvement in female representation in upper secondary, vocational, and higher education, the significant gender gap, for example, in NEET, highlights the vulnerability of young women who are not engaged in productive activities, posing challenges to their economic and social well-being. The NEET indicator holds significant importance within the framework of the Sustainable Development Goals concerning gender equality and the promotion of long-term, inclusive economic growth, along with ensuring full and productive employment and decent work opportunities for all. Due to limited opportunities to

develop job-relevant skills, the youth population faces numerous risks, including labor market barriers and social marginalization.

Gender inequality in higher education persists, with the statistical data demonstrating the challenges of women's leadership in higher education. Although 47 percent of faculty members in HEIs are women (TAJSTAT, 2017), only one woman held the position of Rector (President) out of 38 HEIs in the country in 2017. The previous research indicates that higher education institutions in Tajikistan are influenced by deeply ingrained cultural norms dominated by males in management and prestigious academic specializations (Kataeva and DeYoung, 2017; Kataeva, 2022). The government has endeavored to promote gender balance in educational institutions by appointing more women to leadership positions such as chairs, deans, and vice-rectors in schools and universities; however, leadership roles are mostly associated with the "moral upbringing" of students emphasizing women's positions as caregivers and nurturers who are responsible for the upbringing of the young generation (Kataeva and DeYoung, 2017). Genuine positions of power or influence in top administrative or research roles remain elusive due to deeply ingrained patriarchal beliefs within society, which impede any systemic breakthroughs for women. They are continuously influenced by both male administrators in authoritative positions and the deeply entrenched patriarchal norms. Importantly, this influence extends beyond the academic realm to encompass the appearance and clothing choices of women, even outside their homes, illustrating the complex intersection of professional aspirations and cultural expectations that female academics navigate within Tajikistan (Kataeva and DeYoung, 2017; Kataeva, 2022).

While legal frameworks have been established with the intention of promoting gender equality, they alone are insufficient to dismantle barriers hindering women's barriers in education because, as Bacchi (2004) argues, even policies aimed at promoting gender equality may encounter challenges due to patriarchal power which tends to continue through entrenched cultural and institutional dynamics. Most often, gender equality policies do not take into consideration existing gender norms, social structures, the gendered division of labor, class expectations, and notions of confidence and self-efficacy (Morley, 2010, 2013). The policy interventions in the form of affirmative action and quota programs intended to address gender inequality often prescribe simplistic solutions, as if appointing more women into academia via affirmative action or quota programs is a remedy to addressing structural and gender inequalities. For

instance, addressing the issue of educational program segregation requires efforts to diversify the range of educational programs available to female students, challenging traditional gender norms, and promoting broader career opportunities to foster a more inclusive and equitable workforce in Tajikistan. These challenges also indicate the need for close collaboration of ministries, departments, schools, teachers, and families to challenge the entrenched gender norms and stereotypes. Gender equality must be promoted by all institutions central to the development and construction of gender identities. There is a need for the mobilization of schools, parents, and representatives of communities in shifting patriarchal gender relationships within the population and the larger society.

References

Agency on Statistics under the President of the Republic of Tajikistan. (2017). *Tajikistan 2017 demographic and health survey. Atlas of key indicators*. https://www.unicef.org/tajikistan/reports/demographic-and-health-survey-2017-tajikistan

Agency on Statistics under the President of the Republic of Tajikistan. (2022). *Women and men statistics*. http://stat.tj/en

Akiner, S. (1997). Between tradition and modernity: The dilemma facing contemporary Central Asian women. In M. Buckley (Ed.), *Post-Soviet women: From the Baltic to Central Asia* (pp. 261–304). Cambridge University Press.

Asian Development Bank. (2016). *Tajikistan country gender assessment*. https://www.adb.org/sites/default/files/institutional-document/185615/tajikistan-cga.pdf

Bacchi, C. (2004). Policy and discourse: Challenging the construction of affirmative action as preferential treatment. *Journal of European Public Policy, 11*(1), 128–146. https://doi.org/10.1080/1350176042000164334

Bakhtibekova, Z. (2014). *Early girls' marriage in Tajikistan: Causes and continuity* (Publication No. 10095718). Doctoral dissertation, University of Exeter, ProQuest Dissertations and Theses Global.

Blakkisrud, H., & Nozimova, S. (2010). History writing and nation building in post-independence Tajikistan. *Nationalities Papers, 3*(2), 173–189. https://doi.org/10.1080/00905990903517835

Chorshanbiyev, P. (2022, December 15). Malchikov v tekhnari, devochek v gumanitarii: O neravenstve v gospodderjke studentov pri postuplenii v vuzy Tajikistana [Boys to technicians, girls to humanities: Inequality in the state support in university admissions in Tajikistan]. *Asia-Plus*. https://asiaplustj.info/news/tajikistan/society/20221215/malchikov-v-tehnari-devochek-v-gumanitarii-o-neravenstve-v-gospodderzhke-studentov-pri-postuplenii-v-vuzi-tadzhikistana

DeYoung, A. J., & Constantine, E. A. (2009). Re-gendered education and society in the newly independent states (NIS) of Central Asia. In C. Baker & A. Wiseman (Eds.), *Gender, equality and education from international and comparative perspectives (International perspectives on education and society)* (Vol. 10, pp. 255–299). Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-36790000010011

DeYoung, A. (2012). Gender and the pedagogical mission in higher education in Tajikistan: From Leninabad Pedagogical institute into Khujand state university. *European Education, 44*(2), 44–64. https://doi.org/10.2753/EUE1056-4934440203

European Union & United Nations. (2023). *Short summary of baseline/KAPB study "Spotlight Initiative" to end violence against women and girls*. https://www.spotlightinitiative.org/sites/default/files/publication/Spotlight_Baseline_-_KAPB_Summary_0.pdf

Falkingham, J. (2000). *Women and gender relations in Tajikistan*. https://www.adb.org/sites/default/files/institutional-document/32601/women-tajikistan.pdf

Falkingham, J., & Baschieri, A. (2004). *Gender differentials in Tajikistan: A gendered analysis of the 2003 Tajikistan living standards survey statistical science research institute application and policy* (S3RI Applications and Policy Working Papers No. A04/20). https://eprints.soton.ac.uk/12666/

Gatskova, K., Ivlevs, A., & Dietz, B. (2017*). Does migration affect education of girls and young women in Tajikistan?* (WIDER Working Paper No. 104). https://www.econstor.eu/handle/10419/163075

Government of the Republic of Tajikistan. (2001). *State Program: Main directions of state policies for ensuring equal rights and opportunities for men and women in Tajikistan for 2001–2010*.

Government of the Republic of Tajikistan. (2010). *National strategy of activization of role of women in the Republic of Tajikistan for 2011–2020*. https://cis-legislation.com/document.fwx?rgn=80464#A4HV0J2S7F

Government of the Republic of Tajikistan. (2012). *National strategy of education development of the Republic of Tajikistan till 2020*. https://planipolis.iiep.unesco.org/sites/default/files/ressources/tajikistan_ed_sector_plan_2012-2020.pdf

Harris, C. (2006). *Muslim youth: Tensions and transitions in Tajikistan*. Westview Press.

International Monetary Fund. (2010). *Republic of Tajikistan: Poverty reduction strategy paper*. http://planipolis.iiep.unesco.org/upload/Tajikistan/Tajikistan_PRSP_2010-2012.pdf

Janigan, K. (2020). Gender and education in Tajikistan in the pre-soviet, Soviet, and post-Soviet eras. In D. Egea (Ed.), *Education, equity, economy education in Central Asia: Kaleidoscope of challenges and opportunities* (pp. 53–69). Springer.

Kandiyoti, D. (2007). The politics of gender and the Soviet paradox: Neither colonized, nor modern? *Central Asian Survey, 26*(4), 601–623. https://doi.org/10.1080/02634930802018521

Kataeva, Z., & DeYoung, A. (2017). Gender and the academic profession in contemporary Tajikistan: Challenges and opportunities expressed by women who remain. *Central Asian Survey, 36*(2), 247–262. https://doi.org/10.1080/02634937.2017.1287663

Kataeva, Z. (2022). Gender and the navigation of STEM careers in higher education institutions: Narratives of female faculty in post-Soviet Tajikistan. *Compare: A Journal of Comparative and International Education, 54*(1), 55–73. https://doi.org/10.1080/03057925.2022.2078954

Khushkadamova, K. (2009). Zhenshiny v politike i upravlenii Tadjikistana SOTSIS [Women in politics and administration of Tajikistan]. *Journal of Sociological Studies, 5*, 76–80. https://www.isras.ru/files/File/Socis/2009-05/Hushkadamova.pdf

Khushkadamova, Kh. (2020). Gendernoe prostranstvo obrazovaniya v Tadjikistane [Gender education space in Tajikistan]. *Vestnik MGLU. Social Sciences, 3(*840), 224–236. https://cyberleninka.ru/article/n/gendernoe-prostranstvo-obrazovaniya-v-tadzhikistane

Kudaibergenova, D. (2020). The body global and the body traditional: A digital ethnography of Instagram and nationalism in Kazakhstan and Russia. In J. Beyer & P. Finke (Eds.), *Practices of traditionalization in Central Asia* (pp. 54–71). Routledge. https://doi.org/10.4324/9781003018964

Law about the state guarantees of equality of men and women and equal opportunities of their realization, No. 89. (2005). https://cis-legislation.com/document.fwx?rgn=8064

Ministry of Education of the Republic of Tajikistan. (1997). *O protsedure ezhegodnogo priyema devushek iz otdalennyh regionov strany bez vstupitelnyh ekzamenov* [On the procedure for annual admission of girls from remote areas to universities of the country without entry examinations].

Ministry of Education of the Republic of Tajikistan. (2023). Statistical collection of education sphere of the Republic of Tajikistan: 2022–2023 academic year.

Morley, L. (2010). Gender mainstreaming: myths and measurement in higher education in Ghana and Tanzania. *Compare: A Journal of Comparative and International Education, 40*(4), 533–550. https://doi.org/10.1080/03057925.2010.490377

Morley, L. (2013). The rules of the game: Women and the leaderist turn in higher education. *Gender and Education, 25*(1), 116–131. https://doi.org/10.1080/09540253.2012.740888

Nazridod, S., da Pereira, C. P. C., & Guerreiro, M. D. D. H. (2021). Adolescents who stay, parents who migrate: Gender inequalities, resilience and coping strategies in Tajikistan. *Journal of Ethnic and Migration Studies, 47*(7), 1613–1630. https://doi.org/10.1080/1369183X.2019.1662716

Northrop, D. (2004). *Veiled empire: Gender and power in Stalinist Central Asia*. Cornell University Press.

Nozimova, S. (2022). Imagined women: Bearing, rearing, and wearing the Tajik nation. *Central Asian Affairs*, *9*(2–4), 324–350. https://brill.com/view/journals/caa/9/2-4/article-p324_7.xml

O'Brien, M. (2020). Disruption and decline: The gendered consequences of civil war and political transition for education in Tajikistan. *Post-Soviet Affairs, 36*(4), 323–345. https://doi.org/10.1080/1060586X.2019.1701880

Radioi Ozodi (2015, June 16). *Abituriyenty: Kak "slivayetsya" presidentskays kvota* [Applicants: How the presidential quota is "merged"]. https://rus.ozodi.org/a/27074567.html

Sharipova, M., & Fabian, K. M. (2010). From Soviet liberation to post-Soviet segregation: Women and violence in Tajikistan. In K. M. Fabian (Ed.), *Domestic violence in post-Communism states* (pp. 133–170). Indiana University Press.

Silova, I., & Abdushukurova, T. (2009). Global norms and local politics: Uses and abuses of education gender quotas in Tajikistan. *Globalization, Societies and Education, 7*(3), 357–376. https://doi.org/10.1080/14767720903166376

Stromquist, N. (2015). *Out-of-school children: why gender matters?* UNESCO Institute for Statistics. https://www.allinschool.org/media/2006/file/Paper-OOSCI-Why-Gender-Matters-2014-en.pdf

Tadjbakhsh, Sh. (1998). Between Allah and Lenin: Women and ideology in Tajikistan. In H. Bodman & N. Tahidi (Eds.), *Women in Muslim societies: Diversity within unity* (pp. 163–185). Lynne Rienner Publishers.

Thibault, H. (2018). Labor migration, sex, and polygyny: negotiating patriarchy in Tajikistan. *Ethnic and Racial Studies, 41*(15), 2809 2826. https://doi.org/10.1080/01419870.2017.1400086

United Nations Economic Commission for Europe (UNECE). (2015). *A national review of the Republic of Tajikistan and the implementation of the Beijing Declaration and the Platform for Action (1995) and the final documents of the twenty-third special session of the General Assembly (2000) in the context of the twentieth anniversary of the fourth world conference on women and the adoption of the Beijing Declaration and Platform Action in 2015*. http://1325naps.peacewomen.org/wp-content/uploads/2020/12/Tajikistan-NAP-2014.pdf

United Nations Children's Fund. (2011). *Youth perspectives of education quality in Tajikistan: A case study of education quality for youth in the CEECIS Region.* https://www.loc.gov/item/2014363275/

United Nations Children's Fund. (2020). *Access to education.* https://www.unicef.org/tajikistan/access-education

Waljee, A. (2008). Gendered education, marketization, and Islam in Tajikistan. In **S.** Fennell & M. Arnot (Eds.), *Gender, education and equality in a global context. Conceptual frameworks and policy perspectives* (pp. 87–101). Routledge.

Whitsel, C. M. (2009). Family resources, sitting at home and democratic choice: Investigating determinants of educational attainment in post-Soviet Tajikistan. *Central Asian Survey, 28*(1), 29–41. https://doi.org/10.1080/02634930902771516

World Economic Forum. (2022). *Gender gap report.* https://www.Weforum.Org/Reports/Global-Gender-Gap-Report-2022/

World Bank. (2017). *Glass half full. Poverty diagnostic of water supply, sanitation and hygiene conditions in Tajikistan.* https://documents1.worldbank.org/curated/en/622731504073608228/pdf/119162-WP-v2-P154105-PUBLIC.pdf

World Bank. (2021). *Tajikistan country gender assessment.* https://documents1.worldbank.org/curated/en/874641637562869105/pdf/Tajikistan-Country-Gender-Assessment.pdf

World Bank. (2022). *Working towards gender equality in Tajikistan's labor market.* https://blogs.worldbank.org/europeandcentralasia/working-towards-gender-equality-tajikistans-labor-market

World Bank. (2023a). *Higher education project report.* https://documents1.worldbank.org/curated/en/099070123154038559/pdf/BOSIB04f20881d0380a75905d625f123957.pdf

World Bank. (2023b). *Remittance remains resilient but likely to slow.* https://www.worldbank.org/en/news/press-release/2023/06/13/remittances-remain-resilient-likely-to-slow

Yuval-Davis, N. (1993). Gender and nation. *Ethnic and Racial Studies*, *16*(4), 621–632. https://doi.org/10.1080/01419870.1993.9993800

Exploring the Experiences of Doctoral Student Mothers: A Comparative Study of Kazakhstan and Uzbekistan

Almira Tabaeva and Naureen Durrani

Introduction

Doctoral students worldwide face significant challenges that hinder the timely completion of their studies and increase the risk of dropping out, including financial constraints, personal well-being, and the academic environment (Caruth, 2015; CohenMiller et al., 2022; Mason et al., 2023). Women, in particular, bear a heavier burden as they juggle multiple roles as mothers, spouses, and caregivers while also contending with cultural, familial, community, and societal expectations (Rockinson-Szapkiw and Watson, 2020; Paksi, 2022).

Doctoral student mothers (DSMs) experience predominantly demanding circumstances due to the extensive time commitment required

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for their studies and the lack of essential support from both their families and institutions for degree attainment and successful completion (Breitenbach et al., 2019; Catalano & Radin, 2021; CohenMiller et al., 2022; Gray, 2022). Studies have highlighted how the dual responsibility of childcare and doctoral studies often leads to time and financial constraints (Macaluso, 2020; Velander et al., 2022). Balancing multiple roles and identities has also been linked to physical and emotional health issues among DSMs (Mason et al., 2023; Prikhidko & Haynes, 2018). Additionally, the lack of institutional and social support necessary for coping with motherhood and doctoral studies has been identified as a significant cause of academic stressors and low research productivity among DSMs (CohenMiller & Demers, 2019; Gray, 2022). The COVID-19 pandemic in 2020 further exacerbated the challenges faced by mother scholars, who also had to take on the additional responsibility of guiding their children's online education (CohenMiller & Izekenova, 2022). A recent study by Mason et al. (2023) involving 1323 participants from 112 countries revealed a negative impact of motherhood on the writing and research skills of DSMs. However, international DSMs and those studying in Asia were found to potentially have a more positive effect of motherhood on their doctoral research (Mason et al., 2023), although no clear explanation was provided for these differences.

It is worth noting that the experiences of DSMs in Central Asia are underrepresented in existing studies, which predominantly reflect Western perspectives. This study aims to address this gap by investigating the experiences of DSMs in Kazakhstan and Uzbekistan, the two largest Central Asian countries. By considering the socio-cultural complexities often overlooked in Western perspectives, this research provides valuable insights to inform policies and support systems in higher education that can promote the retention and success of DSMs in the region. Moreover, despite sharing significant historical, cultural, and geographical similarities, Kazakhstan and Uzbekistan have distinct gender regimes and educational systems, which warrant the need for a comparative analysis.

The subsequent section provides a contextual overview of Kazakhstan and Uzbekistan in terms of gender and higher education landscapes. It then introduces Butler's theory of gender and O'Reilly's maternal theory. Next, research questions and methods are discussed. The findings are presented under three main themes: navigating cultural norms and identities in the domestic sphere, navigating scholar identity in academia, and

stresses and coping mechanisms. The discussion section connects the findings with existing literature, provides policy and practice implications, and addresses the limitations of the study. The chapter concludes with final thoughts.

Gender and Higher Education in Kazakhstan and Uzbekistan

Historically, gender played a significant role in Soviet ideology, emphasising women's education, work, and motherhood (Obiya, 2016). While the Soviet education system increased women's literacy rates, socialist paternalism, coupled with a command economy and nationalities policy, hindered social transformation and modernisation associated with gender equality (Kandiyoti, 2007). Soviet maternity policies glorified motherhood, promoting it as a social duty while simultaneously integrating women into the workforce (Kandiyoti, 2007; Sobirova & Abdullaev, 2021).

Following the collapse of the Soviet Union in 1991, Kazakhstan and Uzbekistan, along with other Central Asian countries, underwent postsocialist transformations that gave rise to gendered nationalism (Palandjian et al., 2018). This shift reinforced traditional hierarchies and patriarchal structures (Palandjian et al., 2018; Zhussipbek & Nagayeva, 2023). Women in Central Asia face the challenge of navigating various societal expectations and being required to fulfil multiple roles as mothers, wives, and contributors to the workforce (Kuzhabekova & Almukhambetova, 2017). The resurgence of "national traditions" alongside the emergence of neoliberal capitalism has had detrimental effects on women's rights in the region, consolidating authoritarian oligarchies and reinforcing patriarchal dominance (Zhussipbek & Nagayeva, 2023). Economic changes across Central Asia aim to integrate women into the global market economy, yet the absence of social welfare policies from the Soviet era exacerbates the burdens and vulnerabilities faced by Central Asian women (Zhussipbek & Nagayeva, 2023). Social norms dictate that women can only pursue paid employment once they are relieved of caregiving duties, thereby impeding their economic autonomy.

Understanding post-independence education reforms in these countries requires considering their cultural contexts. The Soviet Union portrayed Central Asian women as a homogeneous group needing liberation from their culture and Islam (Durrani et al., 2022). However,

differing lifestyles in Kazakhstan, with a nomadic lifestyle, and in Uzbekistan, with a more sedentary lifestyle, resulted in distinct gender norms and outcomes for women. Kazakh women had a level of equality and shared labour due to their nomadic lifestyle (Kudaibergenova, 2018), but societal norms still favoured men's superiority, with young newly married women having limited influence within the household (Sattarov, 2021, cited in Durrani et al., 2022). On the other hand, Uzbek women had limited mobility and public presence, with traditional stereotypes and gender conservatism prevalent in both urban and rural areas (Tastanbekova, 2018). Relatively, these varying gender dynamics result in differing implications for gender equality: in Kazakhstan, despite historical equality in labour share, entrenched patriarchal norms limit women's agency; while in Uzbekistan, limited mobility and traditional gender norms cause significant obstacles to women's participation in social life, both highlighting the ongoing challenges in achieving gender equality in Central Asia.

Post-independence, notable differences in gender equality indicators exist between Kazakhstan and Uzbekistan (Table 8.1). Kazakhstan demonstrates lower gender disparities and provides more equitable access to healthcare, income, and educational opportunities for both men and women compared to Uzbekistan. These disparities extend to participation rates in higher education and doctoral programs, as discussed below.

Kazakhstan and Uzbekistan took distinct paths in developing doctoral education post-independence. Kazakhstan's massification and privatisation resulted in a higher female representation in doctoral programs, with 63% of doctoral students being women in the 2022–2023 academic year (Bureau of National Statistics of the Agency for Strategic Planning & Reforms of the Republic of Kazakhstan, 2023). In contrast, Uzbekistan, under Islam Karimov, implemented strict restrictions on access to higher education (Ruziev & Mamasolieva, 2022). Despite recent higher education reforms under Mirziyoyev, Uzbekistan still has low female representation in doctoral education and low completion rates (Uzbekistan Statistics [UzStat], 2021).

The difference in women's involvement in higher education can be attributed to specific educational policies and historical gender norms. DSMs in both countries face contrasting landscapes shaped by diverse historical and policy contexts, necessitating an examination of gendered socio-cultural norms and educational policies. Recognising the intertwined construction of gender and motherhood can aid in incorporating

Table 8.1 A comparative table of gender indicators in Kazakhstan and Uzbekistan

Indicators	Kazakhstan	Uzbekistan
Gender Inequality Index (GII) (2021)[1]	41st place 0.161	56th place 0.227
Global Gender Gap Index (GGGI) (2023)[2]	62nd place 0.721	No data
Gender Equality and Global Governance Index (GEGGI) (2022)[3]	83th place 65.8	107th place 60.7
Gender Development Index (GDI) (2022)[4]	56th place 0.998	101st place 0.944
Participation rate of women in higher education	163,500 (52.7%) (enrolled) (2023)[5]	369,000 (45.6%) (total) (2022)[6]
Participation rate of women in doctoral education (total number)[5]	6200 (63%) (2023)[5]	40 (27.4%) defended (2021)[6]

Note [1] United Nations Development Program [UNDP]. (2021). *Gender Inequality Index.* https://hdr.undp.org/data-center/documentation-and-downloads
[2] Global Gender Gap Report. (2023). *Benchmarking gender gaps, 2023.* https://www.weforum.org/reports/global-gender-gap-report-2023/in-full/benchmarking-gender-gaps-2023/
[3] Global Governance Forum. (2022). *The gender equality and governance index.* https://globalgovernanceforum.org/wp-content/uploads/2021/01/GENDER-EQUALITY-AND-GOVERNANCE-INDEX-2022.pdf
[4] United Nations Development Program [UNDP]. (2022). *Gender development index.* https://hdr.undp.org/gender-development-index#/indicies/GDI
[5] Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (2023). https://www.gov.kz/memleket/entities/stat/press/news/details/476731?lang=ru#:~:text=Общая%20численность%20докторантов%20на%20начало,свыше%20установленного%20срока%20%2D%20408%20человека
[6] Uzbekistan Statistics [UzStat]. (2021). Main Statistical Indicators of Science and Innovation in the Republic of Uzbekistan. https://stat.uz/images/uploads/reliz2021/inovatsiya_28_07_22_ru.pdf

valuable perspectives into policy development to promote gender equity and empower DSMs in their academic pursuits.

Conceptualising Gender and Motherhood

Drawing on Butler's (2002) conceptualisation of gender as performative, we examine the concepts of gender and motherhood as a socially constructed process. Butler (2002) challenges the traditional understanding of gender as a biological sex and a reflection of natural differences, arguing instead that gender is not a cultural inscription, but a

continual reproduction which is established through actions and language within the societal constraints.

> (…) gender is not to culture, as sex is to nature; gender is also the discursive/cultural means by which "a natural sex" is produced and established as "pre-discursive," prior to culture, a politically neutral surface on which culture acts. (Butler, 2002, p. 10)'

Gender norms are deeply embedded within societies, dictating behavioural expectations for individuals who strive to conform to these societal ideals to validate their gender identities. In Central Asian contexts, such norms manifest in women being expected to fulfil roles as mothers, wives, and caretakers, while men are often pressured to embody the role of the breadwinner and deviation from these norms can lead to societal scrutiny and internalised guilt (Durrani et al., 2022). Post-independent Central Asian nation-building ideologies have reinforced these gender norms, emphasising unique ethno-cultural frameworks that define identity and behaviour within the nation and society. Patriarchal structures influenced by the national cultures of Kazakhstan and Uzbekistan have contributed to gender inequalities within marriages, often silencing women and limiting their agency societal discussions (Kudaibergenova, 2016).

This study emphasises motherhood as a critical lens to explore the intricate interplay between gender norms and societal expectations that influence women's experiences. Andrea O'Reilly (2019a) challenges traditional notions of motherhood, advocating for empowering maternal identities within feminist discourse through a matricentric/maternal theory. This perspective highlights the importance of integrating motherhood into feminist theories, which are often overlooked in mainstream policy frameworks (O'Reilly, 2019a). She underscores the distinction between motherhood and mothering, highlighting that motherhood refers to the social institution and cultural expectations surrounding the role of a mother, while mothering encompasses the everyday practices and experiences involved in caring for and nurturing children. In doing so, she draws attention to the socially constructed nature of motherhood, which is continually reshaped in response to evolving economic and societal dynamics. For example, the discourse of "stay-at-home motherhood" as the ideal form of motherhood emerged in the Global North after World War II, to create jobs for men returning from war. She further

asserts that normative motherhood is a patriarchal institution that perpetuates the notion that mothering is inherent to women and vital to their existence, normalising women as natural caregivers who must prioritise their child's needs over their own. If women must work outside home, "the children must always come before the job" (p. 24). Few women can meet the ideals set by normative motherhood, leaving most women feeling guilty and a sense of failure as a mother. In contrast, mothering stems from mothers' lived experiences rooted in women's agency and autonomy. It is not only the physical caregiving act, but also emotional and spiritual support that women create within their own communities" (O'Reilly, 2019b). Empowered mothering "challenges normative understandings of motherhood, family, child-rearing, and activism", and embraces a multitude of mothering identities beyond the middle-class, married and stay-at-home mothers (p. 30).

By acknowledging this difference, the study promotes understanding the diverse caregiving experiences of women, particularly in challenging patriarchal norms and advocating for gender equality. O'Reilly asserts that motherhood is a cultural practice continually evolving in response to economic and societal shifts (O'Reilly, 2019b).

Maternal theory centres on motherhood and the challenges encountered by mothers, promoting social change to aid mothers pursuing doctoral education, establishing it as a key framework for the current study on DSMs in Central Asia. Furthermore, the research underscores the gendered aspects of policy processes and the significance of challenging male-dominated governance through a feminist lens to empower women and rectify biases and inequalities in institutional policies (McPhail, 2003). Historically, higher education and academia have reinforced societal gender norms and relationships (Acker, 1990; Cohen-Miller & Izekenova, 2022). As Acker (1990) argued, organisational structure is not gender-neutral, but rather a hierarchical system that embodies male dominance, marginalising women who indeed contribute to the maintenance of gender segregation in organisations. Just as motherhood is depicted as a patriarchal institution, where male-defined norms often suppress women's agency and autonomy, the gendered structures of academia likewise reflect and perpetuate gendered assumptions and power dynamics. Thus, maternal theory can help illuminate the specific obstacles faced by DSMs and advance gender equality and social justice in higher education.

The interconnected factors impacting women's experiences require an intersectional approach because people's gender and maternal identities are not formed in isolation but are shaped by a myriad of intersecting identity markers, giving rise to diverse gender and motherhood identities and practices. Kimberlé Crenshaw's Intersectionality Theory (1991) is therefore useful in examining how cultural identity dimensions like race, gender, and socioeconomic status intersect and impact each other. This inclusive perspective acknowledges that women's experiences are shaped by a combination of multiple dimensions rather than single identity categories. This holistic approach is vital for crafting impactful policies and interventions to tackle the distinct challenges faced by DSMs in Kazakhstan and Uzbekistan and promote gender equality and social justice in higher education.

Research Approach and Methods

This study adopts a qualitative approach to conduct an in-depth exploration (Creswell, 2014; Labuschagne, 2003) of the experiences of DSMs. Specifically, by employing hermeneutic phenomenology, the research investigates how individuals derive meaning from their lived realities and personal understandings (Van Manen, 1990). This approach was chosen for its capacity to comprehend complex situations and facilitate reflexive and critical thinking (Titchen et al., 2011; Van Manen, 1990). The study aimed to identify socio-cultural and policy-related factors that could inform policy interventions for better support of DSMs.

The study posed the following questions:

- What challenges do doctoral student mothers in Kazakhstan and Uzbekistan face while juggling multiple roles?
- How do these challenges vary between the two countries?

Data was collected between March and May 2021 through in-depth semi-structured interviews, allowing for a deep exploration of the experiences, perspectives, and thoughts of DSMs (Seidman, 1991). The semi-structured nature of the interviews provided flexibility in adjusting questions based on participant responses. In Kazakhstan, the interviews were conducted in Russian and English, while in Uzbekistan, they were conducted in Uzbek and Russian languages. Interviews were conducted

online using the Zoom platform to adhere to COVID-19 restrictions and ethical guidelines, ensuring participant privacy, confidentiality, and data security. Participants were provided with informed consent before each interview with detailed information about the study's objectives, potential risks, and benefits, ensuring their voluntary participation (Seidman, 1991).

Participants

The study utilised a non-random snowball sampling method, where participants were recruited through referrals from the initial participant and subsequent referrals from other participants (Ghaljaie et al., 2017). A total of fifteen DSMs participated in the study, with eight from Kazakhstan and seven from Uzbekistan. The participants primarily represented disciplines in the Social Sciences. They were aged between 30 and 37 years old and were parents with one to three children. The participants were at various stages of their studies, ranging from the early stage to the final stage of preparing for their defence. All names have been changed to protect the identities of the participants.

Data Analysis

The first author transcribed and translated the interviews into English. NVivo software was used to analyse the data, resulting in a codebook with multiple codes. The research questions and theoretical framework guided the analysis. Through multiple readings of the codes and data, the codes were organised into categories and further grouped into main themes. Three themes emerged from the analysis: navigating cultural norms and identities in the domestic sphere, scholar identity in academia, and stresses and coping mechanisms. Excerpts from the interviews are provided to illustrate the participants' lived experiences related to each theme and country.

Findings

Navigating Cultural Norms and Identities in the Domestic Sphere

DSMs in Kazakhstan and Uzbekistan faced the complexities of balancing their roles as mothers, wives, and kelins. Navigating cultural norms and societal expectations while pursuing their doctoral education posed significant challenges for them. As a result, many participants experience feelings of guilt for not meeting their own expectations as mothers and for not being able to dedicate enough time to their children. Aray, a participant from Kazakhstan, expressed this sentiment.

> My son can't speak at three, and I blame myself for not being able to spend quality time with him. I have to leave him alone in the room to watch TV while I study on the balcony.

Aray's identity as a mother was burdened with guilt due to her inability to spend more time with her child, which took an emotional toll on her.

Nigora's experience from Uzbekistan highlights the challenges of managing multiple identities as a doctoral student mother, particularly without the benefit of maternity leave, as she navigated the demands of being a wife, homemaker, and mother to two toddlers. Her experience exemplifies the time constraints and stresses encountered in balancing these roles.

> As a mom of two kids, studying is tough, with every minute of my schedule carefully planned. I experience more physical stress as my kids are young. If I neglect my house chores, my husband scolds at me.

DSMs in Uzbekistan faced the additional complexity of the "kelin" identity, which amplifies the challenges they face in balancing familial and academic responsibilities. The concept of "kelin" was highlighted by four out of seven participants, who experienced the burdens of being a kelin, including responsibilities for household chores and serving their husband's extended family. While having parents-in-law provide childcare support was seen as positive, the participants expressed the added burden of their cultural role as kelins. As Nodira mentioned:

> My husband doesn't understand that research requires time. He insists on me smiling in front of his parents, even when I am feeling moody or tired.

I am expected always to smile and be prepared to serve, and study only at night when everyone is asleep.

Nodira faced the challenge of balancing her doctoral studies with societal expectations and her role as a "kelin", which limited her time for dissertation and research. Since her husband was the only son, living in a nuclear household was unattainable. Nodira prioritised meeting societal standards as a mother, wife, and "kelin" over her identity as a doctoral student. This resulted in her doctoral student identity being overshadowed and compromised within her familial context.

In contrast, participants from Kazakhstan did not mention facing challenges related to their "kelin" identities, possibly because they did not live with their husbands' extended families. This suggests that while women in Kazakhstan may still face constraints related to their "kelin" roles, these roles appear to be less prominent compared to Uzbekistan.

Cultural expectations and norms create internal conflicts for DSMs, which are intensified by societal judgements. DSMs from Kazakhstan expressed that these expectations added extra responsibilities and fears of social judgement. These pressures, combined with maternal obligations and household chores, create a sense of pressure to conform to idealised notions of femininity. For example, Saule, a participant from Kazakhstan, felt hesitant and uncomfortable about revealing her third pregnancy to her family members, highlighting the internal questions she faced while navigating cultural norms and pursuing her academic goals. She feared judgement from those around her, including her family. The concern was that they might question her ability to manage her two school-aged children and an expected new baby while simultaneously working on her PhD dissertation. Aigerim, another participant from Kazakhstan, experienced moral pressure from people who judged her for pursuing her studies at an advanced age in her 40s and perceived her as neglecting her children. She described herself as being "as busy as a bee" but still feeling like she lagged behind in everything.

The analysis presented underscores the intricate interplay between cultural expectations, societal norms, and the pursuit of doctoral education for DSMs in both Kazakhstan and Uzbekistan. Meeting cultural expectations of being a caring mother, an obedient wife, and a dutiful daughter-in-law placed emotional, social, and moral pressures on DSM, making them vulnerable to feelings of guilt and inadequacy as they strived to strike a balance between their familial and scholarly identities.

Navigating Scholar Identity in Academia

This theme delves further into how DSMs navigate their scholar identity within academia, examining their self-perception and how others perceive them as scholars—studious, competent, capable, and intelligent doctoral students. Gender norms play a significant role in shaping not only the multiple familial identities of DSMs but also their scholarly identity. These norms constrain their academic pursuits and contribute to the pressures they experience in their domestic lives.

Gender-Based Barriers
Gender norms created institutional barriers for women, constraining their full potential. Our analysis revealed several challenges stemming from these norms, particularly for DSMs in Uzbekistan. They faced obstacles in accessing research sites and collecting data independently, as local norms of respectability dictated that they should not travel without a male escort. As a result, they relied on a close male family member, who ideally had the necessary resources, to accompany them and facilitate their access to research sites.

> They don't take you seriously because you are a female researcher. You should come either with your husband or any man who has a network, power or an official paper from above. (Aziza)

This pattern of gender bias discouraged DSMs' engagement in research topics that necessitated in-person data collection tools, including interviews or visiting other regions.

Another participant from Uzbekistan, Lobar, who was in the last phase of completing her PhD and preparing to start her teaching career, shared her concerns:

> I never thought about a leading position; for me, teaching is enough. If there are options like choosing a man or a woman with children who has many excuses, they will definitely choose a man who can stay until late if required.

Lobar's statement highlights the gendered institutional environment in Uzbekistan that favours men in leadership roles. The reluctance of DSMs to aspire to higher positions after obtaining their PhDs due to entrenched gender bias in academia exemplifies the complex identities they navigate

as scholars and mothers. This reflects broader societal expectations that shape their choices and opportunities in the academic sphere.

In Kazakhstan, participants did not provide specific examples of institutional gender biases. However, two participants mentioned that prevalent gender norms compromise their full potential in academia due to time or mobility constraints.

> Women in academia face competing demands, and we can't spend as much time in libraries as men, who I really envy. If I could work from morning till evening, I would have more commitment and physically be available all the time. (Saule)

Supervisors' Expectations and Practices

Gender norms not only create structural barriers but also affect how doctoral supervisors perceive DSMs. Saule, a mother from Kazakhstan, hesitated to inform her supervisor about her third pregnancy due to concerns about their reaction. This hesitation highlights the potential negative perception or disdain that supervisors may have towards DSMs.

In Uzbekistan, Mohira often relied on the "unofficial" support of supervisors or administrators to submit her assignments late if she missed a deadline due to childcare-related circumstances. However, she was aware that this support could not be taken for granted, as she recounted, "But some supervisors would say, 'Go home and care for your kids; don't study; you should take care of family and children first'".

The conflicting expectations of being a dedicated mother as demanded by society and a successful scholar as expected by the institution or the supervisor placed an overwhelming burden on the majority of the participants, leading to self-doubt and feelings of inadequacy. As Aigerim, in Kazakhstan, pointed out:

> My supervisors insisted that I prioritise either my family or my studies, demanding my full commitment to my studies and criticising me for not being good enough for academia. Therefore, I experienced imposter syndrome, feeling like I didn't belong to academia and constantly doubted my abilities.

DSMs often faced negative consequences as they were perceived as less committed to their studies due to their involvement in childcare and family duties.

Similarly, a lack of supervisor support was evident in Uzbekistan, particularly in terms of expertise. As one participant mentioned, "My supervisor doesn't understand my topic, and he asks me to do unnecessary paperwork and sometimes unpaid teaching". While this issue is not specific to gender and could potentially be experienced by male doctoral students, this statement emphasises a significant disconnect for DSMs that can hinder the quality and progress of their doctoral research, adding to their already demanding workload.

However, a few participants from both Kazakhstan and Uzbekistan also shared their positive experiences. Interestingly, these positive experiences involved supportive supervisors who were women, themselves mothers and grandmothers. This highlights the significance of having relatable and understanding supervisors for DSMs.

Institutional Support

DSMs faced the challenge of limited institutional support, including inadequate financial resources and the lack of policies and childcare facilities essential for their needs. Participants from both countries raised concerns about financial constraints, as a substantial portion of their stipend was allocated to cover publication costs, a mandatory requirement for completing their doctoral program. The stipend they received was insufficient to compensate for the loss of income during their PhD journey and meet their basic needs. To make ends meet, many had to take on part-time jobs, which further hindered their research progress.

> As my family lives in another region, I have to rent here [Astana], so my first and foremost challenge is a lack of finances. Though I work as an English language tutor to sustain myself and my child, it is not enough. I am really struggling financially. (Nuray, Kazakhstan)
> We cannot work full-time while studying; they take your labour book, and we also pay money for publications, which is a requirement for graduation. I mainly receive support from my mom, both emotionally and financially. (Nigora, Uzbekistan)

Similarly, all participants expressed a desire for dedicated on-campus childcare facilities. However, they doubted the feasibility of establishing such facilities at universities. In Kazakhstan, the compressed timeframe of a three-year, one-tier doctoral program presented significant challenges

for DSMs in balancing their roles as scholars and mothers while producing high-quality research. A participant from Kazakhstan, Nuray indicated:

> Extending the doctoral study timeline is essential because three years is not enough. It is challenging for mothers to meet deadlines. For men, it can be sufficient, but for women with children, it is not; we, mothers, have to work at night.

As Nuray emphasised, meeting harsh deadlines in order to complete doctoral education on time is very challenging. The institutional challenges encountered by DSMs in Uzbekistan mirror those in Kazakhstan, as Aziza noted:

> We have so much unnecessary paperwork, like in the USSR times, but their requirements are like in the West. We are required to publish several peer-reviewed articles. What I hate the most is the university's disregard for our personal lives. They often announce events at the last minute without considering the impact on our families, children, and even our parents-in-law.

The lack of institutional understanding regarding family responsibilities hampers women's academic progress.

In summary, DSMs in Uzbekistan and Kazakhstan face challenges due to gender norms, lack of support, financial constraints, and negative perceptions from supervisors, hindering their progress in balancing motherhood and academia, highlighting the need for extended study timelines, supportive supervisors, and understanding institutions.

Stresses and Coping Mechanisms

Stresses

The narratives of DSMs from Kazakhstan and Uzbekistan highlight a common challenge in balancing multiple roles, with emotional stress being a prevalent issue. This universal struggle of managing familial responsibilities alongside doctoral studies impacts their well-being and can lead to social isolation and thoughts of dropping out. DSMs in both countries face similar difficulties in navigating the roles of motherhood and academia, as noted by Aray and Aigerim from Kazakhstan.

I experienced both physical and emotional stress, to the point where I fainted once. I constantly contemplate dropping out of my doctoral studies. (Aray)

I experience significant emotional stress when people question why I am pursuing doctoral studies in my 40s with three children. This makes me feel like I am failing in my role as a mother and that I am inadequate to pursue a doctoral degree. (Aigerim)

Likewise, Shoira from Uzbekistan shared, "I always feel constant emotional strain, and I am physically exhausted from running all the time". Despite these challenges, her strong passion for research and her academic ambitions prevented her from dropping out.

Similarly, Nigora from Uzbekistan shared that she faces criticism from her husband if she neglects her familial responsibilities, while her supervisor reprimands her if she does not allocate enough time to her research. These pressures often drive her to tears. Additionally, she experienced stress due to a lack of childcare:

I feel overwhelmed when I have to go to the university because there's no one to look after my kids.

These accounts underline the significant toll that balancing multiple roles takes on the well-being of DSMs.

Coping Mechanisms

In an attempt to balance these multiple roles, such as mothers, scholars, wives, and *kelins*, the DSMs in this study developed certain strategies to survive in academia, such as seeking help from mothers and their extended families, setting priorities, and using apps to keep focused.

Family Support

Family support was pivotal in offering childcare so DSMs could delegate childcare and domestic responsibilities momentarily to female family members to attend their classes and other requirements such as fieldwork. Those DSMs who were living with their parents-in-law mainly relied on the childcare support of extended family. However, they preferred the support of their own mothers, not their mothers-in-law. Madina from Uzbekistan expressed:

I prefer leaving my kids with my own mother, as she cares for them without pretension. She even prepares meals for me so that I have more study time.

Likewise, in Kazakhstan, Aray, who moved from the South to the capital city for her PhD with two kids and her husband, crucially relied on the support of her mother and aunts:

My mother sometimes comes to the capital to help me with my child, but she doesn't stay for long; she has other grandchildren. I usually call my aunt [in Astana] to look after my child when I have strict deadlines.

The significant reliance on extended family members, particularly mothers, and the greater sense of comfort found in their caregiving approach highlight the crucial role of familial support in facilitating the identities of DSMs as both mothers and scholars.

Spousal Support

The level of spousal support for DSMs differed between Kazakhstan and Uzbekistan. Kazakhstani DSMs' experiences of spousal support were more positive, although the level of support received varied across the participants. Some spouses offered assistance with childcare and household tasks, as Aidana shared:

My husband helped a lot. When I was studying at home, he would take the children out so that I could focus on productive work. However, this was a rare occurrence, as my husband works in another city and visits us only on weekends. (Aidana)
We divided the childcare responsibilities; if he is responsible for the children's school transportation, I check their homework and go for sports with them. We take turns cooking. (Zhanar)

In Uzbekistan, DSMs experienced a lack of spousal support in childcare and household chores, highlighting the unique challenges faced by DSMs in Uzbekistan. Nevertheless, they were still content that their husband allowed them to study or tolerated delays in their household obligations.

My husband supported me a lot. He ignores me when I come home late from university or if I have to cook late because of my studies. He comes to the university to pick me up and wait for me. (Marhabo)

Time Management and Peer Support

Additionally, in both countries, DSMs employed different strategies to navigate their challenges, such as prioritising tasks and developing time management. For example, Aray shared:

> I learnt to use the "Study with Me" app that pretends to be working with you in order to motivate you, and also the "Pomodoro Technique", which uses a timer to break down work into intervals.

These kinds of adaptive strategies underline the resourcefulness of DSMs as they implemented different techniques to maintain focus amidst other challenges. Participants across Uzbekistan and Kazakhstan mentioned using WhatsApp groups, where mother scholars shared peer support. Aray from Kazakhstan explained how she fought her mental struggles with the support of peers with children:

> I faced mental stress for being unproductive. Soon, I realised that I was not alone in the boat.

In summary, the pressure to excel academically while fulfilling familial responsibilities took a toll on the mental health of most DSMs, leading to high stress levels, fatigue, burnout, and thoughts of dropping out. To address these challenges and mitigate long-term health implications, DSMs in this study relied on coping strategies, external support from family and peers, and internal self-motivation.

Discussion

This comparative analysis of the experiences of DSMs in Kazakhstan and Uzbekistan highlights the intersection of gender, education, and societal expectations, emphasising the gendered nature of academic pursuits and advocating for a gender-centric lens to address institutional and familial barriers. The analysis highlights commonalities and some differences in relation to existing global literature and underscores the significance of potential policy interventions in fostering a supportive environment for doctoral student mothers.

The challenges faced by mothers in doctoral programs in Kazakhstan and Uzbekistan align with existing research, reflecting the struggle of

balancing multiple roles as a mother and a doctoral student (Cohen-Miller et al., 2022; Kent et al., 2020; Onwuegbuzie et al., 2014; Pierce & Herlihy, 2013). This tension between doctoral studies and familial responsibilities emerged as a recurring theme, leading to emotional and physical stress, financial constraints, and thoughts of dropping out, similar to the global literature (Holm et al., 2015; Mason et al., 2023; Maunula, 2017; Shomotova & Karabchuk, 2022; Wang, 2006; Webber & Dismore, 2021).

Uneven pressure on DSMs due to societal expectations of women's caregiving responsibilities was evident in both countries, reflected in the unequal distribution of household chores and the devaluation of the mother's role within the family and academia (Aarntzen et al., 2021; Mason et al., 2023). However, the lack of spousal support in Uzbekistan is notably more pronounced, reflecting the country's adherence to traditional and conservative gender roles (Tastanbekova, 2018).

The gendered impact of parenthood, with a heavier burden falling on mothers during doctoral studies, further compounds the challenges faced by DSMs (Correll et al., 2007; Morgan et al., 2021). For example, societal norms may dictate that mothers should "prioritise their caregiver role over their professional role" (Aarntzen et al., 2021, p. 121). This aligns with Butler's (2002) view of gender as performative, where societal norms uphold motherhood as an essential aspect of femininity. By internalising these societal expectations, motherhood becomes a legitimised institution within socio-cultural structures, reinforcing the idea that women are primarily defined by their "reproductive function" and the compulsory nature of motherhood (Butler, 2002, p. 126). In the current study, these socio-cultural expectations led women to fulfil roles as mothers, wives, and caretakers, while men predominantly assumed the role of the provider, perpetuating traditional gender norms and limiting women's autonomy (Kudaibergenova, 2015).

Financial challenges persist in both countries, highlighting the need for robust government support in the form of increased stipends and quotas for children's education (Abetz, 2019; Mason et al., 2023; Swarts, 2016). While Mason et al. (2023) identified a negative impact of motherhood on research and writing skills in their extensive study of 1323 DSMs, the findings of the current study diverged from this trend. None of the DSMs from both countries reported negative associations with motherhood during their PhD journey; instead, they embraced their motherhood roles as a priority over other responsibilities. Central Asian

DSMs viewed motherhood in a positive light, attributing this perspective to the support provided by extended family networks in childcare and the significant influence of socio-cultural factors on shaping the perceived impact of motherhood on doctoral studies. These findings resonate with O'Reilly's (2019b) maternal theory that differentiates motherhood—a patriarchal institution, from mothering—an empowering force catalyzing social change, further calling for the integration of the experiences of mothers into feminist discourse and policy frameworks. This theoretical alignment challenges traditional gender norms found in Kazakhstan and Uzbekistan, recognising the diverse caregiving experiences of women, particularly in contesting patriarchal norms.

Gender-related barriers permeated DSMs' scholarly identities in both Kazakhstan and Uzbekistan. In Kazakhstan, DSMs face reduced productivity and recognition due to time and mobility constraints, while in Uzbekistan, local customs require DSMs to have a male escort in the research field, limiting their autonomy and recognition as scholars (Abetz, 2019; Elias, 2013). These challenges reflect societal expectations that ideal career trajectories are linear, and the ideal worker can dedicate uninterrupted time to their profession without family obligations, as explored by Abetz (2019) and Buzzanell and Ellingson (2005). These findings illuminate the gendered dimensions of policy processes within academia, echoing Acker's (1990) argument regarding organisational structures characterised by male dominance. This theoretical alignment shows how hierarchical structures perpetuate gender inequalities, reinforcing gender segregation within academic institutions.

Unlike previous literature that overlooked the role of kelin for DSMs, this study contributes to global knowledge by emphasising the unique challenges faced by DSMs who also hold the "kelin" role, particularly affecting participants from Uzbekistan. While this stressor was less prevalent in Kazakhstan, possibly due to participants not residing with their in-laws at the time, the additional emotional and physical strain of fulfilling the "kelin" role while pursuing academic success aligns with O'Reilly's (2019a, 2019b) maternal theory, which underscores the disproportionate burden on mothers in academic and family spheres. Butler's (2002) theory of gender as performative can also explain how women perform their roles as kelin, negotiating and navigating their identities within patriarchal structures. Furthermore, the differences in the experiences of DSMs in Kazakhstan and Uzbekistan and between kelins and non-kelins illustrate that gendered expectations and roles intersect across cultural

contexts and familial arrangements, resulting in diverse experiences of support and oppression, as argued by Crenshaw's Intersectionality Theory (1991).

Overall, this study enhances our understanding of gender, motherhood, and doctoral education in Central Asia. By adopting a gender lens, the study calls for policy interventions aimed at dismantling systemic barriers and addressing the complex experiences of DSMs in navigating multiple roles (McPhail, 2003) and advocating for gender equality and inclusivity in higher education.

Implications for Policy

The findings from both Kazakhstan and Uzbekistan reveal several key recommendations. Firstly, *enhanced financial support* for DSMs, such as discounts for their children, increased stipends, and specific grants, is crucial. Secondly, *child-friendly spaces* on university campuses and dedicated rooms equipped with childcare facilities should be established to support working mothers in their academic pursuits. Thirdly, *institutional reforms and greater flexibility* are needed to better accommodate DSMs and other doctoral students, including a review of program duration and publication requirements. Lastly, *revising maternity-related policies* inherited from the Soviet era is vital to address gendered implications and promote women's economic empowerment.

Limitations

This exploratory small-scale study provides broad findings that can serve as a foundation for future research on specific issues. The study did not consider the age of participants' children, ranging from newborns to older schoolchildren who assisted with household chores. It is important to note that including participants from more male-dominated fields like STEM could yield more complex findings. Therefore, future research should examine the experiences of doctoral student mothers from STEM disciplines, particularly those who are single mothers with small children. Additionally, as all participants in this study were women, further research should explore the challenges faced by doctoral fathers to address a gap in the literature.

Conclusion

This qualitative study examined the challenges faced by doctoral student mothers in Kazakhstan and Uzbekistan. The findings highlight that DSMs in Kazakhstan and Uzbekistan face challenges due to societal expectations, lack of support, financial constraints, and negative perceptions from supervisors. Balancing motherhood and academia is challenging, leading to feelings of guilt, inadequacy, high stress levels, fatigue, and burnout among DSMs. To cope, DSMs rely on support from family and peers and internal motivation. The study emphasises the need for extended study timelines, supportive supervisors, and understanding institutions to help DSMs navigate the complexities of balancing familial and scholarly identities and to mitigate long-term health implications stemming from these challenges. By implementing policy interventions aimed at ameliorating these systematic barriers, including the provision of childcare and educational support, addressing gender differences, and re-evaluating the doctoral path for mothers, the educational systems in both countries can better support and empower DSMs in their pursuit of doctoral degrees.

References

Aarntzen, L., van der Lippe, T., van Steenbergen, E., & Derks, B. (2021). How individual gender role beliefs, organizational gender norms, and national gender norms predict parents' work-family guilt in Europe. *Community, Work & Family, 24*(2), 120–142. https://doi.org/10.1080/13668803.2020.1816901

Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society, 4*(2), 139–158.

Breitenbach, E., Bernstein, J., Ayars, C. L., & Konecny, L. T. (2019). The influence of family on doctoral student success. *International Journal of Doctoral Studies*, *14*, 761–782. https://doi.org/10.28945/4450

Bureau of National statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan (2023). *Организации высшего и послевузовского образования в Республике Казахстан на начало 2022–2023 учебного года.* [Organizations of higher and postgraduate education in the Republic of

Kazakhstan at the beginning of the 2022–2023 academic year]. https://www.gov.kz/memleket/entities/stat/press/news/details/476731?lang=ru#:~:text=Общая%20численность%20докторантов%20на%20начало,свыше%20установленного%20срока%20%2D%20408%20человека.

Butler, J. (2002). *Gender trouble: Feminism and the subversion of the identity.* Routledge.

Buzzanell, P. M., & Ellingson, L. L. (2005). Contesting narratives of workplace maternity. In L. M. Harter, P. M. Japp, & C. S. Beck (Eds.), *Narratives, health, and healing: Communication theory, research, and practice* (pp. 277–294). Lawrence Erlbaum Associate Publishers.

Caruth, G. D. (2015). Doctoral student attrition: A problem for higher education. *Journal of Educational Thought/Revue de la Pensée Educative*, 189–215. https://www.jstor.org/stable/24894120

Catalano, A. J., & Radin, S. T. (2021). Parents pursuing a doctorate of education: A mixed methods examination of how parents manage the roles of student and parent. *International Journal of Doctoral Studies*, *16*, 253–272. https://doi.org/10.28945/4741

CohenMiller, A., Izekenova, Z., & Tabaeva, A. (2022). Graduate Student Mothers and Issues of Justice: Steps, Challenges, and Benefits of a Systematic Review for Examining Master's Theses and Doctoral Dissertations. *The Qualitative Report*, 27(10), 2380–2403. https://doi.org/10.46743/2160-3715/2022.5137

CohenMiller, A., & Demers, D. (2019). Conflicting roles of mother and academic? Exploring the use of arts-based self-care activities to encourage wellbeing. *Art/Research International: A Transdisciplinary Journal*, *4*(2), 611–645. https://doi.org/10.18432/ari29391

CohenMiller, A., & Izekenova, Z. (2022). Motherhood in academia during the COVID-19 pandemic: An international online photovoice study addressing issues of equity and inclusion in higher education. *Innovative Higher Education, 47*(5), 813–835. https://doi.org/10.1007/s10755-022-09605-w

Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology, 112*(5), 1297–1338.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241–1299. https://doi.org/10.2307/1229039

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th Ed.). Sage Publications.

Durrani, N., CohenMiller, A., Kataeva, Z., Bekzhanova, Z., Seitkhadyrova, A., & Badanova, A. (2022). 'The fearful khan and the delightful beauties': The construction of gender in secondary school textbooks in Kazakhstan. *International Journal of Educational Development, 88*, 102508. https://doi.org/10.1016/j.ijedudev.2021.102508

Elias, M. (2013). Practical tips for conducting gender-responsive data collection. *Bioversity International*. https://www.ctc-n.org/sites/default/files/resources/practical_tips_for_gender_responsive_data_collection.pdf

Ghaljaie, F., Naderifar, M., & Goli, H. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, *14*(3). https://doi.org/10.5812/sdme.67670

Global Governance Forum. (2022). *The gender equality and governance index*. https://globalgovernanceforum.org/wp-content/uploads/2021/01/GENDER-EQUALITY-AND-GOVERNANCE-INDEX-2022.pdf

Global Gender Gap Report. (2023). *Benchmarking gender gaps, 2023*. https://www.weforum.org/reports/global-gender-gap-report-2023/in-full/benchmarking-gender-gaps-2023/

Gray, B. C. (2022). The University cannot love you. *Feminist critical digital pedagogy*. https://edtechbooks.org/feminist_digital_ped/zXHDRJAq

Holm, J. M., Prosek, E. A., & Godwin Weisberger, A. C. (2015). A phenomenological investigation of counseling doctoral students becoming mothers. *Counselor Education and Supervision, 54*(1), 2–16. https://doi.org/10.1002/j.1556-6978.2015.00066.x

Kandiyoti, D. (2007). The politics of gender and the Soviet paradox: Neither colonized, nor modern? *Central Asian Survey, 26*(4), 601–623. https://doi.org/10.1080/02634930802018521

Kent, V., Runyan, H., Savinsky, D., & Knight, J. (2020). Mentoring doctoral student mothers in counselor education: A phenomenological study. *The Professional Counselor*, *10*(4), 532–547. https://doi.org/10.15241/vk.10.4.532

Kudaibergenova, D. T. (2016). Between the state and the artist: Representations of femininity and masculinity in the formation of ideas of the nation in Central Asia. *Nationalities Papers, 44*(2), 225–246. https://doi.org/10.1080/00905992.2015.1057559

Kudaibergenova, D. T. (2018). Project Kelin: Marriage, women, and re-traditionalization in post-soviet Kazakhstan. In M. Najafizadeh & L. Lindsey (Eds.), *Women of Asia* (pp. 379–390). Routledge.

Kuzhabekova, A., & Almukhambetova, A. (2017). Female academic leadership in the post-Soviet context. *European Educational Research Journal, 16*(2–3), 183–199. https://doi.org/10.1177/1474904116682040

Labuschagne, A. (2003). Qualitative research: Airy fairy or fundamental? *The qualitative report*, *8*(1), 1–4. http://nsuworks.nova.edu/tqr/vol8/iss1/7

Macaluso, C. M. (2020). *Is there ever a perfect time to have a baby? A narrative study of doctoral student mothers managing work and family while pursuing a research doctorate*. Doctoral dissertation, Rutgers University-Graduate School of Education.

Mason, S., Bond, M., & Ledger, S. (2023). How motherhood enhances and strains doctoral researchers. *Journal of Further and Higher Education, 47*(8), 1087–1105. https://doi.org/10.1080/0309877X.2023.2218274

Maunula, M. (2017). Everyday family life and multiple roles of the female doctoral students. In *EDULEARN17 Proceedings. 9th International Conference on Education and New Learning Technologies, ISBN 978–84697–3777–4*. IATED Academy.

McPhail, B. A. (2003). A feminist policy analysis framework: Through a gendered lens. *The Social Policy Journal, 2*(2–3), 39–61. https://doi.org/10.1300/J185v02n02_04

Morgan, A. C., Way, S. F., Hoefer, M. J., Larremore, D. B., Galesic, M., & Clauset, A. (2021). The unequal impact of parenthood in academia. *Science Advances, 7*(9), https://doi.org/10.1126/sciadv.abd1996

Obiya, C. (2016). The politics of the veil in the context of Uzbekistan. *CIAS discussion paper No. 63: Islam and gender in Central Asia--Soviet modernization and today's society*, *63*, 7–18. https://core.ac.uk/download/pdf/160456223.pdf

O'Reilly, A. (2019a). Matricentric feminism: A feminism for mothers. In L. O. Hallstein, A. O'Reilly, & M. Giles (Eds.), *The Routledge companion to motherhood* (pp. 51–60). Routledge.

O'Reilly, A. (2019b). Maternal Theory: Patriarchal motherhood and empowered mothering. In L. O. Hallstein, A. O'Reilly & M. Giles (Eds.), *The Routledge companion to motherhood* (pp. 19–35). Routledge https://doi.org/10.4324/9781315167848

Onwuegbuzie, A. J., Rosli, R., Ingram, J. M., & Frels, R. K. (2014). A critical dialectical pluralistic examination of the lived experience of select women doctoral students. *Qualitative Report*, *19*(3). https://doi.org/10.46743/2160-3715/2014.1283

Paksi, V. M. (2022). *PhD and childbearing? Work-life balance of female PhD students in the field of engineering*. Doctoral dissertation, Budapesti Corvinus Egyetem.

Palandjian, G., Silova, I., Mun, O., Zholdoshalieva, R. (2018). Nation and gender in Post-socialist education transformations: Comparing early literacy textbooks in Armenia, Kazakhstan, Kyrgyzstan and Latvia. In M. Chankseliani. & I. Silova (Eds.), *Comparing post-socialist transformations: Purposes, policies, and practices in education* (pp. 167–191). Symposium Books.

Pierce, L. A., & Herlihy, B. (2013). The experience of wellness for counselor education doctoral students who are mothers in the southeastern region of the United States. *Journal of International Women's Studies, 14*(3), 108–120.

Prikhidko, A., & Haynes, C. (2018). Balancing graduate school and mothering: Is there a choice? *International Journal of Doctoral Studies*, *13*, 313–326. https://doi.org/10.28945/4109

Rockinson-Szapkiw, A., & Watson, J. H. (2020). Academic-family integration: How do men and women in distance education and residential doctoral programs integrate their degree and family? *Online Learning Journal, 24*(4), 112–130. https://doi.org/10.24059/olj.v24i4.2318

Ruziev, K., & Mamasolieva, M. (2022). Building university research capacity in Uzbekistan. In M. Chankseliani, I. Fedyukin, & I. Fumin (Eds.), *Building research capacity at universities: Insights from post-soviet countries* (pp. 285–303). Springer International Publishing.

Seidman, I. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers college press.

Shomotova, A., & Karabchuk, T. (2022). Navigating COVID-19: Female Ph. D. students coping with family, academic, and job duties. *Journal of International Women's Studies*, *23*(3), 57–75.

Sobirova, D. T., & Abdullaev, F. K. U. (2021). The contribution of Uzbek women to the victory in the Second World War. *The American Journal of Social Science and Education Innovations*, *3*(05), 451–456. https://doi.org/10.37547/tajssei/Volume03Issue05-80

Swarts, S. E. (2016). *Socialization experiences of doctoral student mothers: "Outsiders in the sacred grove" redux*. Unpublished doctoral dissertation, University of California.

Tastanbekova, K. (2018). Post-Soviet legacies in girls' education in Kazakhstan and Uzbekistan. In Y. Gradskaya & I. A. Morell (Eds.), *Gendering postsocialism* (pp. 172–192). Routledge.

Titchen, A., Hobson, D., Somekh, B., & Lewin, C. (2011). *Theory and methods in social research*. SAGE.

United Nations Development Program [UNDP]. (2021). *Gender inequality index*. https://hdr.undp.org/data-center/documentation-and-downloads

United Nations Development Program [UNDP]. (2022). *Gender development index*. https://hdr.undp.org/gender-development-index#/indicies/GDI

Uzbekistan Statistics [UzStat]. (2021). *Основные статистические показатели науки и инноваций в Республике Узбекистан* [Main statistical indicators of Science and Innovation in the Republic of Uzbekistan]. https://stat.uz/images/uploads/reliz2021/inovatsiya_28_07_22_ru.pdf

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Althouse Press.

Velander, S., Silva Martinelli, F., Idam Sari, D., Ali, F., & Biber-Freudenberger, L. (2022). A dichotomy of domestic and academic pathways: Challenges of motherhood in an international doctoral program on land science. *Journal of Land Use Science, 17*(1), 226–244. https://doi.org/10.1080/1747423X.2021.2015002

Wang, S. L. (2006). *Ascending and conscious spirits: A feminist study of female doctoral students' experiences as researchers in the field of education.* Doctoral dissertation, University of Idaho.

Webber, L., & Dismore, H. (2021). Mothers and higher education: Balancing time, study and space. *Journal of Further and Higher Education, 45*(6), 803–817. https://doi.org/10.1080/0309877X.2020.1820458

Zhussipbek, G., & Nagayeva, Z. (2023). Women's rights in Kazakhstan and Kyrgyzstan: In the grip of conservative re-traditionalisation and neoliberal capitalism. In *Post-Soviet women: New challenges and ways to empowerment* (pp. 115–134). Springer International Publishing.

Understanding Barriers and Supports for Women's Progression in STEM in Kazakhstan

Ainur Almukhambetova

Introduction

Science, technology, engineering, and math (STEM) remain a vital field for any country's economy as the advancement of technology depends on STEM fields (Green & Sanderson, 2018). Due to the competitive status of the global market, there is a growing demand for qualified individuals in STEM fields. Although there is a continuous effort to reduce the gender gap in the labor market (WEF, 2023), women continue to face barriers to involvement in all fields of economic activity, including STEM.

The importance of bridging the gender gap in STEM fields is based on the premise that no country will succeed without benefiting from women's talents. As women constitute over half of the world's population, it is very important to close the gender gap in the critical sectors of the economy, such as STEM. Women entering technical fields can

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address the shortage of qualified personnel in STEM (Burke, 2007; Hill et al., 2010). Enhancing gender equality in STEM fields will increase the number of qualified personnel, improve the country's competitiveness in the global market, and strengthen its innovative capacity. Addressing the gender gap in STEM will also reduce the need for job outsourcing and import research and innovation from other countries.

Although overall, women's participation in STEM education has increased internationally, women have not always been successful in entering STEM employment and continue to be filtered out of the STEM workforce (European Commission, 2020). The global employment rate for women in STEM sectors is 54% compared to 81% for men. In Kazakhstan, the tendency is consistent with global findings. According to the Ministry of Science and Higher Education, female students comprise 53.8% of the overall student population. In the 2022/23 academic year, 308,600 female students and 268,700 male students were enrolled in HE programs across Kazakhstan (Bureau of National Statistics, 2022) Meanwhile, the number of women enrolled in STEM majors in Kazakhstan constituted only 31%, with a striking imbalance of only 26.6% of women in such specialties as Information and Communication Technology and 78.7% in Social Sciences (Bureau of National Statistics, 2022). The gender gap proceeds at higher competitive levels, with only 25% of women being employed in engineering and digital sector jobs (Kuzhabekova et al., 2024).

In this contradictory social and economic context, education systems play a critical role as there is a need to support girls' interest and motivation in STEM from an early age. This suggests that teaching and learning environments need to integrate gender equality into their teaching practices. Many countries have succeeded in reducing the gender gaps in educational attainment and achievement. Notably, Kazakhstan displays equal performance in international assessment, with female students performing equally well and even outperforming male students in science (OECD, 2019), which reflects the country's intriguing "gender paradox," as highlighted by Durrani et al. (2022). Kazakhstan boasts high literacy rates (Almukhambetova & Hernandez-Torrano, 2021; Winter et al., 2022) and a trend of women outnumbering men at all levels of education, yet it faces challenges related to women's underrepresentation in political and economic spheres of life. Kazakhstan is also considered to be a leader in progress on gender equality among other Central Asian countries with

62nd position among 146 countries in the Global Gender Gap report (World Economic Forum, 2023).

Based on the theoretical taxonomy of supports and barriers (Fouad et al., 2010), this chapter aims to explore the reasons for women's underrepresentation in STEM in Kazakhstan along with the barriers and supports across three developmental stages: childhood, adolescence, and adulthood. Previous research has focused more on psychological factors that prevent women from participating in STEM and has focused less on understanding the external influences beyond women's personal characteristics, such as supports and barriers that might encourage and discourage girls and women from pursuing STEM education and employment. Meanwhile, there exists evidence that environmental supports play a facilitating role in women's engagement with STEM, whereas barriers can impede their retention and progression in STEM. The chapter seeks to identify the barriers and supports that influence women and girls' retention in STEM educational and career pathways in Kazakhstan across the developmental levels.

Overview of Previous Research

The systematic filtration of women from STEM has received substantial scholarly attention from leading theorists and researchers who have tried to understand the factors behind female underrepresentation in STEM fields. A number of studies have been conducted to analyze the reasons why girls and young women do not succeed in STEM (Henriksen et al., 2015; Mainhard et al., 2018; Microsoft, 2017; Stoet & Geary, 2018).

A substantial part of the literature on this topic is based on the theoretical argument that women's lack of progress in STEM areas is linked to internal aspects of women's choices, i.e., their expectations of success and the subjective value of tasks related to STEM (Eccles, 1994; Kuchumova et al., 2024). Previous research also identified that women display lower self-confidence in their ability to perform equally well with men in STEM, and this is one of the major reasons why they do not persist with related careers (Rittmayer & Beier, 2008). However, less scholarly attention has been paid to external facilitating and impeding factors beyond the women's self-efficacy beliefs, i.e., supports and barriers that girls and women encounter in their schooling, study, and career socialization experiences (Fouad et al., 2010).

One of the most useful theoretical schemas that helps to understand the dynamic process of developing interest, making career-related choices, and achieving success in related education and occupational pursuits is the Social Cognitive Career Theory (Lent et al., 2000). However, as mentioned earlier, the scholars using this theory mostly focused on individual-level influences rather than looking at the complex interaction between internal and external influences. According to Fouad et al. (2010), the most fruitful inquiry should include the role of environmental factors in order to understand women's recruitment and retention in STEM education and careers.

Supports and barriers are defined as environmental influences that either facilitate or impinge the development of interest, attitude, and skills (Lent et al., 2000). Many studies have identified the personal characteristics that influence and hinder or promote women's engagement in STEM but overlooked the external environmental factors (Swanson & Tokar, 1991). The studies also seem to have overlooked the investigation of barriers and supports across the stages of education and career development (Fouad et al., 2010).

Previous research in the Kazakhstani context identified that girls aspiring to choose STEM majors often lack confidence in their abilities, mostly caused by the influence of social stereotypes that STEM is not a female domain. Being able to perform equally well with men, women students in Kazakhstan also get contradictory messages from the surrounding environment about their ability to succeed in STEM-related jobs (Almukhambetova & Kuzhabekova, 2020). Other studies conducted in the context also concluded that major school-related factors of women's underrepresentation in STEM are the teachers' lack of gender awareness (Almukhambetova, 2024) and the gendered messages in school textbooks (Durrani et al., 2022). This study will continue this line of research by investigating the supports and barriers that predict girls' and women's engagement with STEM and subsequent progression in STEM education and careers in the context of Kazakhstan. The focus on all developmental stages is particularly important as certain supports and barriers may bear a different significance at different stages of girls' and young women's progression in the stages of the STEM pipeline.

There are several ways in which this chapter contributes to existing research. First, the study fills the gap in the current understanding of women's experiences at all developmental stages by bringing additional insights into supports and barriers that affect girls' and women's

intentions to pursue education and careers in STEM. These insights complement the previous studies, which mostly focused on women's experiences in formal education only. Second, the proposed study offers an understanding of the environmental influences of women's underrepresentation in STEM careers in a non-Western context, supplementing the predominantly Western perspectives on the phenomenon with insights from a new context.

Methods

The chapter is based on the data collected by the author from five years of research on female students' and university graduates' experiences in STEM education and transition to employment in Kazakhstan. This chapter employed a qualitative secondary analysis of interview data from these projects (Heaton, 2004). The purpose was to explore external environmental factors (based on SCCT theory) to understand the supports and barriers to gender equality in STEM fields using the data collected from 2 projects conducted between 2018 and 2023.

Each project employed a purposive maximal variation sampling to recruit the participants. The combined sample is diverse in age, marital status, STEM domain, and geographical distribution. The overall sample comprises 65 young women aged between 19 and 24. The main data collection tool included semi-structured interviews with young women who were studying STEM majors, were in the process of looking for jobs, or were employed in the STEM sector. Forty women were pursuing their undergraduate and graduate studies at the time of the interview, 10 students were looking for employment, and 15 women were already employed in the STEM sector for not more than 2–3 years. All the participants were required to complete the informed consent form and to express their agreement to be audio recorded before the interviews began. The interviews were conducted by the author and several research assistants involved in both projects. All interview data was transcribed by the research assistants prior to data analysis.

To address the main research question, "What are the main supports and barriers to women's retention in STEM education and careers as experienced by young women?" the author categorized supports and barriers as viewed by female participants. The author used a constant comparative method to code the data in order to pick up young women's

reflections on supports and barriers they have encountered in their STEM educational and career pathways at different developmental stages (Saldana, 2021).

Findings

The overarching purpose of this chapter is to synthesize and summarize the multidimensional barriers that affect, impede, or prevent girls and women from choosing STEM educational/career trajectories and the supports that facilitate their advancement and retention in STEM career trajectories across three developmental stages: childhood, adolescence (high school and university study), and adulthood (professional life). The life course of any individual is constituted of sequences of experiences at different stages (Elder et al., 2003). Previous research on STEM career pathways was mostly focused on educational transitions paying less attention to developmental stages. Meanwhile, investigating gender inequality from a life course perspective (Elder et al., 2003; Sheppard, 2009) might give the full picture of women's experiences in STEM in childhood, adolescence, and adulthood, which shape their educational and occupational choices as well as systemic issues they encounter in these stages. The following sections of the chapter summarize the supports and barriers experienced and reported by young women who pursue education and careers in STEM in Kazakhstan in each developmental stage.

Barriers in Childhood

Female underrepresentation in children's books and cartoons was highlighted as one of the barriers to girls' engagement with STEM at an early age. As participants noted, in children's books and cartoons, there is a lack of female representation, and some stereotypical images are associated with professions. Only men are depicted in STEM jobs, such as engineers or scientists, and women are pictured having stereotypically feminine jobs, like nurses and teachers. Meanwhile, as many participants noted, it would be much more encouraging for girls to have books and cartoons with female lead characters with STEM jobs. This can be evidenced in the following comments:

> We need more children's books with girls engaged in STEM (…), and we need to encourage parents to show these books to their children.

> Even the cartoons…now we have a distinct division- cartoons for girls… cartoons for boys… girls always play with dolls, and boys play with Lego kits. Why don't we let the girls play with Lego too?

The quote above also highlights the agential potential that "girls" and "boys" toys play in children's development and gender socialization, as they might mold the children's perceptions of gender roles and limit their future prospects.

The lack of female role models was named as one of the important barriers to girls' engagement with STEM in childhood. As one participant stated, when she was a child, there were no female role models, but one day, she paid attention to a picture of a woman wearing the uniform of a STEM worker:

> We need to advertise the image of women working in technical fields. Like, for instance, when I was a small girl, I saw a picture of a woman wearing a uniform, and then I started to dream of wearing such a uniform. Now I wear a uniform. Many girls might want to wear uniforms, the same as I did.

Low parental expectations of girls' success in STEM, low parental involvement in girls' studies, and lack of confidence in girls' abilities were also identified as strong barriers to developing girls' interest in STEM education and careers. Several young women mentioned that their parents never displayed any interest in their engagement with math and science subjects, and this has significantly impeded their interest in STEM domains at an early age.

Barriers in Adolescence

As girls grow up, they seem to continue to face barriers in their STEM educational pathway. Several participants stated that one of the barriers to their engagement with STEM in adolescence stems from the fact that girls have less time for study as they spend a lot of their out-of-school time on household chores, helping their mothers around the house or taking care of younger siblings, whereas boys have more time for studies and real-life STEM experiences. As one female participant commented:

> My male classmates have higher academic performance in STEM subjects. From early childhood, girls are expected to do the household chores-and this really takes a lot of time… boys do not have these responsibilities…If I had a chance only to go to classes and solve math problems all the time, I would have achieved the same as my male classmates.

At this stage, many girls graduating from school possess the required skills to succeed in the STEM majors at university. However, they are less likely to pursue these specializations. This mostly happens due to the informal genderization of professions and a lack of parental and familial support when choosing a STEM-related educational pathway when finishing school. This lack of support destabilizes the girls' confidence and raises their doubts about the appropriateness of choosing STEM specializations. One participant commented that she was very unconfident in her choice of the STEM major due to the lack of support from her parents: "Both of my parents were against my decision to enter the STEM major. They told me that technical specialties are not meant for women, not for girls …they are too difficult."

It seems that as the girls transition to adolescence, the parental influence on girls' overall engagement with STEM and decisions regarding STEM-related education becomes more pronounced. While in childhood, girls experience low parental expectations of their abilities in STEM, during adolescence, some parents start to actively discourage their daughters from choosing STEM higher education, voicing doubts about the suitability of STEM specialty for women and STEM being harder for women to handle. This leads to a decrease in girls' self-confidence and instills doubt about their capabilities in STEM.

The young women almost unanimously stated that the dearth of female role models working in STEM was an important discouraging factor at this stage of life, as it could devalue girls' self-perceptions and abilities in STEM and lead to a failure to realize their STEM career aspirations and potential. The role models of the same gender might inspire the girls aspiring to have a STEM career to pursue and emulate the same achievements. Another related barrier at this developmental stage is a lack of career counseling. It was also highlighted by interviewed women that during the last year at school, the students should be provided with career counseling as they need to understand more about what the STEM specialty entails. As highlighted by one participant, there needs to be a close connection between the school and STEM companies, and

career counseling should involve attending the open house days for school graduates in STEM companies, labs, and factories:

> It seems to me that all this needs to start from the elementary grades. We need to take the school students to STEM companies and organize open days for them in laboratories… to understand what they can do in the future. Instead of guessing, "Maybe this will be more useful for me. Maybe this will be more profitable for me." This is a really difficult choice. If I were the Minister of Education, I would change the system. Take them to factories to see all this and allow them to see everything from the inside so that they will imagine themselves in this field in the future.

Gender-biased treatment in the classroom context was also mentioned as one of the important barriers to girls' engagement with STEM in adolescence. It seems that girls often face unfavorable treatment and negative comments from STEM school teachers and university instructors regarding their abilities in STEM, which solidify their self-doubts about STEM, previously instilled by their parents in childhood and early adolescence. The teachers also do not consider the household chores the girls are often burdened with. As one of the participants commented: "The teachers always favor boys…." Overall, the lack of gender-responsive pedagogy in STEM classes at school and university was highlighted by the majority of participants:

> I used to experience this in my Bachelor's studies. You know, this is actually 'a car manufacturing' what I was studying. And this was easier for guys, for boys to understand the subject, to relate it to this car manufacturing, and when even the professors were explaining the material, they were saying, "Well, girls, you might have some problems in understanding this.

The fact that it is easier for male students to understand the subject mentioned in this quote also relates to the role of children's toys in gender role socialization mentioned in the previous section. Male children play with STEM toys (cars, LEGO kits) in early childhood and this gives the advantage of grasping quicker the subject matter. In addition to that, the learning materials at schools are also heavily gendered. This also internalizes the inherent suitability of STEM for boys.

Barriers in Adulthood

Being a woman in some STEM majors means being a lonely venture in group projects. Many participants reported that the low number of female students in STEM courses made them feel isolated and insecure. My analysis also identified that those female students who faced subtle bias from their male peers in their senior years at university were less clear about their belonging to the STEM profession and more likely to leave STEM. Furthermore, subtle discrimination and low encouragement from STEM course instructors were important barriers to further progression with STEM career intentions. As one participant noted, "We had a course instructor; he was responsible for the lab assignments, and he was a postdoc. He openly discriminated against the girls. It was so unpleasant and…ridiculous."

The interviewed women also mentioned the challenge of having competitive rather than cooperative learning environments in their STEM university departments. Also, the fact that there was a low number of female course instructors was reported to be related to a lack of support and mentorship in male-dominated classrooms, increasing young women's feelings that they do not fit the STEM domain and need to move to other, "more suitable areas."

At this developmental stage, many young women plan to start or have started their family. Several participants reported being constrained by the expectations to prioritize their marriage and family. Although they also aspire to build a successful career in STEM, the likelihood of opting out of the highly demanding and competitive STEM field during this period increases. It was also noted that although the parents' role decreases at this developmental stage, young women still get advice from their parents about choosing the jobs that are more suitable for future marriage and their role as future wives. As participants commented, this is one of the reasons that young women confront the choice—either to prioritize a career or family life and find it difficult to opt for both.

One illustrative comment: "My parents say: if you have children, who will look after your children or all these things…your future husband might be against that."

Other similar comments:

In Kazakhstan, girls are treated like, uhm, weak gender…girls are not supposed to be engineers and need to stay at home and, like, raise children,

be a good wife, and everyone is …following this kind of strategy…that is because maybe it is a little bit hard for women here to become engineers. All the challenges women face at that time are connected with their future families and husbands. Because they may not like their profession…
After marriage, girls do not really prioritize careers. That's why many girls put their careers and their education astray, prioritizing marriage over all.

At this developmental stage, it becomes particularly difficult for married women to maintain a work-family balance. Many women already employed in STEM are constrained with caregiving responsibilities at this period of life as they are parenting small children and face a lack of spousal support. They often fail to achieve a balance between work demands and family responsibilities, and this leads to giving up the STEM career pathway. As one participant commented:

I want to create my own family, give birth to children, and give them a proper upbringing… But, on the other hand, I really want to build a career, continue my studies, and go abroad. And it is very difficult to combine both if there is no support.

It is particularly challenging for married women to keep up with the quick development of the STEM spheres, having children, and trying to maintain a work-family balance. One woman working in the telecommunication industry commented:

There are more obstacles, in fact, than supports. Because technology is developing very quickly and keeping up with it, having other responsibilities is very, very difficult, especially for women. Because, well, after all, traditionally, no matter how we say that we are a very progressive country…all that. Nevertheless, a woman has a lot of responsibilities around the house and children. And it's very difficult to keep up with all this progress, and I was hopelessly behind, I thought. That's why I also gave up, well, I sort of gave up trying to develop further in the telecom industry because I missed too much; it's practically impossible to catch up… I believe that women have no advantages in this industry. As they have to compete on equal terms against great obstacles.

Furthermore, women also experience such barriers as indirect and direct discrimination during the job search process after graduation. Many women confirmed that they faced male-oriented hiring practices during

the recruitment and selection process mostly because employers prefer hiring male applicants as they conform to the "ideal worker" image. The employers also seem to hold the stereotype that men are naturally more skilled in science and math than women, and women are viewed as less suitable for certain STEM positions, as encapsulated by the following quote:

> They expected to hire the young guy for this position [IT developer], not a married woman. And you just keep applying again and feeling that you are not even considered… even for a junior developer position…

One of the participants also recalled that she was asked questions about the age of her children during job interviews in several organizations. She also said that it took her a while to get the job offer, mainly because she had two children of an early age. In addition, women aspiring to STEM-related jobs usually lack personal connections to find employment in STEM, as male employers tend to circulate information about vacancies among friends and colleagues.

> I tried to find a job in this field, but it was a bit difficult. I was often not invited to interviews; well, I have no work experience, so I sort of understand. But after the interview, I often noticed that the fact that I am a woman and have two small children had an impact.

Other forms of indirect discrimination and the signs of male-oriented organizational culture in STEM companies were also reported. Several women employed in STEM organizations recounted that women's success was often left uncelebrated compared to male colleagues. Another participant pointed out the differential treatment between men and women in her organization and strong employers' assumptions that women are less capable than men and less committed to work. As she reflected, she often experienced bias in professional evaluation and noticed strong employers' beliefs that women are "the weaker" and "less intelligent" gender:

> They [employers] are not supposed to distinguish them [workers] like the weak and strong genders. And the tasks are supposed to be allocated equally as well. So, let's say the man is doing this task, and women should do the same task. So, you get to choose equality, and that is all, I think.

Sexism in the workplace emerged as a recurring theme in the interviews with women employed in STEM. Several women highlighted the bullying behavior of male colleagues and the discouraging working environment.

> Ok, if there is a young woman wearing a helmet on the construction site, one of the men working there would say, "What are you doing here?" Maybe it is because girls go there wearing makeup and looking nice. [A woman in a full uniform] looks apparently a little strange for them [men]

Supports in Childhood

The development of interest in STEM starts from an early age. Therefore, early exposure to STEM was mentioned as one of the major supports for developing interest in STEM. Several interviewed participants highlighted the difference in how men and women develop their STEM interests, noting that men are socialized differently and have a different degree of exposure to STEM-related activities in their childhood. Therefore, it is critical for girls to have even a little exposure to STEM-related experiences in childhood, as it is a strong supporting factor in their engagement with STEM in the future. Little exposure to STEM-related activities was also named as the reason why women and men have different levels of preparedness and skills in STEM. As one participant noted:

> It definitely matters if you are exposed to STEM from an earlier age… For instance, when I was young, my father and I used to repair small things in the house. I think this is how I developed my interest in STEM.

Parental presence in STEM was also reported to be associated with girl's success in STEM educational and career pursuits. Ten interviewed women highlighted that they engaged with STEM due to the influence of their parents. This was especially evident among those female participants who decided to follow in their parent's footsteps. A female participant shared that the fact that both her parents worked in the STEM field influenced her decision to choose a STEM career. She highlighted that she received strong support from her parents through their education:

> My father teaches Math at Aktobe University. My mother is also a faculty member in the IT department. Looking at my parents, I grew up with the understanding that Math and Computer Science are the top specialties.

My father used to say that Math is the queen of science…and if I choose a math-related specialty, this will give me a lot of flexibility with STEM-related jobs in the future.

Male family members' encouragement and advice were found to be particularly important for the girls aspiring to connect their lives with STEM-related educational pathways. As several participants commented, they started to develop an interest in their childhood due to a father's or brother's support in STEM-related activities. An illustrative comment:

My elder brother is an electrician. From childhood, I liked to watch him doing something … I also liked to disassemble things to see what was inside and then assemble them together. My brother then asked me whether I wanted to become an electrician, too.

Also, most young women- participants who were already employed in STEM reported that their family members who worked in a STEM-related field could familiarize them in early childhood with STEM professions and discredit the belief that STEM jobs are difficult. According to participants, this was the major support that they have received in their STEM educational trajectory.

Supports in Adolescence

Participation in STEM activities (both structured and unstructured) was highlighted as a strong supporting factor for girls' engagement with STEM during their last years at school. Many interviewed participants reported that participation in such after-school STEM activities as robotics clubs and IT camps has boosted their desire to work in STEM. Several young women also highlighted that their participation in STEM Olympiads and competitions in science subjects was also a strong supporting factor of their engagement in STEM.

I participated in the regional chemistry Olympiad when I was in Grade 10. In 11th grade, I participated in the Physics Olympiad. I got the first prize and was also told I would be awarded the Rector's stipend in case I entered the university…It was a big motivation for me.

Several participants also noted the importance of having a STEM teacher mentor who can facilitate the students' interest in learning STEM

subjects. As one participant noted, "…it usually happens like this: if you have a good teacher, you become interested in this subject, and you keep this interest for a long time." A similar comment from another participant:

> At NIS…we had very good teachers. They, for example, tried to support the girls when we had problems. When we did not understand, they explained and dedicated more time to us. In our class, the guys could quickly grasp information and understand it. Therefore, teachers tried to spend more time explaining and conveying all this information to girls.

The availability of resources in STEM subjects at school, as well as the focus on STEM subjects in specialized schools, also seems to strongly facilitate the girls' intentions to pursue education and careers in STEM. According to the participant:

> My school was with a concentration in Chemistry and Biology, therefore they paid more attention to developing interest in theses subjects. The lessons were engaging and we had Chemistry laboratories where we could do different experiments.

At the university level, girls who were able to find like-minded peers in university courses and group projects reported more engagement with STEM and were more likely to proceed with their career intentions. As one participant shared, she really enjoyed studying with like-minded peers: "I can't say that I'm the smartest in my group. But we support and motivate each other and do all the difficult assignments together."

Another important facilitator is the encouragement from the STEM course instructors, especially of the female gender. It was also noted by the participants that they did not have many female STEM course instructors.

Supports in Adulthood

While reflecting on the available support at this developmental level, several women highlighted the importance of professional development opportunities. As one woman highlighted, the STEM industry is very demanding and requires a lot of professional and self-development: "It [STEM industry] requires constant training, a lot of time that should be dedicated to self-development, getting new knowledge…." As

women stated, these professional development opportunities are particularly important for women returning to work from maternity leave so that they can integrate successfully after a long leave:

> Yes, being on maternity leave for three years is, on the one hand, good for a child, but for a career, it is still a big loss… I think that perhaps women… could be offered some free, off-the-job courses. Maybe after maternity leave… for example, a month or two, somehow give her the opportunity to look around and come to her senses after such a break.

Connecting young women with successful role models working in the field is critical. It is also important to connect women professionals with other women working in the same specializations through forums and professional associations, like the Association of Women Engineers and similar organizations.

Several young women noted that to succeed in STEM, it is better to marry someone who also belongs to the same field to form team-like relationships in the family. As one example, one of the interviewed women working in the IT sphere noted that she benefits a lot from the support of her husband, who also works in a similar sphere. As she commented: "My husband usually contributes even more to the house. Sometimes, he has to cook, and sometimes, he cleans the house, but mostly, we share the responsibilities. This helps me a lot." "It's much easier to have a supportive family…there are some families in which the spouses can achieve a lot by moving together towards common goals."

DISCUSSION

This chapter set out to extend the current understanding of supports and barriers that assist and challenge women in STEM education and career pathways in three developmental stages-childhood, adolescence, and adulthood. Previous research on STEM career pathways was mostly focused on educational levels, paying less attention to developmental stages (life course perspective). The life course perspective (Sheppard, 2009) on supports and barriers for women in their STEM education and career track presents a more comprehensive picture of women's experiences in childhood, adolescence, and adulthood, which shape their education and occupation-related choices at these stages. This perspective was also important for understanding the life cycle of recurrent gender

inequality of "disempowered girls growing into disempowered women" (Sheppard, 2009, p. 238).

The findings are consistent with previous studies in the field and indicate that girls' and women's engagement with STEM in childhood and intentions to pursue education and a career in STEM in adolescence and adulthood is influenced by a number of environmental factors, which serve as either supports or barriers (Fouad et al., 2010; Merayo & Ayuso, 2023; O'Connell & McKinnon, 2021). It is evident from the study that girls and young women were hindered by barriers related to gender role socialization, lack of female role models, low number of women in STEM classes, subtle gender bias and direct discrimination, lack of career guidance, and issues related to negotiating a work-life balance.

The study also identified some factors that appeared to support girls' and women's progression in STEM education and career trajectory, such as early exposure to STEM, participation in STEM school and extracurricular activities, and professional development opportunities.

A core finding from this study is that women are strongly dependent on external social agents, such as parents, teachers, peers, employers, and spouses, in all developmental stages. The impact of social agents was also corroborated in previous studies (Henriksen et al., 2015; Mainhard et al., 2018). Although the influence was found to be somewhat different at each developmental level, the study identified some common influences. Such factors as familial and parental support were found to be critical across all developmental stages, especially in childhood and adolescence. The teachers'/instructors' mentorship and encouragement for the girls were also found to be crucial in adolescence and adulthood. It was identified that teachers and university instructors could play a dual role, either supporting the girl's and young women' interest in STEM and providing mentorship or discouraging them from being engaged with STEM. It should be noted, however, that in the current study, young women were more exposed to gendered teacher discourses and practices both at the school and university levels.

Overall, social agents seem to exert a significant influence on young women's educational experience and career choices as women tend to rely on relational experiences, and external encouragement is very important for them (Zeldin et al., 2008).

The study has also identified that women actually experience more barriers than supports as they progress in their STEM education and career trajectory and underscored the issues related to unfavorable hiring

practices, employers' bias, and workplace sexism (Rosser & Lane, 2002). The problem of girls and women being unable to identify female role models at all stages of their development also requires special attention. Not knowing female role models in childhood and adolescence and having few female role models in their immediate environment (mothers, female relatives, STEM university instructors) is a strong discouraging factor for choosing STEM studies and subsequent careers (Cheng et al., 2020; Microsoft, 2017). It seems that images of women actually working in STEM fields are particularly powerful as they serve as aspirational models for girls and encourage them to envision themselves in similar roles, while STEM female teachers and course instructors offer relatable mentorship and support in educational contexts and help to create an inclusive and equitable learning environment.

Conclusion

This chapter contributes to the existing literature on STEM women's pathways by qualitatively examining environmental supports and barriers that girls and women experience in all developmental stages, from childhood to professional life. It also presents STEM women's reflections on how these supports and barriers have influenced their engagement with STEM and intentions to pursue STEM education and careers.

Limitations

The results of this study should be considered within the context of possible limitations. The first limitation is that the two projects did not use the same interview guide and were not focused primarily on the exploration of supports and barriers. However, the influence of environmental factors was raised as a key theme in both projects. The second limitation is that the selection criteria (convenience sample) and a relatively small sample of women involved in the study preclude the generalizability of findings. Participation in this study was voluntary, so the findings derived from this sample might differ from those who did not volunteer to participate. Future quantitative research needs to involve larger samples of women students and women employees of STEM organizations to understand more the multitude of supporting and impeding factors and their impact on women's participation in STEM. Longitudinal studies would also be helpful to better understand the perceived supports and barriers over the life span.

Implications

The findings from this study suggest certain implications for practice. The study's findings indicate that in order to address the issue of underrepresentation of women in STEM fields, the measures should be implemented from early childhood, as this is a critical period for the formation of interest and attitudes toward STEM. Parents should be aware of the positive influence of early exposure to role models and the importance of providing their children with a diverse range of toys. By providing equal access to STEM educational resources and gender-neutral learning materials from an early age, parents can help to level the playing field for all children, regardless of their gender. Media should be mindful of the messages they convey via cartoons and children's programs.

There is also a need for institutional policies at the school level to support adolescent girls in the process of choosing higher education majors and providing gender-responsive instruction and mentoring opportunities via structured and unstructured activities. Schools should also be responsible for providing training for teachers and family members to ensure that they encourage and support girls in their education and career pursuits. The study pointed out the absence of role models working in STEM, which limits young women's understanding of professional choices and career prospects in all developmental stages. Therefore, more attention should be paid to the promotion of images of successful women in children's books and school textbooks to serve as role models for girls who aspire to pursue education and careers in STEM.

Higher education institutions should provide comprehensive career development support for female STEM students, including internship opportunities, networking events, and professional development workshops. They should also actively collaborate with industry to create pathways for women to enter and succeed in STEM careers. Universities should also address the existing bias in teaching and assessment in STEM disciplines through awareness-raising and gender-responsiveness workshops. STEM departments should strive to increase diversity among the faculty members. Having female faculty members to serve as role models and mentors for female students can contribute to a more inclusive learning environment.

STEM organizations need to revise their hiring practices to mitigate bias in candidate selection and hiring process. Employers should also support work-life balance initiatives to enable women to manage their

personal and professional responsibilities. STEM organizations should also offer professional development and promotion opportunities for all employees regardless of their gender. They also need to ensure that no pay gaps exist within organizations. Employers should also provide diversity training programs to raise awareness of unconscious bias and promote inclusive behaviors among employees.

References

Almukhambetova, A., & Kuzhabekova, A. (2020). Factors affecting the decision of female students to enrol in undergraduate science, technology, engineering and mathematics majors in Kazakhstan. *International Journal of Science Education, 42*(6), 934–954.

Almukhambetova, A., Kuzhabekova, A., & Hernández-Torrano, D. (2022). Hidden bias, low expectations and social stereotypes: Understanding female students' retention in math-intensive STEM fields. *International Journal of Science and Mathematics Education, 20*, 1–23.

Almukhambetova, A., Torrano, D. H., & Nam, A. (2022). Fixing the leaky pipeline for talented women in STEM. *International Journal of Science and Mathematics Education, 21*, 1–20.

Almukhambetova, A., & Hernández-Torrano, D. (2021). On being gifted at university: Academic, social, emotional, and institutional adjustment in Kazakhstan. *Journal of Advanced Academics, 32*(1), 70–91.

Almukhambetova, A. (2024). Exploring STEM teacher educators' gender awareness and understanding of gender-responsive pedagogies in Kazakhstan. In N. Durrani & H. Thibault (Eds.), *The political economy of education in Central Asia: Evidence from the field* (pp. 97–115). Springer Nature Singapore.

Burke, R. J. (2007). *Women and minorities in STEM: A primer.* Edward Elgar Publishing

Bureau of National Statistics of Kazakhstan. (2022). *Key indicators, demographic yearbook of Kazakhstan, 2017–2021, NurSultan* (pp. 12–35). https://stat.gov.kz/ru/industries/social-statistics/demography/.

Cheng, L., Hao, M., Xiao, L., & Wang, F. (2020). Join us: Dynamic norms encourage women to pursue STEM. *Current Psychology,* 1–11. https://doi.org/10.1007/s12144-020-01105-4

Dasgupta, N., & Stout, J. G. (2014). Girls and women in science, technology, engineering, and mathematics: STEMing the tide and broadening participation in STEM careers. *Policy Insights from the Behavioral and Brain Sciences, 1*(1), 21–29.

Durrani, N., CohenMiller, A., Kataeva, Z., Bekzhanova, Z., Seitkhadyrova, A., & Badanova, A. (2022). 'The fearful khan and the delightful beauties':

The construction of gender in secondary school textbooks in Kazakhstan. *International Journal of Educational Development, 88*, 102508.

Eccles, J. S. (1994). Understanding women's educational and occupational choices: Applying the Eccles et al. model of achievement-related choices. *Psychology of Women Quarterly*, *18*(4), 585–609.

Elder, G. H., Johnson, M. K., & Crosnoe, R. (2003). The emergence and development of life course theory. In *Handbook of the life course* (pp. 3–19). Springer, Boston, MA.

European Commission (2020). *Women in digital scoreboard 2020*. https://digital-strategy.ec.europa.eu/en/library/women-digital-scoreboard-2020

European Institute for Gender Equality (2021). *How gender equality in STEM education leads to economic growth*. https://eige.europa.eu/gender-mainstreaming/policy-areas/economic-and-financial-affairs/economic-benefits-gender-equality/stem

Fouad, N. A., Hackett, G., Smith, P. L., Kantamneni, N., Fitzpatrick, M., Haag, S., & Spencer, D. (2010). Barriers and supports for continuing in mathematics and science: Gender and educational level differences. *Journal of Vocational Behavior, 77*(3), 361–373.

Green, A., & Sanderson, D. (2018). The roots of STEM achievement: An analysis of persistence and attainment in STEM majors. *The American Economist, 63*(1), 79–93.

Heaton, J. (2004). *Reworking qualitative data*. Sage.

Henriksen, E. K., Jensen, F., & Sjaastad, J. (2015). The role of out-of-school experiences and targeted recruitment efforts in Norwegian science and technology students' educational choice. *International Journal of Science Education Part B, 5*(3), 203–222.

Hill, C., Corbett, C., & St Rose, A. (2010). *Why so few? Women in science, technology, engineering, and mathematics*. American Association of University Women.

Kuchumova, G., Kuzhabekova, A., Almukhambetova, A., & Nurpeissova, A. (2024). Women's Science, Technology, Engineering, and Mathematics persistence after university graduation: Insights from Kazakhstan. *Journal of Career Development, 51*(3), 408–428.

Kuzhabekova, A., Mukhamejanova, D., & Almukhambetova, A. (2024). Experiences of female early-career professionals in male-dominated STEM companies in Kazakhstan. *Central Asian Survey*, 1–19.

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*(1), 36.

Mainhard, T., Oudman, S., Hornstra, L., Bosker, R. J., & Goetz, T. (2018). Student emotions in class: The relative importance of teachers and their interpersonal relations with students. *Learning and Instruction, 53*, 109–119.

Merayo, N., & Ayuso, A. (2023). Analysis of barriers, supports and gender gap in the choice of STEM studies in secondary education. *International Journal of Technology and Design Education, 33*(4), 1471–1498.

Microsoft (2017). *Why don't European girls like science or technology?* https://news.microsoft.com/europe/features/dont-european-girls-like-science-technology/

O'Connell, C., & McKinnon, M. (2021). Perceptions of barriers to career progression for academic women in STEM. *Societies, 11*(2), 27.

Ministry of National Economy of the Republic of Kazakhstan Committee on Statistics, Astana. (2016). http://bit.ly/1ra1qtO

OECD (2019). *Gender institutions and development database (GID-DB).* Retrieved from https://stats.oecd.org/Index.aspx?DataSetCode=GIDDB2019.

Rittmayer, A. D., & Beier, M. E. (2008). Overview: Self-efficacy in STEM. *SWE-AWE CASEE Overviews, 1*(3), 12.

Rosser, S. V., & Lane, E. O. N. (2002). Key barriers for academic institutions seeking to retain female scientists and engineers: Family-unfriendly policies. Low Numbers, stereotypes, and harassment. *Journal of Women and Minorities in Science and Engineering*, *8*(2). https://doi.org/10.1615/JWomenMinorScienEng.v8.i2.40.

Saldaña, J. (2021). *The coding manual for qualitative researchers* (pp. 1–440). SAGE.

Sheppard, C. (2009). Systemic discrimination and gender inequality. In E.P. Mendes & S. Srighanthan (Eds.), *Confronting discrimination and inequality in China. University of Ottawa Press.*

Stoet, G., & Geary, D. C. (2018). The gender-equality paradox in science, technology, engineering, and mathematics education. *Psychological Science, 29*(4), 581–593.

Swanson, J. L., & Tokar, D. M. (1991). Development and initial validation of the career barriers inventory. *Journal of Vocational Behavior, 39*(3), 344–361.

Winter, L., Hernández-Torrano, D., McLellan, R., Almukhambetova, A., & Brown-Hajdukova, E. (2022). A contextually adapted model of school engagement in Kazakhstan. *Current Psychology, 41*(4), 2479–2495.

World Economic Forum (2023). *Global gender gap report 2023.* https://www.weforum.org/publications/global-gender-gap-report-2023/

Zeldin, A. L., Britner, S. L., & Pajares, F. (2008). A comparative study of self-efficacy beliefs of successful men and women in mathematics, science, and technology careers. *Journal of Research in Science Teaching: THe Official Journal of the National Association for Research in Science Teaching, 45*(9), 1036–1058.

Women in Leadership in Education in Kyrgyzstan and Kazakhstan

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Introduction

Across the world, universities remain gendered (Amsler & Motta, 2019; Filipek & Stone, 2021; Rosa et al., 2020). This is clearly manifested in the persisting underrepresentation of women in leadership positions in academia when compared to men. While the share of women presidents has been increasing over the last decade in some countries, most commonly in the Global North, parity is yet to be achieved. In 2022, only a third (33%) of the U.S. college presidents at all levels were women (Melidona et al., 2023). In a similar vein, women held only 31% of university president posts in Canada in 2021 (Cafley, 2021). The proportion of women in leadership positions in Australian universities was 41.2% in 2021 (Calderon, 2022). According to a report titled *Gender Equality:*

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How Global Universities are Performing (UNESCO, 2022), in 2022 only 18% of university rectors were women in nine Latin American countries, while only 15% were women in 48 European countries.

Central Asia is not an exception in this global trend of women's underrepresentation in university leadership. Although women are well represented among faculty and academic support staff at universities of the region as a legacy of the Soviet gender policies, which supported women with flexible working hours and relatively good pay (ADB, 2005), women remain under-represented among top leaders of universities. Based on the estimate by Harden-Wolfson and Shakirova in this book, the representation of women in higher education leadership in the region varies from just 5.3% of the total in both Tajikistan and Uzbekistan to 26.1% in Kazakhstan. In 2022, women comprised a third of university leaders in Kazakhstan, occupying only 22 out of the total 116 rector positions (FactCheck, 2022). Kazakhstan seems to be a leader in this gender-equity parameter and this statistic is similar to global estimates mentioned by Harden-Wolfson and Shakirova.

Research on women leaders in Central Asian higher education is still in the nascent stages. This region, in general, is largely ignored in global research on higher education. In addition, the topic of women's leadershipfemale lead tends to be marginalized and attracts limited attention from both local and international scholars. Furthermore, existing global knowledge on women's leadership at universities is limited in its reliance on the empirical data collected mostly from universities in the West (Acker, 2014; Aiston, 2014; Morley & Crossouard, 2016; Obers, 2015). Meanwhile, Central Asian research on women's leadership could inform human resource practice at universities and international and domestic gender-equity-promoting policy initiatives in the region by providing a better understanding of (1) the challenges faced by women in attaining leadership positions, (2) the nature of the positions, which are attainable for them, (3) the barriers they face when they become leaders, and (4) the factors, which facilitate their success and persistence. This knowledge could also inform the development of policy strategies for more effective recruitment, training, and support structures at universities.

Furthermore, examining the experiences of women higher education leaders in Central Asia could offer important insights for global scholarship, given the unique features of the Central Asian context. As an ambitious project of the Soviet state aimed at liberating women from

patriarchal and religious subjugation, women in Central Asia were encouraged to contribute to economic growth through labor force participation, supported by policies like extended childcare leave for mothers and universal access to daycare (McAuley, 2022). Women were overrepresented in Soviet academia, attracted to the work by the flexible work hours and the relatively low workload (Rudakov & Prakhov, 2021). However, the political nature and the centralized appointment mechanism to university leadership positions at Soviet universities restrained women from pursuing career aspirations outside the classroom or administrative chairs within their immediate departments (Katz, 2001). Thirty years after the collapse of the Soviet Union, as the governments of Central Asian states strive to implement gender-equity-promoting policies, including increasing the presence of women in leadership in general and in academia more specifically, some legacies of the traditional past and the Soviet times continue to exert their influence, stalling the advancement of women as leaders (Darbaidze & Niparishvili, 2023).

This paper summarizes the results of a study that explored the experiences of female leaders in Central Asian academia using empirical data from Kazakhstan and Kyrgyzstan. Implications of the results of the study are discussed in terms of their relevance for global research on the topic and for domestic policies aimed at promoting the representation and advancement of women in the labor force and leadership in particular.

Prior Research on Women in Leadership in Academia

Most of the existing knowledge on women leaders in academia has been informed by the data collected in the West (e.g., Acker, 2014; Manongson & Gosh, 2021; Townsend, 2021; Wallace & Wallin, 2015). Recently, more studies have been conducted on women outside the Western contexts, including East Asia (e.g., Morley & Crossouard, 2016; Sueda et al., 2020), Africa (e.g., Obers, 2015), and the Middle East (e.g., Arar & Oplatka, 2016; Samier, 2015). However, Central Asia remains largely underexplored (c.f. Kuzhabekova & Almukhambetova, 2021).

The existing research has produced several promising theories helping to explain the women leaders' underrepresentation: (1) human capital theory; (2) psychosocial or gender-role theory; (3) gendered organization theory; (4) professionalization theory; (5) performative leadership theory; and (6) intersectionality theory. In the rest of this chapter, a summary of

the main ideas and results of research conceptualized with these theories will be provided. A combination of the theories was used in the interpretation of the results of this study on women leaders' experiences in higher education in Kazakhstan and Kyrgyzstan.

1. *Human Capital Theory* attributes the inability of women to advance to leadership positions to the systematic underinvestment in their human capital resulting from interruptions from pregnancy, childcare leave, and familial preponderance in some cultures to underinvest in girls' education (Hakim, 1996). This theory is particularly relevant in the context of developing countries (Adusah-Karikari and Ohenmeng, 2014; Bawa & Sanyare, 2013), but is less relevant in the context of transitional economies, where educational levels of males and females have leveled off (Harden-Wolfson and Shakirova, here).

2. *Gender-Role Theory* developed by Eagly (1987) connects women's underachievement as leaders to the differences in psychosocial characteristics and behaviors of women and men resulting from differences in socialization. According to this theory, the differences are the product of the sexual division of labor and the social structures, which evolved to support it—the organization of individuals into social categories of women and men (gender), with expectations about the associated social roles (child-caring or bread-winning), as well as behaviors, which are deemed appropriate for the roles. Women are expected to be primarily responsible for housework and childcare at the expense of pursuing careers (Eagly & Carli, 2007a). They develop lower levels of motivation for pursuing education, lower leadership aspirations, and weaker sense of self-esteem (e.g., Adusah-Karikari & Ohenmeng, 2014) as a result of being socialized into these gender roles (Coogan & Chen, 2007).

3. *Gendered Organization Theory* argues that gender stratification and associated inequality reincarnate in organizations in the form of hierarchies, promotion structures, organizational division of labor, communication patterns, and leadership ideals (Aiston, 2014; Bain & Cummings, 2000; Jones et al., 2015). Research informed by this theory revealed that in many organizations, male leaders act as "gatekeepers" to women's advancement (Aiston, 2014; Jones et al., 2015) and exclude women from "informal networks of male bonding and information sharing" (Luke, 2011, p. 58). It also shows that the common organizational stereotype of an ideal leader

is based on an image of a man and is associated with male traits, such as self-confidence, independence, and ambition (Madera et al., 2009), which leads to the common perception that women are unfit for leadership positions (Ohemeng & Adusah-Karikari, 2015).

4. *Professionalization Theory* by Blackmore (2014) attributes the lack of women's advancement to leadership positions to processes extraneous to organizations. Blackmore (2014) points to the gendered division of labor in the academic profession, where full-time positions are designed with a man in mind, failing to accommodate the maternity-associated needs of women, women are often marginalized into part-time positions, encountering challenges with obtaining tenure or promotion, making it impossible for them to join the leadership candidates pool (p. 90).

5. *Performative Leadership Theory* perceives gender not as a fixed construct of reality, but as something fluid and constantly re-shaped in discourse, structuring reality itself, whereby the performance of the gender role by an individual according to the socially prescribed scripts leads to the reproduction of the structure of gendered power relations, while improvisations allow for agency and historical changes in gender conceptualization (Fuller, 2014; Morris, 1995; Reed, 2001). This critical feminist view goes beyond the victimization of a woman as a silent sufferer of the social order to empowering her as an agent overthrowing social categorization and structures. Performative leadership theory assumes that an individual may assume various gender and leadership characteristics depending on the context in which they find themselves (Acker, 2012). A woman leader may enact "traditional femininity" in general, but in specific situations, depending on expectations of the surrounding individuals, they may display switch from one gender identity to another ("gender heteroglossia") (Francis, 2012; Fuller, 2014, p. 324).

6. *Theory of Intersectionality* by Crenshaw (1989) argues that the social experiences of women are shaped not merely by gender, but rather by a complex interaction among various social structures, such as gender, race, ethnicity, religion, and ability, which affect the conditions of marginalized groups in society. As a result of this interaction, women with different combinations of social structures and identity markers may experience different forms of oppression resulting from

different power influences. In fact, some women may be subject to multiple forms of subordination within society, thus being put in particularly marginalized positions (McCall, 2005).

Methods

This study used a qualitative phenomenological case study design (Groenewald, 2004). The design aims to describe as accurately as possible the structure of a phenomenon, which in this study refers to the experiences of women leaders in Central Asia. More specifically, phenomenology helps to uncover what a particular experience means to a group of people. This approach requires the researcher first to describe the lived experiences objectively and then reflect on the description with reference to the existing theories about the phenomenon.

The choice of the two countries as cases for inclusion in the case study was determined by three considerations. First, the two neighbors share common nomadic origins and, as a result, have similar views on the role of women in the family and society. Second, Kazakhstan (0.72) and Kyrgyzstan (0.70) have demonstrated average performance on gender equity in Eurasia, gaining relatively high scores in the Global Gender Gap Index (2023) and staying behind Moldova (0.78) and Belarus (0.75), while surpassing Azerbaijan (0.69) and Tajikistan (0.67) (Statista, 2023). Third, the two countries also displayed some differences, promising the desired extent of variability in the participants' responses (Table 10.1). Table 10.1 shows essential differences, including the size of the population, levels of national income per capita, unemployment, and the extent of representation of women in the labor force, educational enrollment, and national parliaments.

The study was organized around two key research questions:

> RQ1 What are the experiences of women in leadership positions in higher education in Kazakhstan and Kyrgyzstan?
> RQ2 How do the countries compare in terms of the experiences of female academic leaders?

To obtain an understanding of the experiences of the participants in their own terms we conducted in-depth Zoom interviews with 30 women

Table 10.1 Basic background information about Kazakhstan and Kyrgyzstan

Characteristics	Kazakhstan	Kyrgyzstan
Territory	2,724,902 sq. km (2014)	199,949 sq. km (2014)
Population size	19,62 mln (2022)	6,98 mln (2022)
GDP per capita	11,492.2 USD (2022)	1,655.1 USD (2022)
Unemployment	4.9% of the labor force (2022)	4.2% of the labor force (2022)
Labor force participation	63.3 females/74.6 males % of population (2022)	53.5 of females/79 of males % of population (2022)
Main economic sectors	Services (52.6), Industry (35)—mostly mining and oil and gas extraction, Agriculture (5.25) as % of GVA (2022)	Services (59), Industry (26)—mostly mining, clothing and textiles, Agriculture (15) as % of GVA (2021)
Fertility rate	3.32 (2021) live births per woman	2.89 (2021) live births per woman
Gross enrollment (school), gender parity index	1.16 (2020)	1.14 (2022)
Women parliamentarians	27% (2022)	20 (2022)

(15 in Kazakhstan and 15 in Kyrgyzstan), who occupied leadership positions at various levels in several universities in the two countries. To achieve variability in the responses, we used a maximal-variation sampling approach (Creswell, 2013). The following criteria of variation were set: (1) age, (2) marital and parental status, (3) ethnicity, (4) type of institutional ownership, (5) geographic location of the participant, (6) level of leadership occupied, (7) disciplinary affiliation, (8) leadership and higher education experience.

The sampling frame was constructed by identifying universities of different types of ownership (public and private) and orientation (national/regional/other) in various regions of the two countries, which provided employee contacts on their websites. The participants were sent an invitation to take part in an interview with an explanation of the purposes of the study. The final participants were selected from volunteers after an additional background search using the Internet. Table 10.2 provides a summary of the demographic characteristics of the participants.

Table 10.2 Demographic characteristics of the participants of the interviews

No	Position	Type of ownership	Ethnicity	Region	Age	Marital status	Number of children	Years in higher education	Years in leadership	Code
1	Dean	Private	Kazakh	South	46	Married	1	26	18	A
2	Head of Department	Private	Kazakh	North	36	Single	1	15	10	B
3	Vice Rector	Private	Kazakh	North	41	Single	3	11	1	C
4	Head of Department	Private	Tatar	North	30	Single	0	7	6	D
5	Head of Department	Public	Kazakh	East	45	Married	3	20	9	E
6	Head of international office	Public	Kazakh	East	49	Married	2	20	2	F
7	Dean	Public	Kazakh	South	53	Married	3	30	25	G
8	Head of Department	Public	Kazakh	South	40	Married	3	17	2	H
9	Head of Department	Public	Russian	South	46	Married	1	14	3	I
10	Dean	Quazi-private*	Kazakh	North	59	Married	2	30	25	J
11	Vice Rector	Private	Russian	South	50	Married	3	7	7	K
12	Vice Rector	Private	Russian	North	42	Married	1	20	17	L
13	Director of academy	Private	Kazakh	South	30	Single	0	4	4	M
14	Head of Department	Public	Kazakh	West	45	Single	0	7	7	N
15	Vice-dean	Public	Kazakh	West	37	Single	1	5	3	O
16	ExVice Dean	Quazi-private (AUCA)	Kyrgyz	North	40	Widowed	2	7	15	P

Table 10.2 (continued)

No Position	Type of ownership	Ethnicity	Region	Age	Marital status	Number of children	Years in higher education	Years in leadership	Code
17 Head of Department	Public	Kyrgyz	North	48	Married	1	16	11	Q
18 Head of Department	Private	Kyrgyz	North	39	Married	4	1	1	R
19 Head of Department	Private	Kyrgyz	North	55	Married	2	11	30	S
20 Head of Department	Private	Kyrgyz	North	35	Married	2	9	9	T
21 Head of Department in the Ministry	Public	Russian	North	51	Single	0	8	8	U
22 Dean	Public	Kyrgyz	North	66	Married	3	40	34	V
23 Head of Department	Public	Kyrgyz	South	45	Single	3	23	11	W
24 Head of Research Center	Public	Kyrgyz	South	38	Single	0	16	7	X
25 Ex Vice Dean	Private	Kyrgyz	North	40	Widowed	2	7	15	Y
26 Head of Department	Public	Kyrgyz	North	48	Married	1	16	11	Z
27 Head of Department	Private	Kyrgyz	North	39	Married	4	1	1	AA
28 Vice Rector	Public	Kyrgyz	South	45	Married	1	23	15	AB

Table 10.2 (continued)

No Position	Type of ownership	Ethnicity	Region	Age	Marital status	Number of children	Years in higher education	Years in leadership	Code
29 Vice Rector	Public	Kyrgyz	South	47	Married	2	25	17	AC
30 Dean	Private	Kyrgyz	South	36	Single	1	10	7	AD

RESULTS

Psychosocial Determinants of Individual-Level Challenges

The individual-level experiences of women in Kazakhstan and Kyrgyzstan were similar to the experiences of women leaders in higher education in previously explored countries across the world (e.g., Adusah-Karikari & Ohenmeng, 2014), in that their professional pathways continued to be affected by the gender-role expectations and gender norms influenced by the patriarchal legacies of the sexual division of labor. Consistently with the norms, women in Kazakhstan and Kyrgyzstan were expected to be primarily responsible for caretaking roles in the family, associated with child-caring, house-keeping, and senior-tending. The society's ideal of a woman is that of a modest and unambitious member of the family, who draws life-meaning in serving and complying with the husband and his extended family. In fact, in the two culturally related countries, these expectations have merged into the archetype of the "Ideal Bride", a metaphor, which is frequently referred to in both humorous and serious manner at family dinners and functions, on official media, and in entertaining contests between young female students organized at universities.

As predicted by gender-role theory and has been revealed in research on other countries (Eagly & Carly, 2007a), both women and men are inculcated with the dominant beliefs about the responsibilities and characteristics of both genders since early childhood. These beliefs are so ingrained in the minds and hearts of women that even women who advance to high levels of university leadership, who have achieved distinctive qualifications and notable achievements, who are expected to contribute to equity-promoting policies in their current positions, and,

thus, who may be familiar with research on the condition of women around the world, at the bottom of their heart remain committed to the dominant beliefs that their primary role is that of a woman, who should put their families ahead of her career. Some of the high achieving interviewees confided that they had never aspired to advance in leadership careers to begin with and, at times, had been pushed into the career path by their own supervisors. In fact, the majority of them indicated that they continued to reject offers of promotion because they did not want to complicate their already challenging family lives with new difficulties. The quote from a head of the department from a public university in Kazakhstan reveals the low level of self-confidence and lack of aspirations some of the women had at the time they were forcefully appointed to their first leadership position:

> I have always been somewhat shy and tried to stay away from any politics in our department. As a mom of a young child, I also wanted to focus on teaching and my research. However, when our departmental chair retired, nobody wanted to take over because the pay was not really that much higher than the pay of a regular faculty, while there was much more responsibility and work. All other colleagues were pre-retirement age, so the dean told me that either I agreed or I had to leave. So, I never really wanted to become an academic leader to begin with. I just complied with the demand.

Similar to women leaders in universities in other countries (Rosa, 2022), many women leaders in the current study found it difficult to combine their family and professional responsibilities and experienced cognitive dissonance from the need to respond to two sets of contradictory expectations. Many were stuck to the perpetual feeling of guilt for being neither a good enough mom nor a good enough professional. They devalued their career success due to the feeling that they had achieved this success at the expense of their children's and their own wellbeing. Some participants in both countries complained about psychological issues due to the "double load" they had to carry at home and at work, as well as due to conflicts in the family originating from the pressures experienced by the husbands, who could not find peace with the fact that they had been outperformed by their spouses. In the words of one dean at a private university in Kyrgyzstan:

It is very difficult to balance your work and your family responsibilities and you can never be good at either. I feel like I have a never-ending stream of crisis situations that require my attention. These tend to switch from family-related ones to work-related ones. One week, it is my child's health issues. Next week, it is a situation with a problematic co-worker or a busy reporting period when I have to focus my attention on the Ministry of Education staff. I never have a quiet period when I can just relax and I am never able to deal with any of these situations perfectly. So, I have to find peace with the idea that I am not really a good Mom. The problem is that I am not satisfied with myself as a leader either.

Challenges Imposed by the Gendered Nature of Universities

Gendered organization theory is very relevant in the context of Central Asia in explaining how organizational-level gendered practices make the process of promotion to leadership, as well as performance as a leader, more challenging for women. Similarly to universities in other countries, which were studied in prior research (Aiston, 2014; Bain & Cummings, 2000; Jones et al., 2015), higher education organizations in Kazakhstan and Kyrgyzstan have structures, cultures, and practices, which inherently favor men over women.

One of the most visible ways in which cultural expectations about gender roles shape organizational practices with respect to women's promotion at universities is manifested in the structure of career ladders available for women. Because employers assume that professional advancement is secondary for women who should prioritize their motherhood role, they do not provide women with any advancement opportunities until she gives birth and her children become relatively independent. As a result, many participants mentioned that opportunities for promotion were limited for young females of child-bearing age. In fact, some of our interviewees complained that they were asked about their marital and motherhood status during interviews and were cut off from any opportunities when getting pregnant. As a 40-year-old participant from a public university in the capital city of Kyrgyzstan shared with us:

At some point in my career, I felt as if I had reached some sort of a "glass ceiling". I was around 29 when I started to realize that I was stuck in the position I had at the time. I had received an advanced degree and had

gained rather good experience in several leading private and public universities by then, so it seemed as if I had everything to get promoted. In fact, I could see that male colleagues with the same credentials did get a chance to advance, while I remained invisible to our leadership. Then I overhead somebody saying that one of the 45-year-old single ladies working in another department was "an old spinster" whose bad temper could be attributed to the lack of a husband and a family. I suddenly started to realize that the real reason I was facing the ceiling was that I was not yet married, and I did not have kids.

Because being women, our participants did not comply with the societal masculine ideal of leadership, many of them felt that they had to work harder to prove that they were qualified. This was consistent with the findings of studies conducted in other cultural contexts (Beddoes & Pawley, 2014; Luke, 2011; Wilson, 2003). Not only the women leaders tended to be described by colleagues as being more responsible, hard-working, and detail-oriented, but they also were more demanding toward their subordinates than their male counterparts. This predisposition to be extremely demanding grew with the women's progression to higher positions in academic hierarchy. This could be explained by the increasing need to compete exclusively with males at the higher levels, where women were less prevalent. Women reported that they needed to "become more like males" as their level of responsibility increased. As one Vice Rector from Kazakhstan reported: *When among males, act as males do. I could afford being "nicer" when I was a chair and a dean. I can no longer afford this at this level. Too much responsibility for people. Too much to lose".*

The gendered stereotype of an academic leader is sustained in Central Asia even despite the fact that men are relatively rare species in some women-dominated disciplines. This causes the phenomenon of "mothering", which was described in prior research on other contexts (Simpson, 2004). The deficit of males increases their value in universities and intensifies the administration's efforts to ensure their retention. Some of our participants reported that males are getting opportunities for professional development and promotion even when they are underqualified compared to their female counterparts. When they do get to leadership positions, women tend to value them and, at times, assume some of their direct responsibilities to make sure that the man does not leave the organization. As one of the Kazakhstani participants reported:

Men are rare species in our higher education, so we need to take care of them so that our students have some fatherly figures to model. We "carry our men in our arms" to make sure they stay with us. In some cases, that involves putting together their syllabus or filing their academic reports when they "accidentally" forget to do this (Vice-dean from Southern Kazakhstani public university).

Consistent with studies conducted in other countries (Heilman et al., 1987; Schein, 1973), women tend to be undervalued as compared to men in peer and performance evaluations. Some of our participants believe that they and other women lack "strategic thinking and the ability to think globally" because these are male strengths. These stereotypes lead to the common perception that women are naturally less qualified for leadership positions and that men fit the positions much better. In addition to that, women tend to be excluded from informal male communication networks, a barrier described in other studies (e.g., Aiston, 2014; Bain & Cummings, 2000). Three of our participants pointed out that decisions are "often made in smoking rooms, pubs while drinking a bottle of beer, while playing golf, football or billiards", all of which constitute "games that only guys play". These activities often take place outside the normal working hours, when females are expected to be at home performing her family responsibilities.

Challenges at the Professional Level

According to official statistics in both countries, although Kazakhstan surpasses the world average and Kyrgyzstan is doing fairly well in terms of representation of women in leadership positions in higher education, women are still underrepresented (Harden-Wolfson & Shakirova, this volume). Professionalization theory (Blackmore, 2014) helps to explain the phenomenon. Women rarely reach the position of rectors and ministers because they cannot access a separate career track, while the administrative track is designed exclusively for men. There are opportunities for women in the separate career track in academic affairs, which ends with the position of a Vice Rector for Academic Affairs. At the same time, there is a parallel track in administrative affairs (Finance, Administration, International Affairs, and Research), which is reserved for males and leads to the position of a Rector and, ultimately, Minister of Education. It is these positions that require the notorious "strategic vision and

global thinking" and which are associated with a "male face by external stakeholders".

Modern work in academic affairs administration in Kazakhstan and Kyrgyzstan is associated with a high degree of bureaucratic control, and, consequently, with overtime work and much responsibility. Hence, the positions are not really that attractive for males. It is to these positions that women are frequently "promoted" or, rather, "marginalized". Meanwhile, the administrative track position often requires a degree in engineering or sciences, as well as an active research profile and research administration experience because universities are increasingly expected to play a key role in innovation-driven economic growth. Even when women have a degree and work as faculty in engineering or sciences, they tend to have a lower level of research productivity due to the additional pressures from the family, pregnancy, and child-bearing interruptions. Therefore, they are rarely considered for advancement along the administrative track and very few of them reach the positions of rectors and ministers.

Performativity, Intersectionality, and Agency of Women as Academic Leaders

Due to the transitional state of the development of the two post-Soviet countries, a unique feature of the societies in terms of gender-role expectations is that several sets of such expectations exist at the same time. One set is associated with reviving traditional and Islamic norms, which require a woman to sacrifice her career for family responsibilities. The other is linked to the Soviet views on the role of women at work and in the family, which expect a woman to contribute to family income while being primarily responsible for child-rearing and senior-tending. The third set has arrived from the neoliberal democratic West, which sees the distribution of family responsibilities as a solution to the problem of optimizing a specific set of job market opportunities, whereby either of the spouses can assume caretaking responsibilities depending on their potential as a "bread-winner".

According to the Performative Theory, these conflicting expectations leave women some room for heteroglossic interpretation (Francis, 2012) and some degree of agency in performing their social roles (Fuller, 2014; Morris, 1995; Reed, 2001). Many of our participants play a complex game of juggling the contradictory set of expectations (Acker, 2012). They may act as "Ideal Kelin" in front of the extended family pouring

tea to everyone and making sure that the table is ready to be laid out every day in case of an occasional guest, may act as a progressive "Wonder Women" with younger colleagues and friends, who "tolerate her free-spirit", and as a perfect Soviet wife with their husbands, "trying to be a good Mom to kids, an ever beautiful and interesting companion to husbands, and a good worker at the job place". In the words of one of the participants:

> You have to wear different hats with different people. When I am at the meeting of the Academic Council, where most of my colleagues are reputable older academics, I try to keep quiet, give compliments and refer to the male colleagues as "agha" (respectful address to an older male). When I am in my department, where most of my colleagues are ladies of my age, I laugh out loud and feel as if I am with my friends. When I am with foreign colleagues, I can be bold and speak out, which would never be appropriate among senior local colleagues (Head of Department, Kazakh private university).

With everyone in society being cognizant of the difference in the norm sets, women are at times allowed to push boundaries and to act in slightly unacceptable ways due to their leadership position. As a result, the women constantly push boundaries and actively contribute to the reconceptualization of gender roles in response to the new reality and the social complexity.

Intersectionality Theory, in its turn, helps to explain how a particular set of expectations imposed on or enacted by a woman is determined by the interplaying influences (Crenshaw, 1989; McCall, 2005) of ethnicity, religion, age, socio-economic and educational background of relatives, type of employing organization (public vs. private), and the region of residence. Kazakh and Kyrgyz participants in our sample were more influenced by traditional gender-role expectations than their Russian or Korean counterparts. For these participants, family values were intricately linked to the reviving ethnic and Islamic identity and culture, which had been undermined during the Soviet times. Older women tended to be more influenced by Soviet values, while younger females were significantly affected by neoliberal norms, often pressured by their husbands and parents to achieve professional success, sometimes even at the expense of their family responsibilities.

Supra-Organizational Influences

In addition to individual, organizational, and professional influences on women leaders, in other contexts, this phenomenological study of women leaders' experiences in Central Asia has revealed some supra-organizational influences at the institutional level. This finding is consistent with existing political science research on Central Asia, which has identified an important role of informal networks in societies (Collins, 2004; Ilkhamov, 2007; Lewis, 2012). The findings of this study clearly indicate that certain rules of operation of the informal networks may create barriers to women's advancement.

Within political science, informal exchange networks are defined as groups of connected individuals representing formal bureaucracies who engage in an "informal exchange of influence or bureaucratic favors for equivalent services or cash" (Lomnitz, 1988, p. 42). These relations are based on principles of patronage, loyalty, and trust (Lomnitz, 1988, p. 42) and run "parallel to formal hierarchy" (Lomnitz, 1988, p. 42). They emerge because of inefficiencies inherent in bureaucracies (Lomnitz, 1988) and often occur in authoritarian societies (Lomnitz, 1988). In post-Soviet Central Asia, informal networks emerged from a combination of the Soviet clan networks, which shadowed the formal authoritarian bureaucracy, and the traditional kinship networks, which resurrected in the early years of independence (Ilkhamov, 2007).

Two of our participants from Kazakhstan explained how the ability of a woman to advance to the position of university rector is affected by the phenomenon of "team leadership" discovered in our prior study (Kuzhabekova & Almukhambetova, 2017). The position of a rector in Kazakhstan is that of a political appointed. It is often used as a testing ground for promotion to a ministerial chair for individuals, who come to the position with their previously established teams from outside academia. These teams are also often a part of informal political networks of influence, or they may use the position of a rector as a point of access to the networks. Women are rarely part of the teams for two important reasons. First, they have difficulty with geographic relocation. Second, engagement in informal networks may be associated with bribing and other forms of corruption. Meanwhile, due to their caretaking responsibilities at home, women are less prone to engage in corruption due to the danger of being imprisoned.

In Kyrgyzstan, rectors are elected rather than appointed. However, the advancement of women in the country toward top leadership positions in higher education was affected by informal networks as well. Two Kyrgyzstani participants revealed that the informal networks are maintained by favorable exchanges, which occur in informal settings, such as funerals, weddings, anniversaries, and other life events, which are associated with social expectations of gift-giving. When a member of the informal network is invited to an event, they need to show up and satisfy the patron with the appropriate value of a gift to demonstrate their loyalty. The greater the value of the gift, the greater the loyalty demonstrated. Participating in this informal gift-giving is restricted for women for two reasons. First, it is less acceptable for women to show up at such events without their spouses, whereas it is somewhat socially awkward for their husbands to accompany their wives at the events organized by their colleagues. Second, to take huge amounts out of her family budget for the purchase of gifts, a woman must negotiate the withdrawal with her husband. In short, the rules of operation of informal exchange networks are gendered, are written by and for males, and are not played well by females, making promotion to the top leadership highly unlikely.

Differences in the Experiences of Female Leadership in Kazakhstan and Kyrgyzstan

Kazakhstan and Kyrgyzstan are the most culturally similar countries in Central Asia. Therefore, we did not find many differences in the experiences of women leaders in academia between the two countries. The only difference was in the womens' perceptions of opportunities. Kyrgyzstani women seem to be more confident in their ability to achieve career advancement. More participants in Kyrgyzstan than in Kazakhstan reported that they felt it was possible for a woman to become a president or a university rector. This can be explained by several factors. First, historically, Kyrgyzstan has experience with a female national leader—Kurmanzhan Datka. Second, Kyrgyzstan has already had a successful example of a woman president—Roza Otunbayeva, who has gained "much respect for her abilities and the changes she produced in the country at a turning point of history". Moreover, during her office, Otunbayeva created opportunities for several other women to occupy ministerial positions, as well as positions in the presidential administration. The presence of these successful role models may have affected the

aspirations and the confidence of other women in society. We sensed that Kyrgyzstani women felt more empowered than women in Kazakhstan.

Conclusion

The findings of our study point to the relevance of existing theories in explaining the experiences of women leaders in higher education in post-Soviet Central Asia and might help to identify potential barriers and opportunities for the advancement of women to leadership. First, we found that human capital theory is not particularly relevant in the context of Kazakhstan and Kyrgyzstan, where women have similar aspirations and opportunities for the attainment of higher education as men as a result of the Soviet legacy. Meanwhile, Gender Role, Gendered Organization, and Professionalization Theories are much more relevant in the explanation of the key factors, which affect women's self-confidence, aspirations, leadership conceptualizations, and ability to successfully balance family and professional life. As in many other countries, these theories correctly predict for Kazakhstan and Kyrgyzstan that women leaders have to balance the conflicting gender roles and career expectations, that as a result of the conflict, they experience psychological issues caused by the associated career and family pressures, and that organizational and professional structures and cultures in the region are also gendered and favor men in performance evaluations and advancement.

A unique feature of the regional context that was revealed in this research is that in Central Asian societies, the act of balance is complicated by the fact that women have to deal with a set of contradicting social expectations about gender roles. While this circumstance is unique for the context, Performative theory is available to explain how women perform in the conditions of heteroglossia and deal with the complex dramaturgy of society. By performing a variety of roles in different social contexts, women acquire agency and ability to outplay some of the social constraints, as well as to exert influence on the interpretation of gender roles within the societies. Intersectionality theory, in its turn, reveals how the extent of agency exercised by a woman is determined by the intersectionality of various power sources acting on her, by the influences of her ethnicity, age, regional location, as well as university ownership type.

Finally, our study points to the relevance of institutional theory in the explanation of the experiences of women leaders in academic contexts of Central Asia. In particular, available research in the neighboring field of

political science brings some light on the importance of informal social networks, which may create barriers for women. These networks exist in external power structures, but they also penetrate the bureaucracies within educational organizations. Their operation is highly gendered and favors males while creating unique barriers to the advancement of women.

The key implication from the study is that measures aimed at increasing university autonomy might have most positive effect on advancing women in higher education leadership. One of the key reasons why "team leadership" and political networks create barriers for women is that university rectors are currently being appointed by the government vs. elected within universities. If rectors are appointed, this may allow women to participate in the competition on equal terms with males and may contribute to greater representation of women in the top university leadership positions. Having women leaders would subsequently facilitate the advancement of women in lower leadership positions within institutions of higher education.

References

Acker, J. (2012). Gendered organizations and intersectionality: Problems and possibilities. *Equality, Diversity and Inclusion: An International Journal, 31*(3), 214–224.

Acker, S. (2014). A foot in the revolving door? Women academics in lower-middle management. *Higher Education Research & Development, 33*(1), 73–85.

ADB (2005). *Kazakhstan country gender assessment.* Retrieved on March 13, 2019 from https://www.adb.org/sites/default/files/institutional-document/34051/files/kazakhstan-country-gender-assessment.pdf

Adusah-Karikari, A., & Ohemeng, F. L. K. (2014). Representative bureaucracy in the public service? A critical analysis of the challenges confronting women in the civil service of Ghana. *International Journal of Public Administration, 37*(9), 568–580.

Aiston, S. J. (2014). Leading the academy or being led? Hong Kong women academics. *Higher Education Research & Development, 33*(1), 59–72.

American Council on Education (ACE). (2023). *The American College President. 2023 Edition.* https://www.acenet.edu/Documents/American-College-President-IX-2023.pdf

Amsler, S., & Motta, S. C. (2019). The marketised university and the politics of motherhood. *Gender and Education, 31*(1), 82–99.

Arar, K., & Oplatka, I. (2016). Current research on Arab female educational leaders' career and leadership: A review of extant literature and future directions for research. In A. J. Bowers, A. R. Shoho, & B. G. Barnett (Eds.), *Challenges and opportunities of educational leadership research and practice* (pp. 87–115). Information Age Publishing.

Bain, O., & Cummings, W. (2000). Academe's glass ceiling: Societal, professional–organizational and institutional barriers to the career advancement of academic women. *Comparative Education Review, 44*(4), 493–514.

Bawa, S., & Sanyare, F. (2013). Women's participation and representation in politics: Perspectives from Ghana. *International Journal of Public Administration, 36*(4), 282–291.

Beddoes, K., and Pawley, A.L. (2014). Different people have different priorities: Work–Family balance, gender, and the discourse of choice, *Studies in Higher Education, 39*(9): 1573–1585. https://doi.org/10.1080/03075079.2013.801432.

Blackmore, J. (2014). 'Wasting talent'? Gender and the problematics of academic disenchantment and disengagement with leadership. *Higher Education Research & Development, 33*(1), 86–99.

Cafley, J. (2021, October 27). The struggle for gender equity in university leadership. *University Affairs*.

Calderon, A. (2022, March 5). Proportion of women in academic leadership is on the rise. *University World News*.

Collins, K. (2004). The logic of clan politics: Evidence from the Central Asian trajectories, *World Politics, 56*(2): 224–261. https://doi.org/10.1353/wp.2004.0009.

Coogan, P. A., & Chen, C. P. (2007). Career development and counselling for women: Connecting theories to practice. *Counselling Psychology Quarterly, 20*(2), 191–204.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *Feminist Legal Theory* (pp. 57–80). Routledge.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Darbaidze, E., & Niparishvili, T. (2023). The status of women in the Soviet Union. *Journal of Geography, Politics and Society, 13*(1), 1–10.

Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Erlbaum.

Eagly, A., & Carli, L. (2007a). Women and the labyrinth of leadership. *Harvard Business Review, 85*(9), 62–71.

FactCheck.kz (2022, July 01). *Men on top: Women rectors are three times less represented than their men counterparts.* https://factcheck.kz/media-me/

muzhchiny-vo-glave-zhenshhin-rukovoditelej-vuzov-v-kazaxstane-v-3-raza-menshe-chem-muzhchin/

Filipek, D., & Stone, L. B. (2021). Twice a "housewife": On academic precarity, "hysterical" women, faculty mental health, and service as gendered care work for the "university family" in pandemic times. *Gender, Work & Organization, 28*(6), 2158–2179.

Francis, B. (2012). Gender monoglossia, gender heteroglossia: The potential of Bakhtin's work for re-conceptualising gender. *Journal of Gender Studies, 21*(1), 1–15.

Fuller, K. (2014). Gendered educational leadership: Beneath the monoglossic façade. *Gender and Education, 26*(4), 321–337.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods, 3*, 42–55

Hakim, C. (1996). Labour mobility and employment stability: Rhetoric and reality on the sex differential on labour-market behaviour. *European Sociological Review, 12*(1), 1–31.

Heilman, M. E., Simon, M. C., & Repper, D. P. (1987). Intentionally favored, unintentionally harmed? Impact of sex-based preferential selection on self-perceptions and self-evaluations. *Journal of Applied Psychology, 72*(1), 62–68.

Jones, S. J., Warnick, E. M., & Taylor, C. M. (2015). Identification of institutional genderedness through organizational operations: An analysis of community college working environments. *NASPA Journal about Women in Higher Education, 8*(1), 1–16.

Katz, K. (2001). *Gender, work and wages in the Soviet Union a legacy of discrimination*. Springer.

Kuzhabekova, A., & Almukhambetova, A. (2017). Female academic leadership in post-Soviet context: Finding Work-Life balance while negotiating multiple sets of gender role expectations. *Special Issue of European Education Research Journal:* Work - Life Interferences in Scientific Careers 16 (2–3): 183–199.https://doi.org/10.1177/1474904116682040.

Kuzhabekova, A., & Almukhambetova, A. (2021). Women's progression through the leadership pipeline in the universities of Kazakhstan and Kyrgyzstan. *Compare: A Journal of Comparative and International Education*, *51*(1), 99–117.

Lewis, D. (2012) Understanding the authoritarian State: Neopatrimonialism in Central Asia, *World Aff, 19*(1): 115–126.

Ilkhamov, A. (2007). Neopatrimonialism, interest groups and patronage networks: The impasses of the Governance system in Uzbekistan, *Central Asian Survey, 26*(1): 65–84.https://doi.org/10.1080/02634930701423491.

Lomnitz, L. A. (1988). Informal exchange networks in formal systems: A theoretical model. *American Anthropologist, 90*(1): 42–55.

Luke, C. (2011). *Feminist post-structuralism by Carmen Luke: A plain language edit. Clear clean words*. Accessed 03 March 2019. https://cleanwriting.wordpress.com/2011/11/15/feminist-post-structuralism-by-carmen-luke-a-plain-language-edit/

Madera, J. M., Hebl, M. R., & Martin, R. C. (2009). Gender and letters of recommendation for academia: Agentic and communal differences. *Journal of Applied Psychology, 94*(6), 1591–1599. https://doi.org/10.1037/a0016539

Manongsong, A. M., & Ghosh, R. (2021). Developing the positive identity of minoritized women leaders in higher education: How can multiple and diverse developers help with overcoming the impostor phenomenon? *Human Resource Development Review, 20*(4), 436–485.

McAuley, A. (2022). *Women's work and wages in the Soviet Union.* Taylor & Francis.

McCall, L. (2005). The complexity of intersectionality. *Signs: Journal of Women in Culture and Society, 30*(3), 1771–1800.

Melidona, D., Cassell, A., Chessman, H., & Cecil, B. G. (2023). *The American college president: 2023 edition*. Available at SSRN 4689236.

Morley, L., & Crossouard, B. (2016). Gender in the neo-liberalised global academy: The affective economy. *British Journal of Sociology of Education, 37*(1), 149–168.

Morris, R. C. (1995). All made up: Performance theory and the new anthropology of sex and gender. *Annual Review of Anthropology, 24*(1), 567–659.

Obers, N. (2015). Influential structures: Understanding the role of the head of department in relation to women academics' research careers. *Higher Education Research & Development, 34*(6), 1220–1232.

Ohemeng, F. L., & Adusah-Karikari, A. (2015). Breaking through the glass ceiling: Strategies to enhance the advancement of women in Ghana's public service. *Journal of Asian and African Studies*, 50(3), 359-379.

Samier, E. (2015). Emirati women's higher educational leadership formation under globalisation: Culture, religion, politics and the dialectics of modernisation. *Gender and Education, 27*(3), 239–254.

Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of Applied Psychology, 57*(2), 95–100.

Simpson, R. (2004). Masculinity at work: The experiences of men in female dominated occupations. *Work, Employment and Society, 18*(2), 349–368.

Statista. (2023). *The global gender gap index.* https://www.statista.com/statistics/244387/the-global-gender-gap-index/#:~:text=The%20global%20gender%20gap%20index%20benchmarks%20national%20gender%20gaps%20on,equal%20countries%20in%20the%20world.

Reed, R. L. (2001). Re-searching, re-finding, re-making: Exploring the unconscious as a pedagogic and research practice. In B. Francis & C. Skelton (Eds.),

Investigating Gender: Contemporary Perspectives in Education (pp. 77–90). Open University Press.

Rosa, R. (2022). The trouble with 'work–life balance' in neoliberal academia: A systematic and critical review. *Journal of Gender Studies, 31*(1), 55–73.

Rosa, R., Drew, E., & Canavan, S. (2020). An overview of gender inequality in EU universities. In *The Gender-Sensitive University: A Contradiction in Terms?* (pp. 1–15). Routledge.

Rudakov, V. N., & Prakhov, I. A. (2021). Gender differences in pay among university faculty in Russia. *Higher Education Quarterly, 75*(2), 278–301.

Sueda, K., Mayer, C. H., Kim, S., & Asai, A. (2020). Women in global leadership: Asian and African perspectives. *The Aoyama Journal of International Politics, Economics and Communication, 104*, 39–59.

Townsend, C. V. (2021). Identity politics: Why African American women are missing in administrative leadership in public higher education. *Educational Management Administration & Leadership, 49*(4), 584–600.

United Nations Educational, Scientific and Cultural Organization [UNESCO] (2022). *Gender Equality: How Global Universities Are Performing*. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000381739. Accessed on 20 September 2023.

Wallace, J., & Wallin, D. (2015). 'The voice inside herself': Transforming gendered academic identities in educational administration. *Gender and Education, 27*(4), 412–429.

Wilson, D. (2003). Exploring the working life of a female politician. *Women in Management Review, 18*(8), 389-397.

Women's Experiences in Education in Turkmenistan

Aknur Orazova and Aliya Kuzhabekova

Introduction

The purpose of this chapter is to present an exploratory overview of gender issues in education in the most underexplored country of Central Asia, Turkmenistan. The chapter intends to contribute to existing research by filling the existing gap in understanding the situation with gender equality in education. Moreover, it offers insights into factors influencing women's educational pathways and the ways in which women's and men's behaviors are socially constructed in Turkmenistan. The study combines written interviews with a review of the available literature and policy reports to provide a descriptive picture of the situation with gender equality in Turkmen higher education.

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Turkmenistan remains under-researched within Central Asia due to the restriction of government-approved short-term research visits (Polese & Horak, 2015). Furthermore, state archives are not accessible to researchers (Clement & Kataeva, 2018). Therefore, limited research on gender issues exists, particularly within the field of education (Orazova & Cohen, 2021).

Being a member of the United Nations, Turkmenistan is expected to attain global benchmarks for education quality and to promote the inclusion of marginalized groups and minorities. On the international stage, the country has expressed a commitment to gender equality (Liczek, 2005). For example, Turkmenistan endorsed the Beijing Declaration and the Platform of Action on Gender Equality in 1995, along with other Central Asian countries. In accordance with Article 1 of the Law 2015 on Gender Equality in Turkmenistan, women have equal rights with men in Turkmenistan (Silova & Magno, 2004). These rights are reflected in the educational standards established in the country after the dissolution of the Soviet Union, which require a formal secondary education from both genders (The Borgen Project, 2021).

However, the extent to which the global benchmarks have been achieved in Turkmenistan is difficult to assess because access to policy reports and statistics is restricted for external scholars. The country continues to be one of the most closed states in the world (Bohr, 2016), and, as a consequence, one of the least understood countries in Central Asia, including on issues related to gender policy (Kataeva et al., 2023; Liczek, 2005).

The purpose of this study is to address a critical gap in the existing understanding of the experiences of women in education in Turkmenistan. Particularly, this study aims to explore how gender expectations influence women's decision-making on their educational choices and their opportunities via the analysis of official sources, media publications, and data from written interviews.

This chapter starts with an overview of gender in education in Turkmenistan during Soviet times and a summary of changes during the period of independence based on official documents. It then provides a summary of insights from the existing scholarly literature about gender and education in Turkmenistan. Finally, an analysis of the written accounts of Turkmen women about their educational experiences in the country provides an exploration of factors shaping women's choice of university majors and educational pathways, as well as social constructs influencing

masculine and feminine behavior. Overall, this chapter offers readers a deeper understanding of the challenges women encounter in Turkmenistan to attain education and the way they overcome the challenges on that path.

Gender Equity and Education in Turkmenistan During Soviet Times

It is important to note that the legacy of Soviet policies on women's liberation in Central Asia is complex, as highlighted by Öz DÖM (2018). The Soviet Union significantly transformed the position of women in Central Asia, including in Turkmenistan (Kandiyoti, 2007). The economic structure of the Soviet Union demanded a larger workforce. The government encouraged both men and women to contribute to economic development (Lubin, 1981). Due to the shortage of employees in various sectors of economy, women were welcomed and were provided with the necessary conditions to obtain jobs in areas of demand. Soviet initiatives transformed traditional Central Asian lifestyles. The share of women in the workforce of Turkmenistan increased from 13% in 1924 to 40% in 1976 during Soviet times (Abdullayev, 1976). Importantly, women comprised 45% of employees in industries, 57%—in education and health and 72% in social services (Abdullayev, 1976). Women's rights and gender equality were enhanced through legal reforms. Finally, significant efforts were spent on ensuring equal access to education and achieving universal literacy rates (See also Chapter 1).

While more recent numbers on educational attainment in late Soviet Turkmenistan are not available, one can infer an increase in literacy and education rates among women during Soviet times based on general statistics from the region. Prior to the Soviet revolution, only about 2% of women (aged 9–49 years old) in Central Asia were literate. In the 1970s, the figure increased to 99% and women constituted one-third of enrollment in higher and vocational education (Lubin, 1981). In 1990, about 49% of women aged 15 years and older participated in the labor force in Turkmenistan as compared to almost 80% of males (Khitarishvili, 2016). This was an increase from zero participation of women before the Soviet revolution.

While the gender policy made significant achievements during the Soviet times, the patriarchal cultural traditions of Turkmens and their Islamic background posed obstacles to the realization of full gender

equality during the Soviet period. For example, gender inequality in the labor market persisted as noted by Gerber and Mayorova (2006). In addition, the Soviet government promoted equal participation of men and women in the labor market, but still expected women to fulfill additional roles and functions at home (Kuldysheva et al., 2021). In more traditional Turkmenistan, despite being actively engaged in economic activities, women remained primarily responsible for household obligations (Ashwin & Isupova, 2014; Ashwin & Lytkina, 2004; Kravchenko, 2008).

As a result of the greater influence of the traditional norms, Turkmen women were less represented in the labor force in the Soviet times as compared with women from the less traditional Kazakhstan, where over 60% of women were employed in different sectors of economy in 1990 (Khitarishvili, 2016). Similarly, while Turkmenistan had surpassed the formerly sedentary Uzbekistan in tertiary enrollment rates by 1989 with almost 45% pursuing higher education as compared to 41% in Uzbekistan, it remained far behind exclusively nomadic Kazakhstan (women enrollment—55%) and Kyrgyzstan (women enrollment—59%), where women outnumbered males as students at universities (Harden-Wolfson, 2016). A possible explanation can be related to the fact that Turkmen were not exclusively nomadic and some of the tribes within the people were sedentary at different points in history. They are also more related to sedentary Turkish and Azeri peoples (aghuz group of tribes) rather than to Kazakhs and Kyrgyz (kypchak group of tribes).

To summarize, the Soviet emphasis on education and employment provided opportunities for Turkmen women to participate in political, economic, and cultural life in Central Asia (Szalkai, 2019). Despite some gender-based job segregation and wage gaps, the gender shift in the workforce and education did occur (Rugina, 2019).

Changes in Gender Policies and Education in Post-Soviet Turkmenistan

In post-Soviet Turkmenistan, as in other countries of post-Soviet Central Asia, gender relations have been shaped by a complex interplay between Soviet legacies, Islamic revival, and global governance initiatives. Kandiyoti (2007) highlighted that gender ideologies have been intertwined with historical legacies and contemporary political changes in Central Asia.

On the one hand, Turkmenistan has committed to fostering women's equality consistently with the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (UN General Assembly, 1979) and the Beijing Declaration on Women's Rights (1995). The country is making some notable steps toward achieving the goals set in the documents.

Based on the Report on the state of the women's rights submitted by Turkmenistan to CEDAW (2023), in the 2023 elections, out of the 125 deputies elected to Parliament, 32 were women. Remarkably, a woman was chosen as Speaker of Parliament for the third consecutive term. Women's participation extended across all political parties registered in Turkmenistan, constituting 28% of local self-government bodies. Within the Ministry of Foreign Affairs, 26.4% of employees were women, including 21.5% who served as diplomats. Additionally, women played an active role in the business sector, with 22.4% of entrepreneurs being women, and holding significant leadership positions in the private sector.

Turkmenistan is actively enabling its National Action Plan on Gender Equality for the period 2021–2025 (Turkmenportal, 2020). This comprehensive plan encompasses efforts aimed at promoting gender equality, improving healthcare with a gender-responsive approach, ensuring equal educational opportunities, empowering females economically, and addressing gender-based violence.

In 2022, a survey titled "Health and Status of Women in the Family" was conducted by United Nations Population Fund (UNFPA). A report on the survey results revealed a declining situation with gender-based violence. Around 12% of women reported having experienced physical and/or sexual violence by their intimate partner (current or former) at least once in their lives. Subsequently, a roadmap for the implementation of report recommendations with respect to gender-based violence was developed for the period from 2022 to 2025 (UN, 2024). Regular awareness campaigns are also conducted to educate the public about the Convention and the National Action Plan, as well as to challenge stereotypes concerning women (OHCHR, 2024).

Overall, in 2023, according to the Gender Inequality Index (GII), Turkmenistan, demonstrates GII value of 0.177 and a rank of 43 out of the countries assessed (Yerimpasheva et al., 2023). This is a moderate level when compared with other Central Asian countries. Labor force participation of women remained relatively stable from 1990s to 2024 at around 49% as compared to 47% among males, which is comparable to

the average level of labor force participation in the world and the rest of Europe and Central Asia region (World Bank, 2024).

Education in independent Turkmenistan is provided free of charge and is accessible to all, with the country transitioning to a 12-year education system. Lower secondary completion rate is 94% for girls and 95% for boys, whereas for upper secondary, the gender difference increases with 13% young women and 18% young men attending high school (UNESCO, 2019). In 2019, only 5% of women were enrolled in higher education as compared to 10% of males (UNSECO, 2019). The share of women among higher education students has declined from 65% in 2015 to 58% in 2022 (UNICEF, 2023). Similarly, within the vocational education system, girls' participation has decreased as compared to that of boys since 2015 from girls representing almost half of the enrolled students to only a third of them in 2022 (UNICEF, 2023). Women constitute most teachers in secondary schools, accounting for 67% of educators, while in higher education institutions, women represent 44% of faculty (OHCHR, 2024).

To summarize, after the dissolution of the Soviet Union Turkmenistan has formally committed to international initiatives related to gender equality. Government reports show some achievements in implementation of gender equality policies. However, statistical data on the extent of achievement is limited and any external assessment of the progress is available.

Prior Research on Contemporary Views About Gender and Education in Turkmenistan

Research on the state of women in Turkmenistan, as well as on the experiences of women in education in the country, is very limited. This section provides a summary of some related scholarly ideas from research on Turkmenistan and other Central Asian countries, which provide some insights into the factors, which may explain persisting gender inequality.

The limited number of studies on the country reveal that the educational differences and the declining situation with women's rights in the country can be attributed to the fact that after the end of the Soviet era post-Soviet regimes have strategically appropriated patriarchy to reinforce gender hierarchies as part of national culture to counteract radical feminist agendas and to reinforce traditional gender roles (Cleuziou & Direnberger, 2016). These roles emphasize women's subordination and

promote motherhood as a national duty. Therefore, while international efforts have been made to encourage gender equality, post-Soviet national ideologies contribute to the differentiation in the rights and opportunities of women and men in the country (Cleuziou & Direnberger, 2016).

Based on the reviving patriarchal norms, women are expected to marry young, bear children, and accomplish domestic responsibilities (Ilyina, 2002). Despite advancements in education in post-Soviet countries, many women continue to be confined to roles associated with motherhood and domesticity (Kataeva et al., 2023). Pursuing higher education and professional pursuits are considered to be secondary to these roles (Cleuziou & Direnberger, 2016).

Meanwhile, the economic transition toward a market economy in the country has welcomed the financial contribution of every member of the family. As a result, the desire for professional growth and development coexists with deeply ingrained social norms that have been imposed on women from birth (Cleuziou & Direnberger, 2016). While the prospect of women entering the labor market is encouraged, it is accompanied with a substantial set of family and household responsibilities (Peshkova & Thibault, 2022). The choice between professional development and fulfilling social expectations puts women in a conundrum. If women choose to focus on a career path, social norms result in a challenging environment for them (Luke, 2001). Navigating this conundrum becomes complex when there is limited support from both spouses and extended family members. This is perceived as a choice made by women and a price caused by this choice (Peshkova & Thibault, 2022).

Socio-economic backgrounds also shape women's experiences and opportunities in Central Asia. Economic disparities intersect with gender norms, reinforcing inequalities and limiting women's participation in decision-making processes. Women from marginalized backgrounds encounter more challenges in traditional roles due to constrained access to resources such as education and employment (Gebel, 2020). This limits their ability to assert their rights and pursue opportunities for growth, perpetuating cycles of inequality (Peshkova & Thibault, 2022).

Interestingly, a central element of discourse causing conflicts in the dynamics of gender relations as perceived by society is related to the pursuit of international education. International education has been increasingly perceived in Turkmen society as offering opportunities for social and professional growth and has been increasingly seen as a pathway

to global integration and societal changes. However, the societal acceptance of international education is gender-differentiated. While international aspirations of males are generally accepted, a woman's initiative in this regard is openly criticized (Luke, 2001). In summary, the societal pressure for women to adhere to cultural norms about gender roles, which prioritize family over academic development, has created a dilemma for women, putting them in front of a difficult choice between educational and professional pursuits and family, thus shaping the women's choices in post-compulsory education (Aiston, 2011).

Importantly, the knowledge of the actual dynamics of gender relations and their influence on educational aspirations and experiences of women, especially at the postsecondary level, remains limited. To fill the gap in existing understanding of the dynamics, this study conducted a descriptive empirical exploration of the experiences and the factors shaping the educational choices of women in higher education in an attempt to lay the foundation for future studies. The rest of the chapter describes the methodological approach, the results, and the implications of the study.

Method

To provide an initial overview of the experiences of women in education in Turkmenistan, we conducted a descriptive qualitative exploration. We used a grounded theory approach that allowed us to delve deeper into the experiences and perspectives of women within the educational context in Turkmenistan in the absence of prior theoretical explorations or empirical understanding of the central phenomenon. The grounded theory approach helped us to capture insights as well as understand the complexities of women's educational experiences to develop foundational understanding of the nature of the experiences (Stough & Lee, 2021).

We used a purposeful sample to collect written accounts from the participants. This sampling approach allowed us to select participants who possessed certain characteristics or experiences relevant to the research focus, as well as enriching the data collected during interviews (Suri, 2011). Participants in this study were required to be exclusively female residents of Turkmenistan who were raised in the country and had completed at least secondary education there. A total of 10 female people participated in the interviews, with 6 studying abroad for higher education and 4 obtaining higher education in Turkmenistan. Every participant completed compulsory secondary education in Turkmenistan. Moreover,

all participants pursued or have been attaining higher education, both within and outside of the borders of Turkmenistan.

Our initial intent was to capture the higher educational aspirations and overall educational experience of women in the local environment. To comprehensively explore the impact of educational settings on women's choices and experiences, we used semi-structured written accounts collected from the women participants who pursued higher education both within the borders of Turkmenistan and internationally. This approach has been shown to be able to produce more focused and reflective data than the data from the transcripts of face-to-face interviews (Handy & Ross, 2005). It allowed us to carefully examine the varying factors that shaped participants' educational journeys.

The participants were posed several questions to guide their reflections in the written accounts. The respondents provided their answers in Turkmen with the subsequent translation to and analysis of the records in English. The questions were carefully developed to address the key issues related to gender in education, educational quality, disparities in opportunities, and societal perceptions or expectations. This approach also allowed us to gain a comprehensive understanding of factors that influenced the participants' intent to pursue advanced education.

The data from the interviews was subjected to subsequent analysis using a thematic coding approach (Kiger & Varpio, 2020). Concepts such as gender bias, stereotypes, and cultural perspectives functioned as viewpoints through which participants' insights were interpreted. The first author collected the data. To ensure ethical consideration, informed consent was obtained from each participant underlining confidentiality and voluntary participation in the study. To protect the privacy of the participants, anonymizing identifiers were applied in data analysis and reporting.

Results

The reflections of women in this study reveal that their experiences are shaped by cultural perspectives that are largely informed by traditional norms. The rest of this section presents the themes pertaining to the various social expectations that influence females' behavior in relation to their choice of postsecondary educational path and their experiences in education in general. The most common themes that emerged from the

interviews were family influence and the social construction of masculine and feminine behavior and socially appropriate educational and career futures. Almost all participants expressed an external influence on their educational choices.

Economic Value of University Degree and Family Influence on the Choice of Major

As indicated, every participant successfully completed compulsory secondary education in Turkmenistan. Moreover, all participants pursued or have been attaining higher education, either within or outside the borders of Turkmenistan. This inclusive approach contributed to gaining a comprehensive understanding of motivation that influenced the participants to pursue different pathways toward advanced education.

One of the most important themes that emerged from the written accounts was the significant role of parental influence as a factor shaping the participants' decision to obtain a higher educational degree. For all our participants, aspirations for higher education were "inherited" from parents, who received higher education themselves. As one of the women explained:

> My parents and grandparents were all educated people, and from them, I have acquired a mindset that all people need to be educated, which is my main aspiration. (Participant D)

However, our study revealed that in some regions of the country, the pressure to pursue higher education is not related to the recognition of the importance of higher education per se. Rather, the pressure is related to the economic value of the diploma received upon graduation. In the cultural context of Turkmenistan, a higher educational degree is perceived as a symbol of socio-economic status, indicating parental ability to provide sufficient funds for the advanced education of their children. As a diploma indicates the financial status of some families, marrying an "educated" man implies building a financially stable marriage. The desirability of such a marriage and an educated husband makes educational pursuits acceptable. Similarly, the value of a bride is increased if she has a university degree, which signals a higher socio-economic status of her family. Furthermore, in some regions of the country, the value of a bride's price ("galyn" in Turkmen) depends on the educational degree she

attained. Moreover, the type of degree can affect the bride price amount, for example, degrees in law make it reasonable to request a greater bride price size. Two of our participants explained the economics behind the bride price decisions:

> Unfortunately, many families in Turkmenistan prepare their daughters for marriage from a young age, emphasizing that they should aim to marry when they become adults. In this cultural context, holding a higher education diploma is seen as a pre-condition for a successful marriage. In Turkmenistan, the focus is often on obtaining a diploma rather than benefitting from education itself. Personally, my parents, who are well-educated, never conveyed the message that higher education is a requirement for a successful marriage. However, I have observed this mindset in some of my relatives. Two of my aunts raised their daughters with the belief that a diploma is crucial for a successful marriage and for negotiating "galym". I have heard similar sentiments expressed by my aunt, who has encouraged my 14-year-old cousin to study for the sake of a successful marriage. (Participant C)
>
> I once had a course-mate who took great pride in attending a law school, believing that this was a prestigious degree that would ensure her parents not to settle for anything less than a substantial bride price. (Participant J)

Families shape not only the overall decision of a girl to pursue higher education but also her choice of a major. In Turkmenistan, females predominantly occupy the academic and pedagogical roles, mostly as teachers. This trend has evolved since the Soviet Union era (Kuzhabekova & Almukhambetova, 2017). Therefore, women continue to be perceived as future teachers and parents influence their children to select the teaching pathway. In words of one of our participants:

> I was advised to enter a pedagogical institute by my Dad…. I can assume that this was because of my gender. My parents didn't suggest that I pursue any traditionally male jobs. (Participant E)

As the economy of the country has been undergoing restructuring, some new developments have been happening in the perceived acceptable professions for women. New roles in economics and finance, such as a bank employee or an accountant, have become prestigious for women. This transformation brought a significant shift in societal expectations,

where obtaining a career in economics or finance became a priority for women, regardless of personal interest:

> I thought that, for example, engineering, logistics or computer science were not for women, and the best specialty for women would only be banking. (Participant A)
> Despite my lack of interest in higher education, I attended a professional school for accounting under parental pressure. (Participant G)

To summarize, the insights from our participants' written accounts highlight that societal and traditional views restrict women's choices and opportunities in various educational and future career paths, even though socially desirable careers have expanded in contemporary Turkmenistan. Furthermore, family expectations continue to push young women toward majors and careers, which they may dislike, but which are consistent with gender expectations. As family bonds often take precedence in Turkmen society, the family decision over children's life trajectories is centralized as an integral part of the Turkmen community.

Factors Influencing Women's Educational Experiences

Despite governmental policy supporting equal opportunities in education, patriarchal gender norms and stereotypes tend to favor males within the academic context. Males are believed to be more competent for certain educational specializations and societal roles and are provided with more opportunities in education, whereas girls' access is restricted in some majors and their behavior is overregulated, prohibiting risky endeavors and unconventional career paths.

For example, there is a common societal belief that men are more capable of accomplishing tasks, which entail social networking, leadership, and project management. As a result of this perception, they are given preference in any internship and part-time employment opportunities, which occur during university studies. As a result, they receive a better start in their careers when they graduate and are more likely to be hired for first jobs upon graduation than women:

> Even with younger professionals, our people still tend to perceive males as superior to females… Because of gender, males tend to connect faster

with managers and are perceived as better candidates for first positions and internships…. (Participant E)

In addition, there are socially constructed beliefs that STEM aspirations are not acceptable for women. Because of these stereotypes, girls are not considered for any STEM-related opportunities during their secondary education and are discouraged from pursuing majors in STEM upon high school graduation. This discouragement comes from the family, teachers, and peers. Awareness about these stereotypes demotivates girls from a young age to even consider a career in science, technology, engineering, and mathematics fields:

I wanted to attend a meeting of the programming club dedicated to Olympiads at school. I was rejected from the club because it was mainly made up of male students, and they discouraged me by saying I was not suitable for the tech field because I was a girl. Unfortunately, I let that one negative comment influence my decision to give up on programming and focus on languages instead. (Participant G)

The dominant cultural expectation is for girls to obey the rules and not to take any risks or display any sort of non-compliance. Boys and young males are often less sanctioned for non-conformity to societal rules and norms and also have a greater degree of freedom in their actions compared to women. Women, on the contrary, are sanctioned and punished to a greater degree for any violation of gender expectations. This pattern has been observed in school settings where high-disciplined behavior was prescribed to females.

In secondary school, my teachers would often say, "You are a girl and you have not completed your homework. Shame on you". (Participant C)

To summarize, the discrepancy in how different genders are treated in Turkmen education is intricately linked to gender-differentiated societal gender norms. By prescribing specific gender roles and behavior expectations to women, society attempts to convey the idea that masculinity is superior, allowing men greater freedom of expression and power compared to women. These norms extend to a variety of areas, influencing females' career choices, personal relationships, and, ultimately, women's individuality. In words of one of the participants:

Culture tells me to stay quiet and not to go over the limits. (Participant E)

Mechanisms of Empowerment

Empowering women to prioritize their interests over societal pressure is essential in achieving societal changes with respect to gender equity. By choosing to follow their own interests and passions, girls can challenge traditional norms and cause gradual shifts in societal attitudes. Women are marginalized in Turkmen society, but they still have aspirations and seek for opportunities to get inspired. Sometimes these opportunities are outside the country, as the experience of some of our participants shows. Several participants, notably among those, who are currently educated abroad, pointed to the importance of empowerment programs, networking opportunities, partnership initiatives, and positive role models. One participant, in particular, talked about the importance of being exposed to positive role models:

> I believe our girls lack vision. They need to know that we have women out there who are having families, living full lives, all while pursuing their aspirations in education, whether it be a master's or PhD or anything related. Maybe they should meet such women at seminars organized by influential women, or at guest lectures at schools and universities. Also, in a broader sense, we need more opportunities and incentives for females to pursue their educational dreams. (Participant, E)

Another participant mentioned positive experiences with women-targeting programs and clubs:

> There is one program called Technowomen in Turkmenistan. We could create programs like that, or we could create clubs which inform people regarding all scholarship opportunities abroad. (Participant, D)

Other interesting ideas included the importance of creating social networking opportunities for women and partnering with universities and organizations abroad to establish exchange programs for youth in general and for women in particular:

To navigate the challenges faced because of gender in education in Turkmenistan, creating networks and support systems can be crucial. One approach is to focus on education as a means to address gender-based inequalities. Partnering with educational systems in other countries to support the education of Turkmen youth can be valuable. Additionally, establishing initiatives such as student exchange programs, teacher programs, and exchange programs for school children could help foster a more inclusive educational environment. Furthermore, addressing gender-based inequality through direct action, rather than mere advertisement, could significantly impact the landscape of education in Turkmenistan. (Participant, C)

These ideas can be taken as a basis for government and organizational initiatives aimed at girl's empowerment. Many of these ideas are consistent with research about effective international practices aimed at the promotion of gender equity and girl's agency in education.

Discussion and Conclusion

Our results reveal several important insights about the state of gender equality and the experiences of women in education in Turkmenistan. First, consistently with the findings of earlier studies on Central Asia (Kuzhabekova & Almukhambetova, 2017), the gender equality situation in Turkmenistan is shaped by three contradictory discourses— Soviet, reviving traditional, and neoliberal Western. These contradictory discourses are associated with different sets of gender expectations and views about the possible roles of women in the society. Faced with the contradictions, women find themselves in a conundrum when choosing the socially acceptable work-life balance.

Second, de jure, Turkmenistan is committed to a variety of international agreements on the achievement of gender equality and has adopted a variety of internal policies and strategies to comply with international expectations. However, the extent to which the intent of the policies has been achieved is hard to assess in the absence of access to statistical data and external studies. Official reports, however, reveal that some positive changes have been made in the area of women's representation in public policy, in business, and in employment.

Third, the empirical part of our study revealed that the educational choices and aspirations of women in Turkmenistan are increasingly shaped by traditional gender role expectations and family influences, while also

being affected to a lesser extent by the continuing legacy of the Soviet efforts aimed at engaging women in higher education and the labor force, and the changing market configurations, which created some alternative career and educational pathways. The finding is consistent with the prior research on the region, which also points to an increasing influence of traditions and the crucial role of the family in shaping educational and professional aspirations of young women in Central Asia (Aiston, 2011; Almukhambetova & Kuzhabekova, 2021; Kuzhabekova & Almukhambetova, 2017; Kataeva & DeYoung, 2017; Peshkova & Thibault, 2022).

Fourth, importantly, women in Turkmen society seem to display agentic behaviors and awareness of the potential for empowerment. Despite participants' recognition of complexities in gender relations and biases, their discussions emphasized that women can modify their current position by navigating the challenges resulting from their gender. They stressed the significance of women's decisions to prioritize individual interests over societal pressure Some of these agentic women are currently educated abroad, despite the social criticism of women's aspirations for such educational pursuits (Luke, 2001). They are also aware of some empowerment approaches, which can be utilized by policymakers to create better opportunities for women.

The key limitations of the study include the fact that our analysis of the past and current policies and of the overall condition of women in the country has been constrained by poor access to policy documents and reports, as well as to official and international statistics. The empirical part of the study has been limited by the number of participants with Turkmen women, in general, are cautious about participating in research studies due to social norms. Given the lack of prior research on the topic, our study was conducted from the ground without any guiding theoretical framework defined a priori. It was also qualitative in nature not allowing for a broad generalization of findings across diverse Turkmen communities. Moreover, considering the cultural sensitivity related to gender issues, it was somewhat problematic for us to obtain extended responses on the topic of interest and this constrained the study's ability to fully explore and understand the various complications and barriers faced by females in pursuit of education and professional growth.

Future research could add greater contributions by including larger samples in diverse localities. Gender dynamics in Turkmenistan vary across regions, thus, diverse backgrounds of participants would provide more insights into the gender issues and societal perspectives regarding gender

dynamics. In addition, it might be beneficial for future studies to focus on the exploration of the experiences of women, who managed to achieve educational and professional success in non-traditional spheres to identify factors, which facilitated such success, as well as to reveal more empowerment mechanisms.

Based on the participants' responses, several steps can be taken by policymakers to address gender inequality in education. First, the policymakers might consider creating structured supportive networking systems and mentorship opportunities. These networks would help women to share their experiences and would allow them to reflect on their educational journeys, while the mentorship schemes would empower them with examples of success. Disseminating information about successful female role models in various fields could help to increase the range of career possibilities and might counteract the familial discouragement.

Additionally, to address the gender gap in STEM or other fields, policymakers should invest in facilitating more educational opportunities for women, as well as create incentives for women to specialize in those areas, including financial incentives in the form of scholarships. Greater attention should be paid to the creation and support of girl-targeting STEM clubs at the secondary level and to creating specialized support and mentorship structures for female students in STEM majors at the university level. Providing specialized training for faculty in STEM on gender-sensitive instructional and supervision approaches might also be useful.

As a final point, expanding global networking and establishing international educational partnerships with specialized opportunities for women's engagement and mobility might be another approach, which could expand educational and career opportunities for young women and may facilitate the promotion of the norms of gender equality in the society at large.

References

Abdullayev, B. (1976). *Turkmen soviet socialist republic, Turkmenistan*. https://www.booksite.ru/fulltext/1/001/008/112/966.htm

Aiston, S. J. (2011). Equality, justice and gender: Barriers to the ethical university for women. *Ethics and Education, 6*(3), 279–291.

Almukhambetova, A., & Kuzhabekova, A. (2021). Negotiating conflicting discourses. Female students' experiences in STEM majors in an international

university in Central Asia. *International Journal of Science Education, 43*(4), 570–593.

Ashwin, S., & Isupova, O. (2014). "Behind every great man…": the male marriage wage premium examined qualitatively. *Journal of Marriage and Family, 76(1),* 37–55. https://doi.org/10.1111/jomf.12082

Ashwin, S., & Lytkina, T. (2004). Men in crisis in Russia: The role of domestic marginalization. *Gender & Society, 18*, 189–206. https://doi.org/10.1177/0891243203261263

Bohr, A. (2016). *Turkmenistan: Power, politics and petro-authoritarianism.* Chatham House, Royal Institute of International Affairs.

CEDAW Convention on the Elimination of All Forms of Discrimination against Women (2023). Sixth periodic report submitted by Turkmenistan. Retrived from https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW/C/TKM/6&Lang=en

Clement, V., & Kataeva, Z. (2018). The transformation of higher education in Turkmenistan: Continuity and change. *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity, 25*, 387–405.

Cleuziou, J., & Direnberger, L. (2016). Gender and nation in post-Soviet Central Asia: From national narratives to women's practices. *Nationalities Papers, 44*(2), 195–206. https://doi.org/10.1080/00905992.2015.1082997

Committee on the Elimination of Discrimination Against Women welcomes Turkmenistan's National Action Plan on Gender Equality, asks about measures to prevent domestic violence and the exploitation of women labourers | OHCHR. (2024, February 2). https://www.ohchr.org/en/news/2024/02/committee-elimination-discrimination-against-women-welcomes-turkmenistans-national

Gebel, M. (2020). Young women's transition from education to work in the Caucasus and Central Asia. *The ANNALS of the American Academy of Political and Social Science, 688*(1), 137–154. https://doi.org/10.1177/0002716220908260

Gerber, T. P., & Mayorova, O. (2006). Dynamic gender differences in a post-socialist labor market: Russia, 1991–1997. *Social Forces, 84*(4), 2047–2075. https://doi.org/10.1353/sof.2006.0088

Handy, J., & Ross, K. (2005). Using written accounts in qualitative research. *South Pacific Journal of Psychology, 16*(1), 40–47.

Harden-Wolfson, Em. (2016). *Women in higher education in Central Asia.* Retrieved from https://emmahardenwolfson.com/2016/05/13/women-in-higher-education-in-central-asia/

Ilyina, I. (2002). Marital-status composition of the Soviet population. In *Demographic trends and patterns in the Soviet Union before 1991* (pp. 207–224). Routledge.

Kandiyoti, D. (2007). The politics of gender and the Soviet paradox: Neither colonized, nor modern? *Central Asian Survey, 26*(4), 601–623. https://doi.org/10.1080/02634930802018521

Kataeva, Z., & DeYoung, A. J. (2017). Gender and the academic profession in contemporary Tajikistan: Challenges and opportunities expressed by women who remain. *Central Asian Survey, 36*(2), 247–262. https://doi.org/10.1080/02634937.2017.1287663

Kataeva, Z., Durrani, N., Izekenova, Z., & Rakhimzhanova, A. (2023). Evolution of gender research in the Social Sciences in post-Soviet countries: A Bibliometric analysis. *Scientometrics*, *128*(3), 1639. Stockholm Universitet.

Khitarishvili, T, (2016). *Gender inequalities in labor markets in Central Asia*. UNDP. Retrieved from https://www.undp.org/sites/g/files/zskgke326/files/migration/eurasia/Gender-inequalities-in-labour-markets-in-Central-Asia.pdf

Kravchenko, Z. (2008). *Family (versus) policy: Combining work and care in Russia and Sweden*. Stockholm Universite.

Kuldysheva, G., Paraidinuulu, S., Atantaev, A., Mirzaeva, A., Shookumova, D., Zhusupov, B., ... & Patiev, N. (2021). Providing women equality in Kyrgyzstan: Legal and historical analysis. *Open Journal of Social Sciences, 9*(1), 328–333.

Kuzhabekova, A., & Almukhambetova, A. (2017). Female academic leadership in the post-Soviet context. *European Educational Research Journal, 16*(2–3), 183–199. https://doi.org/10.1177/1474904116682040

Liczek, I. (2005). Cultural parameters of gender policymaking in contemporary Turkmenistan. *Comparative Studies of South Asia, Africa and the Middle East, 25*(3), 567–583.

Lubin, N. (1981). Women in Soviet Central Asia: Progress and contradictions. *Soviet Studies, 33*(2), 182–203. https://doi.org/10.1080/09668138108411351

Luke, C. (2001). Academic career paths: Women in senior management in Malaysian higher education. *Asia Pacific Journal of Education, 21*(2), 52–75.

Orazova, G., & Cohen, J. (2021). "English as a tool for empowering women's educational success": A case study of a young rural Turkmen woman. *TESOL Journal, 12*(1), e00536.

ÖZ DÖM, Ö. (2018). Muslim women in Soviet Central Asia. *Tarih İncelemeleri Dergisi*, *33*(1), 91–116. https://doi.org/10.18513/egetid.443313

Peshkova, S., & Thibault, H. (2022). Introduction. *Central Asian Affairs, 9*(2–4), 149–175. https://doi.org/10.30965/22142290-12340019

Polese, A., & Horák, S. (2015). A tale of two presidents: Personality cult and symbolic nation-building in Turkmenistan. *Nationalities Papers, 43*(3), 457–478.

Project, B. (2021, December 10). *Girls' education in Turkmenistan*. The Borgen Project. https://borgenproject.org/girls-education-in-turkmenistan/

Rugina, S. (2019). Female entrepreneurship in the baltics: Formal and informal context. *International Journal of Gender and Entrepreneurship, 11*(1), 58–74. https://doi.org/10.1108/ijge-05-2018-0055

Silova, I., & Magno, C. (2004). Gender equity unmasked: Democracy, gender, and education in Central/Southeastern Europe and the Former Soviet Union. *Comparative Education Review, 48*(4), 417–442.

Stough, L. M., & Lee, S. (2021). Grounded theory approaches used in educational research journals. *International Journal of Qualitative Methods, 20*,. https://doi.org/10.1177/16094069211052203

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal, 11*(2), 63–75. https://doi.org/10.3316/qrj1102063

Szálkai, K. (2019). The Soviet Union as a 'feminist colonialist?' the women's question in early soviet central asia. *Corvinus Journal of International Affairs, 4*(1), 4–14. https://doi.org/10.14267/cojourn.2019v4n1a2

Turkmenportal. (2020, September 12). *Turkmenistan adopted the second plan for achievement of gender equality*. https://turkmenportal.com/blog/32772/turkmenistan-prinyal-vtoroi-nacionalnyi-plan-po-obespecheniyu-gendernogo-ravenstva

United Nations. (2024). (rep.). *Sixth periodic report submitted by Turkmenistan under article 18 of the Convention, due in 2022*. Retrieved from https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symboln=CEDAW/C/TKM/6&Lang=en" https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symboln=CEDAW/C/TKM/6&Lang=en.

UNESCO (2019). *World inequality database on education: Turkmenistan*. https://www.education-inequalities.org/

UN General Assembly (1979, December 18). *Convention on the elimination of all forms of discrimination against women* (Treaty Series, vol. 1249, p. 13). United Nations. http://www.un.org/womenwatch/daw/cedaw/cedaw.htm.

UNICEF (2023). *Voluntary national review of Turkmenistan on the progress of implementation of the global agenda for sustainable development*. https://turkmenistan.un.org/en/239049-voluntary-national-review-turkmenistan-progress-implementation-global-agenda-sustainable

World Bank (2024). *Gender data portal: Turkmenistan*. https://genderdata.worldbank.org/en/economies/turkmenistan#:~:text=In%20Turkmenistan%2C%20the%20labor%20force,labor%20force%20participation%20has%20decreased.

Yerimpasheva, A. T., Lipovka, A. V., Tarakbaeva, R. E., & Zakirova, A. A. (2023). Comparative analysis of gender stereotypes in Central Asia and Central Europe. *Bulletin of" Turan" University* (1). https://doi.org/10.46914/1562-2959-2023-1-1-130-144

Conclusion

Lessons Learned and Pathways to the Future

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This volume marked the first attempt to compile current research on the intersection of gender and education in Central Asia. Divided into two distinct parts, the first section offered a comparative examination of the gender policy landscape, encompassing both contemporary and historical perspectives, along with an analysis of various gender equality indicators across Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, and Turkmenistan. The subsequent section introduced the reader to an array of contemporary empirical studies authored by both established and emerging researchers, shedding light on crucial facets of gender equality in education within the region. In this concluding chapter we draw some general observations about the current trends concerning gender equality within

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Central Asian education systems, reflect on the current state of research on the topic, as well as identify future directions for scholarship, policy, and practice. Our aim is to pave the way for future policymaking and research, identifying directions for strategic action and transformative change.

Lessons on the State of Gender Equality in Education in Central Asia

A noteworthy theme emerging across the studies is that gender equality is widely acknowledged as an important area of action by policymakers in the region. All countries have become signatories of important international agreements, adopted domestic legislation pertaining to the protection of the rights of women, and most have joined international assessments on gender equality. While the level of commitment to translating policies into action varies among countries—with some countries falling short in tracking policy implementation or allocating adequate resources to achieve policy targets—in general, the governments of all Central Asian states seem to realize that the economic competitiveness and social development of the region depend on adherence and success in the implementation of gender equity policies.

Another important observation across Central Asia is the complex interplay of the Soviet, traditional, Islamic, and Western neoliberal discourses on the formation of modern gender role expectations, the conceptualization of the role of education in the reproduction of gender norms and structures in societies, as well as in the process of implementation of gender equity-related policies. These influences play out differently both between and within country contexts, as well as across organizational, professional, and family environments, producing varying dynamics influencing the educational aspirations and pathways of women. At the same time, these influences clash and compete with one another in each of the countries observed. The emerging conflicting gender role expectations complicate women's experiences, and require skillfulness in navigating the different sets of such expectations and the ability to produce different performances depending on the specific audience and the related gender norms at play. However, they also empower the women, allowing them to play one set of conflicting expectations against the other.

The complex interplay of Soviet, traditional, Islamic, and Western discourses is complicated further by the displacement of the Russian colonial discourse by the Western neocolonial one. This displacement is accompanied by the appropriation of the self-ascribed modernizing role in the liberalization of the Central Asian woman. Both the old and the new colonizing discourses obscure local voices and initiatives, misrepresent some influences in the region, such as religion and tradition and silence local players and activists in the development of gender policies, including those in education.

The studies in the volume also revealed the complex mechanisms by which gender norms are constructed and impact the educational choices and experiences of women. Gender expectations are communicated through various channels, including within families (by parents, siblings, in-laws, and spouses), educational organizations (by teachers/faculty members, peers, and educational materials), future employers at internship sites, supervisors and colleagues in case of women leaders, and society at large via social media, gossip, and other ways of communicating general societal discourse. Conventional gender expectations are pervasive, whereas any non-compliance with them is more consequential for women than men in each of the countries we explored.

As in the Soviet Union, the key rationale justifying women's participation in the labor force and their pursuit of education is economic. Neoliberal capitalism, which has brought about significant socio-economic differentiation and fierce competition, pushes families to consider women as serious economic players who can contribute to the family budget via participation in the labor force or can increase a family's social position by attracting higher levels of dowry or a more educated and economically promising match. Economic reasoning pushes some spouses and parents to accept their wives' and daughters' enrollment in higher education and employment, as well as assume some of the conventional women's roles in the family despite the prohibitive gender stereotypes to provide support to the female earner.

Similar to other emerging nations, another characteristic of gender dynamics in Central Asian societies is the importance of women in the societal construction of national identity in the context of linguistic and ethnic identity revival after the dissolution of the Soviet Union. In most of the countries of the region, the woman is viewed not only as the primary caretaker but also as the Mother of the Nation and the Keeper of the Traditions. The societies are very prescriptive with respect to a woman's

acceptable wardrobe, behavior, and gender roles. Education plays a vital role in national identity formation, and girls are constrained in their educational choices and educational experiences not only due to the social views about their role as women but also due to their important roles as keepers of ethnic/national identity. This inter-dependence of gender and national identity constructing roles of women complicates the experiences of girls in education and increases the complexity of any actions aimed at achieving equal status of women with men in the societies.

Notably, the region is not homogeneous in terms of the achievement of gender equity. There is much differentiation in women's experiences in education shaped by cultural, linguistic, rural/urban, religious, and other dimensions. This differentiation is difficult to capture, research, and address in policy and educational practice.

The State of Current Research on Gender Equality

This volume clearly demonstrates an increasing interest within the scholarly community in understanding the interplay between gender and education in Central Asia. Importantly, much of the scholarly work has been done by local scholars. Many of these scholars are current graduate students, raising questions about the sustainability of the research, given the uncertainty surrounding how many of them will pursue research careers in the future. However, even this student-driven research is important as it lays the foundations for understanding complex issues, brings unique local perspectives, and helps expand the currently limited empirical data. Moreover, most of the local scholars are women with few male scholars contributing to the discussion. While women researchers provide an insider perspective, the lack of men among the scholarly community has negative consequences for gender advocacy. The absence of men in research and advocacy has reduced "gender equality" to "women's problem", putting the onus of women to fight the struggles for gender equality. The alienation of men from gender activism and research casts a long shadow on the hopes of transforming gender relations in Central Asia and across the globe.

As should be clear from our collection, as well as literature reviews conducted by the authors included in the volume, much of the existing research on gender in education in Central Asia is qualitative. This can be explained by the nascent state of research on the topic, but, even more

so, by the absence of reliable statistical data and difficulties in conducting survey research in the context of Central Asia, which could facilitate quantitative explorations. Available statistical data is not disaggregated and is not collected in a way that would allow cross-country comparisons.

In addition to that, most studies focus on the experiences of women in a single country and there is a lack of comparative explorations. Our volume includes only three studies that explore the issue of gender in education comparatively using secondary data from international assessments and qualitative data from interviews with women leaders in higher education. Meanwhile, given the shared past and many parallels in the way gender norms influence the experiences of women in education in the region, it is important to engage in comparative studies across regions.

One limitation of the existing scholarship is that current explorations of gender focus on the experiences of women. We have not been able to identify studies analyzing boyhood, manhood, and the experiences of males in education, as well as the influence of gender norms and stereotypes on the males' educational pathways and employment in education. Few studies have also explored the views and experiences of males and females comparatively. Meanwhile, it is essential to understand the experiences of both genders since the viewpoints and insights about the challenges and needs of one gender may improve our understanding of the challenges and needs of the other.

We also faced difficulties in securing a chapter on LGBTQ+ issues in the region. These difficulties also speak to the point that gender is understood by policymakers and scholars in Central Asia mostly in terms of the women/men binary, and broader conceptualization of the field is necessary to include sexuality and gender orientation. The societies in Central Asia continue to be closed to the discussion of the rights of LGBTQ + individuals, and gender equality policies do not discuss any measures addressing discrimination of the social group. Meanwhile, very few scholars problematize the fact and engage in the exploration of the experiences of LGBTQ + students and employees in education.

Another important revelation from our volume is that much of existing research is conceptualized with Western theories, and there are very limited efforts aimed at providing local interpretations and conceptual frameworks to understand the mechanism by which gender norms and stereotypes are formed and exert influence on educational choices and experiences. Meanwhile, the unique history and current context of

Central Asia is a fertile ground for the identification of new theories, which can be used to understand both women's and men's experiences in education.

Directions for Future Research

In general, research on gender and education in Central Asia is still in nascent stages and more scholarly effort in this regard is required. The Central Asian context is very unique and has a lot to offer in terms of both novel empirical insights and theories. Edited volumes and special issues focused on the topic could stimulate interest among and support the first steps of emerging scholars from the region, as well as bring together more experienced and early career scholars, also contributing to the emergence of collaborative and comparative efforts.

While there is definitely a place for more qualitative explorations, more studies of the quantitative nature need to be conducted. This might require government support in improving the quality of data collection and in funding data collection implemented by the researchers themselves. Quantitative studies could lead to local theory building and testing, as well as might have a greater influence on policy and practical decision-making in education. With the inclusion of socio-demographic data, such as ethnicity, location, religious affiliation, socio-economic circumstances, sexuality, and so on, nuanced intersectional analyses can be undertaken to identify groups experiencing multiple disadvantages that need greater policy support.

There also seems to be a need for more critical studies of gender issues in education. Most of the existing research tends to be informed by pragmatism and is descriptive in nature. There is little critical assessment of colonial and neocolonial discourses and their influence on the construction and reproduction of gender in Central Asian societies. More studies need to be conducted from the critical and decolonial perspectives.

The time may also have come for scholars of gender equity education in the region to enrich Western conceptualizations with some local theoretical interpretations, which might help better explain the condition of women in education in Central Asia, as well as inform the existing global discourse on the topic by bringing new conceptualizations, variables, and explanations. Similarly, local scholars might consider bringing local methodological approaches, which might not exist in

current global scholarship on the problem of gender equity in education. These approaches might be informed by local traditions, beliefs, and cultural practices.

The current conceptualization of gender is limited to the men/women binary with most studies focusing on the experiences of women. Meanwhile, current views of gender assume fluidity and performativity with the notions of "male" and "female" being constantly re-defined by gendered actors and structures. What remains underrepresented is research on how gender norms shape the experiences of non-binary and gender-fluid individuals. Without the missing LGBTQ + individuals' perspectives, no complete picture of gender equity in education can emerge. Future studies must address these gaps to present a more inclusive and holistic perspective on this issue.

Finally, some implications can be made for future research on gender equality in other country contexts or research on the region conducted by scholars from outside. First, more studies need to be conducted in post-Soviet countries outside Central Asia. The broader post-Soviet region offers many important insights about the interaction of past and emerging colonial structures with traditional cultural norms in shaping gendered experiences in education. Understanding this dynamic is important for addressing gender inequality in many formerly colonized societies. Second, important insights can be drawn from comparative explorations of gender inequality in education in Central Asian countries and countries outside the region. Such explorations could make some differences in the causative mechanism more visible and could reveal factors contributing to the differentiation. Third, our volume reveals that there is a growing number of scholars from the region, who can conduct rigorous research on gender issues in education. These scholars bring a more critical and culturally informed perspective on gender dynamics in their native countries and have a greater commitment to put the results of their studies to action, to change the condiction of women, as well as to ensure that the solutions are locally relevant and locally owned. Future scholars of gender equality in the region should put greater effort to engage the local scholars in their studies both to empower the local agents of change, but also to counteract colonialism in knowledge production.

Directions for Future Policy and Practice

Several policy and practical recommendations can be made from the collection of studies in this volume. It is important to recognize that the implementation of the suggested approaches should be tailored to the specific socio-economic and cultural context of each country. However, some common recommendations applicable across the country contexts analyzed can be identified.

First, many of the studies we analyzed reveal that young women and girls in Central Asia seem to lack positive role models. Many women participants indicate that they would like to have such role models available in education, as well as in the public policy arena. Some of our studies revealed that positive role models are missing from textbooks, other books, movies, and other media of mass culture productions. Meanwhile, success stories are available both from the history of the countries and from present-day reality. Some concerted effort on behalf of education and cultural policymakers is necessary to infuse curriculum and artistic productions with positive examples of women who managed to achieve influential roles and leave an impact on society. Such role models will encourage women in Central Asia to overcome and gradually change gender stereotypes and gender expectations.

Second, given that family is important in shaping girls' educational pathways, policy makers and educators concerned with gender equity need to pay greater attention to parental engagement in the education of both girls and boys. Parents need to be included in the decision-making about curriculum, teaching approaches, financing mechanisms, and teacher professional development. They need to understand why and how gender equity policies and practices are conducted and what their role in the process of reshaping gender norms with respect to girls' education should be.

Third, economic mechanisms have been shown to play a decisive role in shaping the educational pathways of girls. Availability, sufficiency, and disciplinary distribution of financial aid to support higher education can significantly influence family decision-making about girls' education and the choice of majors. In the long term, such financial mechanisms can change the balance of men and women in currently male-dominated professions, can multiply the number of available women and male role models in gendered professions and may gradually change labor market and leadership opportunities for both genders. Greater caution and more

thinking should be put into the development of effective mechanisms of quotas and financial aid targeting girls in non-traditional specializations.

Fourth, governments in each of the countries in the region should put more effort into systematic data collection on gender equity in the region, as well as put more resources to support independent data collection via surveys by scholars. Data is essential in providing a detailed picture of the distribution of educational opportunities and resources across genders. It is also essential to understand effective mechanisms for addressing the unequal distribution of such opportunities.

Fifth, some government support might be necessary in the form of funding to support comparative explorations of gender in education across countries of the region. There are many commonalities in the experiences of women in Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan. Comparative studies could help identify commonalities and differences, lead to the development of local theories, and identify effective regional solutions.

As the final word in this volume, we would like to express our strong belief that education can play a transformative role in gender equality in the region and in the world in general. By bringing together the voices of local and international experts on gender in education in Central Asia we wanted to play a role toward that end. We hope that we have achieved the goal, have strengthened the scholarly community specializing in the topic, and have made an important contribution to the improvement of the status of women in education in the region.

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